Volume 61:Chapter 6:Figure 5. Stratigraphic distribution of Cenozoic calcareous nannofossils, Hole 462. Species abundances: A = abundant (more than 10% of total nannofossil assemblage); C = common (1-10% of nannofossil assemblage); F = few (0.1-1% of nannofossil assemblage); R = rare (less than 0.1% of nannofossil assemblage). Abundances given in lower case letters represent specimens considered reworked. Preservation: blank = no etching or overgrowth, 1 = slight, 2 = moderate, 3 = strong etching or overgrowth.

Age	Nannofossil Zone	Sample (interval in cm)	Sub-bottom Depth (m)	Abundance	Preservation	Etching	Overgrowth	Reworking
Pleistocene	NN20–NN21	1-3, 4–5	3.5	C	M	2	1	f
	NN20–NN21	1-6, 140–141	9.4	C	M	2	1	f
late Pliocene to Pleistocene	NN18–NN19	1,CC	10.0	C	M	2	1	f
	NN18–NN19	2,CC	19.5	C	M	2	2	c
	NN18–NN19	3-4, 52–54	24.5	B				
	NN18–NN19	3,CC	29.0	C	M	2	2	c
	?	4-4, 34–35	33.8	C	M	2	2	c
	?	4-5, 90–91	35.9	C	M	2	2	c
	?	4,CC	38.5	B				
	?	5-4, 25–26	43.3	C	P	3	1	c
		5-7, 19–20	47.7	F	P	3	1	c
	NN18?	5,CC	48.0	F	P	2	1	c
late Miocene–late Pliocene	NN11	6-2, 20–21	49.7	C	M	2	1	c
	NN11	6-4, 51–52	53.0	C	M	2	1	r
	NN11	6,CC	57.5	C	M	2	1	f
	NN11	7-2, 103–104	60.0	C	M	2	1	r
	NN11	7,CC	67.0	C	M	2	1	f
	NN11	8-1, 34–35	67.3	C	M	2	1	f
	NN11	8-3, 109–110	71.1	F	M	2	2	r
	NN14–NN18	8,CC	76.5	C	G	1	1	f
Miocene, middle	NN7	10-2, 85–86	88.4	C	M	1	2	f
	NN7	10,CC	95.5	C	M	2	2	f
	NN7	11,CC	105.0	C	M	2	2	c
	NN7	12-1, 36–37	105.9	A	M	1	2	c
	NN5	12-4, 46–47	108.5	A	M	2	2	c
	NN5	12;CC	114.5	C	M	2	2	f
	NN5	13,CC	124.0	F	M	2	2	r
	NN5	14,CC	133.5	C	M	2	2	f
	NN5	15,CC	143.0	A	M	2	1	f
Miocene, early	NN2	16-1, 88–89	149.9	A	M	2	2	f
	NN1	16,CC	152.5	A	P	2	3	r
	NN1	17,CC	162.0	A	P	2	3	r
	NN1	18,CC	171.5	C	P	2	3	r
Oligocene, late	NP25	19-2, 138–139	173.9	F	P	3	3	r
	NP25	19-6, 34–35	178.3	C	P	2	3	r
	NP24	19,CC	181.0	C	M	2	2	f
	NP24	20,CC	190.5	C	M	2	3	r
	NP24	21,CC	200.0	C	P	3	2	r
	NP24	22,CC	209.5	C	P	2	3	r
	NP23	23-2, 89–90	211.9	C	P	2	3	r
	NP23	23,CC	219.0	C	P	3	3	r
	NP23	24,CC	228.5	C	P	3	3	r
	NP23	25-6, 8–9	236.1	C	P	2	3	r
	NP23	25,CC	238.0	C	P	3	3	r
	NP23	26k,	247.5	C	P	2	3	r
	NP23	27,CC	257.0	C	P	2	3	f
	NP23	28-4, 60–62	262.1	C	P	3	3	r
	NP23	28,CC	266.5	C	P	3	3	r
	NP23	29,CC	276.0	C	P	2	3	f
