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P L A N K T O N - H A U L S

" P i e r " S c h e v e n i n g e n

1 9 7 5

13th January - 15th December 1975

by dr. Joh.a Muller

DATA SAMPLING NOVEMBER 1974, JANUARY AND FEBRUARY 1975.

Haul X "Pier" A, Scheveningen 3 hours before high water.

Date: 13th January 1975.

Hauls	X "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Generally much clouded clouded, but most places good have dry weather. Wind moderate to strong; Southern to South-Western. Maximum temperature about 8 °C.
4. Weather while hauling	Sunshine, blue sky. Visibility rather good, yet a bit hazy near the horizon. Colour sea grey, blue near place of hauling light green. Sea transparent and choppy rather much wind.
5. Distance, while hauling	± 144 meter by walking
6. Temperature	Air 8 °C. Sea 7 °C.
7. Wind during hauling	Data Semaphore Direction SSW-SW . Velocity 6½ m/sec
8. Time of hauling	12.06 - 12.18
9. Tides	2nd H.T. 15.59
10. Lighthours a day	
11. Water Levels	a. during hauling - 55 cm b. L.W. before hauling - 92 cm. c. H.W. after hauling + 75 cm.
12. Direction of streams	± 2 ^{three hours} hours before high water
13. Direction of streams at Scheveningen	
14. Chemical analysis	Ammonium 0.2 mgr/l
Chloride g/l	Silicaat 1,2 mg/l
NH ₄ ⁺ en NO ₃ ⁻ als N	Nitrate (NO ₃ ⁻) 1,0 mg/l
PO ₄ ⁻ als P	Chloride 15,1 g/l
	Phosphate (PO ₄ ⁻) 0,14 mgr/l
	Orthodryleesbaar Phosphaat <i>no data</i>

DATA SAMPLING NOVEMBER 1974, JANUARY AND FEBRUARY 1975.

Haul X "Pier" A, Scheveningen 3 hours before High Tide.

Date: 13 January 1975.

X Haul "Pier" A, Scheveningen	Total numbers of organisms in haul
1. Bacillariophyceae	
Belliarochea malleus	350
Belliarochea alternans Biddulphia	250
Biddulphia sp.	2350
" mobiliensis	250
" regia	250
" sinensis	800
n Coscinodiscus concinnus	100
" excentricus	500
" granii	2850
2. Protozoa	
Foraminifera sp.	500
Noctiluca miliaris	4350
3. Ctenophora	
Pleurobrachia pileus	100
4. Coelenterata	
Sarsia sp.	50
5. Polychaeta	
Polychaeta sp.	50
6. Crustacea	
Copepoda	
Acartia sp.	300
Centropages sp.	350
Microcalanus pusillus	200
Nauplius larva Cop. sp.	50
Temora longicornis	50
Cirripedia	
Cypris larva Cir. sp.	200
Harpacticoida	
Harpacticoida sp.	450
Harpacticoida sp. with eggs	100
7. Chaetognatha	
Sagitta sp.	50
8. Mollusca	
Lamellibranchiata	
Larva Modiolus sp. (0.2mm)	50
" Spisulo. sp. (0.3mm)	50
9. Ectoprocta	
Membranipora membranacea	50
10. Eggs ^{membranacea}	
Evertebrata eggs	100

Sediment $\pm \frac{1}{10}$ contents (mainly sand, pellets, vegetable rests).

DATA SAMPLING NOVEMBER 1974. JANUARY AND FEBRUARY 1975

Haul XI "Pier" A, Scheveningen, one hour before high water

Date: 7th February 1975.

Hauls	XI "Pier" A ,Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	± 300 meter from the beach.
3. Weather forecast	Dry and sunny weather. Wind moderate to strong. South-East. Maximum temperature about 7°C. Minimum temperature from 0°C to 4°C.
4. Weather while hauling	Sunshine, blue sky, visibility rather good. Cold wind light to moderate, Eastern. Sea near place of hauling brown-green; somewhat transparent At the distance grey-blue. Somewhat hazy. Sea slight.
5. Distance, while hauling	± 144 meter by walking
6. Temperature	Air 3°C water 5°C
7. Wind during hauling	Data Semaphore Direction E-E.S.E Velocity 3½ m/sec
8. Time of hauling	11.54 - 12.06
9. Tides	2nd H.T. 12.50
10. Lighthours a day	9.25 61
11. Water Levels	a. during hauling + 61 cm. b. L.W. before hauling - 92 cm c. H.W. after hauling - 75 cm.
12. Direction of streams	one hour before H.T.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrate (NO ₃ ⁻) 0.7 mgr/l
Chloride g/l	Ammonium ³ 0,3 mgr/l
NH ₄ ⁺ en NO ₃ ⁻ als N	Silicaat 1,2 mgr/l
PO ₄ ⁻ als P	Chloride (Cl ⁻) 18,1 gr/l
	Phosphate (PO ₄ ⁻⁻) 0,07 mgr/l
	Ortho ij hydrolyseerbaar phosphate 0.08 mgr/l