	NP23	30,CC	285.5	C	P	2	3	r
	NP23	31-1, 134–135	286.8	C	P	2	3	f
	NP23	31,CC	295.0	C	P	2	3	f
	NP23	32-2, 49–50	297.0	C	P	2	3	r
Oligocene, early	NP21–NP22	32,CC	304.5	C	P	2	3	r
	NP21	33-1, 88–89	305.4	C	P	2	3	r
	NP21	33,CC	314.0	C	P	2	3	r
Eocene, late	NP20	34-1, 73–74	314.7	C	P	2	3	r
	NP20	34,CC	323.5	C	P	2	3	r
	NP20	35,CC	333.0	C	P	2	3	r
	NP20	36-1, 101–102	334.0	C	P	2	3	r
	NP20	36-3, 81–82	336.8	C	M	2	2	r
	NP20	36,CC	342.5	B				
	NP20	37-1, 91–92	343.4	C	P	2	3	f
	NP20	37,CC	352.0	C	P	2	3	r
	NP20	38-2, 68–69	354.2	C	M	2	2	r
	NP20	38,CC	361.5	C	P	2	3	r
Eocene, middle	NP16	39-1, 8–9	361.6	C	P	2	3	r
	NP14–NP15	39-3, 18–19	364.7	C	P	2	3	r
	NP14–NP15	39,CC	371.0	C	P	2	3	r
Eocene, early	NP12–NP14	41,CC	390.0	F	P	2	3	r
	NP12–NP14	42-1, 30–32	390.3	F	P	2	3	r
	NP10–NP11	44-1, 61	409.6	F	M	2	2	f
e. Paleocene	NP3–NP4	45,CC	428.0	F	M	2	2	c

Sample	Sphenolithus abies	Cyclicargolithus abisectus	Ceratolithus acutus	Discoaster asymmetricus	Discoaster barbadiensis	Discoaster berggrenii	Zygrhablithus bijugatus	Dictyococcites bisectus	Discoaster bollii	Discoaster brouweri	Discoaster calcaris	Catinaster calyculus	Gephyrocapsa caribbeanica	Triquetrorhabdulus carinatus	Helicosphaera carteri	Discoaster challengeri	Sphenolithus ciperoensis	Catinaster coalitus	Helicosphaera compacta	Ceratolithus cristatus	Chiasmolithus danicus	Discoaster deflandrei	Discoaster diastypus	Sphenolithus distentus	Crenalithus doronicoides	Discoaster druggii
1-3, 4–5	r	r	r							r			F		F											
1-6, 140–141	r	r	r							r			F		F					R						
1,CC	f									f			F		F										F	
2,CC	f									r			F		F	r									F	
3-4, 52–54																										
3,CC	f									F			R		F	r									F	
4-4, 34–35	r							f							F	f						r			C	
4-5, 90–91	r			R		r				F		r			F											
4,CC																										
5-4, 25–26	f					f				C					F		r									
5-7, 19–20	f									F					F	r										
5,CC	f									F										R					C	
6-2, 20–21	F									F					F											
6-4, 51–52	F													r												
6,CC	R									R	R			r	F										A	
7-2, 103–104															F											
7,CC	F													r	F										A	
8-1, 34–35	F																	F								
8-3, 109–110	F														F										C	
8,CC	F		R						f	R			?		F	R				?						
10-2, 85–86	F														F											
10,CC	F													r	F											
11,CC									R						F	R										
12-1, 36–37															R											
12-4, 46–47		R						r						r	R											
12;CC		F												r	R											
13,CC														r	R											
14,CC														r	R							F				
15,CC		F						f						f	R		r									
16-1, 88–89		R						r						F												F
16,CC		C						r						C										r		
17,CC		F						r						A										r		
18,CC		C						r						A												
19-2, 138–139		F						r						F			R									
19-6, 34–35		F															F									
19,CC		C															F					C		F		
20,CC		A															F					C		F		
21,CC		C															F					C		F		
22,CC		A					R	R						?			F					F		F		
23-2, 89–90		C						F														R		R		
23,CC		F						C																		
24,CC		F						A														R		R		
25-6, 8–9		A						C											R			R				
25,CC		F						A														R				
26k,		R			r			A																F		
27,CC					f		R	C																		
28-4, 60–62								C																R		
28,CC					r			A																		
29,CC					f			A											R							
30,CC					r			A																		
31-1, 134–135					f			C																		
31,CC					f			C																		
32-2, 49–50					r			C																R		
32,CC		R			r			C											R							
33-1, 88–89					r			C																		
33,CC		F						C																		
34-1, 73–74					F			C																		
34,CC					F			C																		
35,CC		F			F			R											R							
36-1, 101–102					F			C																		
36-3, 81–82					C			A																		
36,CC																										
37-1, 91–92					F			A																		
37,CC					F			C																		
38-2, 68–69		F			C			C																		
38,CC		F			F																					
39-1, 8–9					F																					
39-3, 18–19					F																					
39,CC					R																					
41,CC					R																					
42-1, 30–32					R																					
44-1, 61																							F			
45,CC																					R					

Sample	Discoaster exilis	Cyclicargolithus floridanus	Coccolithus formosus	Sphenolithus furcatolithoides	Chiasmolithus grandis	Chiasmolithus gigas	Discoaster hamatus	Sphenolithus heteromorphus	Triquetrorhabdulus inversus	Fasciculithus involutus	Heliolithus kleinpellii	Discoasteroides kuepperi	Discoaster kugleri	Pseudoemiliania lacunosa	Calcidiscus leptoporus	Discoaster lodoensis	Sphenolithus moriformis	Discoaster multiradiatus	Sphenolithus neoabies	Discoaster neohamatus	Chiasmolithus oamaruensis	Gephyrocapsa oceanica	Coccolithus pelagicus	Discoaster pentaradiatus	Sphenolithus predistentus	Sphenolithus pseudoradians
1-3, 4–5														r	C		r		r			F	F	r		
1-6, 140–141			r					r						r	C		r		r			F	F	r		
1,CC		f												F	C				f				F	r		
2,CC														F	F								F			
3-4, 52–54																										
3,CC	f													F	F				c				F			
4-4, 34–35							f						r		C				f	f			F	f	r	
4-5, 90–91								r							C		f		c				F	r		
4,CC																										
5-4, 25–26		f					r								C				c				F	F		
5-7, 19–20															C				c				F			
5,CC		f						f							C				c				F			
6-2, 20–21		c					r	f					f		F				C				F			
6-4, 51–52								r							C				C				F			
6,CC		f						r							F				F				F	R		
7-2, 103–104							r						r		F				F	R			F			
7,CC								f							C				C	R			F			
8-1, 34–35													f		C		f		C	F			F			
8-3, 109–110								r					F		C				C							
8,CC							r							?	F				C	R				?		
10-2, 85–86													R		F				C							
10,CC								r															C			
11,CC	R	c						f					R		F								F			
12-1, 36–37	F	c						f					F		R		R						C			
12-4, 46–47	F	C						C							R		R						F			
12;CC	F	C						C									C						F			
13,CC	F	C						C							R		C						F			
14,CC	F	A						C							R		F						F			
15,CC	R	C	f					C							R		F						F		r	
16-1, 88–89		A															F						F			
16,CC		A															C						F		r	
17,CC		A	r														F						F			
18,CC		F															C									
19-2, 138–139		C																					F		F	
19-6, 34–35		C															F						F		R	
19,CC		A															C				r		F		F	
20,CC		C															C						F		F	
21,CC		A															C						F		F	
22,CC		F															A								F	
23-2, 89–90		F															A						F		F	
23,CC			r														A								F	
24,CC		R															A								F	
25-6, 8–9		R															F						F		F	
25,CC																	C						F		F	
26k,			F						r								F						C		F	R
27,CC			C		r				r								F	r			r		c		c	F
28-4, 60–62			F														F						F			R
28,CC			C														F						F		R	
29,CC			C		r												F	r					F			R
30,CC			C														F						F		F	R
31-1, 134–135			C		r												R						F			F
31,CC			C														R						F			R
32-2, 49–50			C														F						F			F
32,CC			C														R						F			F
33-1, 88–89			C														R									F
33,CC			C																				F			F
34-1, 73–74			C						R								F						C			R
34,CC			C														F						F			R
35,CC			C		r												F						F			R
36-1, 101–102			C						R								F						F			R
36-3, 81–82			C														F						C			R
36,CC																										
37-1, 91–92			C		F	r			F								F						C			F
37,CC			C	r	F				F	r							F						C			F
38-2, 68–69			C		F					r							R						C			C
38,CC			F		R				R														C			R
39-1, 8–9			C	R	F				R														C			
39-3, 18–19			C	R	F				R							?		r					C			
39,CC			C	F	R				R			F											C			
41,CC			A						F	r	r	R											C			
42-1, 30–32			A							r	r							r					C			
44-1, 61																		A					C			
45,CC																							A			

Sample	Reticulofenestra pseudoumbilica	Discoaster quinqueramus	Sphenolithus radians	Helicosphaera recta	Isthmolithus recurvus	Helicosphaera reticulata	Ceratolithus rugosus	Triquetrorhabdulus rugosus	Discoaster saipanensis	Reticulofenestra samodurovi	Helicosphaera sellii	Bramletteius serraculoides	Orthorhabdus serratus	Zygodiscus sigmoides	Chiasmolithus solitus	Coccolithus subdistichus	Discoaster sublodoensis	Discoaster surculus	Discoaster tamalis	Discoaster tanii	Cruciplacolithus tenuis	Discoaster trinidadensis	Reticulofenestra umbilica	Discoaster variabilis	Thoracosphaera sp.	Towius sp.
1-3, 4–5	r						r											r							R	
1-6, 140–141	r						r	r																	R	
1,CC	r	r						r										r	r							
2,CC	r						r				R															
3-4, 52–54																										
3,CC	r	r					r				R															
4-4, 34–35	f	f						f										c								
4-5, 90–91	f	r						r										f	r						R	
4,CC																										
5-4, 25–26	f																	r							R	
5-7, 19–20		f						r																	R	
5,CC	f							f			R															
6-2, 20–21	C							f																	R	
6-4, 51–52	C	F						r																	R	
6,CC	F							f																F		
7-2, 103–104	C	F						F														r		F	R	
7,CC	F	F						R																		
8-1, 34–35	C	F						F			R													F		
8-3, 109–110	C																									
8,CC	F	F						R																		
10-2, 85–86	F							F					r												R	
10,CC	F							F																F		
11,CC	C																					F		F		
12-1, 36–37	A							F														F		F		
12-4, 46–47	R							R														F		R		
12;CC	F							F														F		R		
13,CC								R					R											R	R	
14,CC	R							F														F		F		
15,CC	F							F					F									F		F		
16-1, 88–89																						C				
16,CC																						C				
17,CC										r												A				
18,CC																									R	
19-2, 138–139																										
19-6, 34–35																										
19,CC				R																			r		R	
20,CC												r														
21,CC												r														
22,CC												r											r		F	
23-2, 89–90																										
23,CC																				F						
24,CC																				F						
25-6, 8–9																				r			r			
25,CC																							C			
26k,						R																	A			
27,CC			r			R			f	F		F											F			
28-4, 60–62						R				F		R											F			
28,CC									r	R		R											C			
29,CC			r			R				F		F			r								F			
30,CC										F		F				R							R			
31-1, 134–135						R				C		C											F			
31,CC					R	R			f	F		C											C			
32-2, 49–50						R			r	F		C								R			C			
32,CC						F			r	C		C								F			C			
33-1, 88–89										F		F											C			
33,CC												C								F			C			
34-1, 73–74						R			R			F								F			C			
34,CC						R			R			C			r					F			C			
35,CC			r			F			F	R		C								R			C			
36-1, 101–102						F			F	F		F								F			F			
36-3, 81–82			r			F			F	C		C								F			F			
36,CC																										
37-1, 91–92			r			R			F	F		C								F			F			
37,CC			r			R				R		C											F			r
38-2, 68–69			F						C	F		F								F			C		R	
38,CC			R		R	R			F	F					F					R			C			
39-1, 8–9			R						F	F					F								F		F	
39-3, 18–19			R							C							R						F			
39,CC										C					R								C			
41,CC			C												R										R	
42-1, 30–32			C							F					F											F
44-1, 61																										F
45,CC														R							R				F	F