DATA SAMPLING NOVEMBER 1974, JANUARY AND FEBRUARY 1975

Haul XI, "Pier" A, Scheveningen, one hour before High Tide

Date: 7 February 1975.

Haul XI "Pier" A, Scheveningen	Total numbers of organisms in Haul
1. B a c i l l a r i o p h y c e a e	
Bellarochia malleus	850
Biddulphia sp.	5750
" alternans	350
" mobiliensis	100
" regia	2000
" sinensis	4950
Coscinodiscus concinnus	100
" excentricus	3500
" granii	850
Ditylum brightwelli	100
Fragilaria sp.	250
Lauderia borealis	250
2. P r o t o z o a	
Noctiluca miliaris	3600
3. C t e n o p h o r e	
Pleurobrachia pileus	100
4. C o e l e n t e r a t a	
Sarsia sp.	50
Rathkea octopunctata	50
5. P o l y c h a e t a	
Polychaeta larva	250
6. N e m a t o d a	
Nematoda sp.	50
7. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	450
" with eggs	100
" " parasites	100
Centropages sp.	350
Nauplius larva Cop.sp	150
Temora longicornis	100
" " with parasites	50
C i r r i p e d i a	
Cypris larva Cir.sp.	100
M y s i d a c e a e	
Mesopodopsis slabberi	100
H a r p a c t i c o i d a	
Harpacticoida sp.	950
8. C h a e t o g n a t h a	
Sagitta sp.	150
9. E c h i n o d e r m a t a	
Bipinnaria larva	100
Brachiolaria "	50
10. E g g s	
Fish Clupea sp.	50
Sediment $\pm \frac{1}{9}$ contents	

DATA SAMPLING NOVEMBER 1974, JANUARY AND FEBRUARY 1975.

Haul XII "Pier" A, Scheveningen, two hours before high water

Date: 24th February 1975.

Hauls	XII "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Dry and sunny weather. Wind moderate to rather strong. Southern to South-Eastern. Maximum temperature about 8°C.
4. Weather while hauling	Sunshine, yet hazy. Blue sky with light white clouds. Visibility poor. Sea grey at the distance, near place of hauling brown-green, somewhat transparent. Sea calm not very much wind.
5. Distance, while hauling	+ 144 meter by walking
6. Temperature	Air 6°C Water 6½°C
7. Wind during hauling	Sata Semaphore Direction N.N.E. Velocity 2½ m/sec
8. Time of hauling	12.05 - 12.17
9. Tides	2nd H.T. 13.54
10. Lighthours a day	10.36
11. Water Levels	a. during hauling - 1 cm b. L.W. before hauling -90 cm c. H.W. after hauling + 93 cm
12. Direction of streams	two hours before H.T.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Ammonium 0,3 mgr/l
Chloride g/l	Silicaat 0.7 mgr/l
NH ₄ ⁺ en NO ₃ ⁻ als N	Nitrate (NO ₃ ⁻) 0,7 mgr/l
PO ₄ ⁻ als P	Chloride (Cl ⁻) 15,9 gr/l
	Phosphate (PO ₄ ⁻) 0.06 mgr/l
	Hydrolyseerbaar fosphaat 0.08 mgr/l

DATA SAMPLING NOVEMBER 1974, JANUARY AND FEBRUARY 1975.

Haul XII "Pier" A, Scheveningen, 2 hours before High Tide

Date: 24 February 1975.

XII "Pier" A, Scheveningen	Total numbers of organisms in haul
1. Bacillariophyceae	
Bellarochloa malleus	100
Biddulphia sp.	3000
" alternans	350
" mobiliensis	100
" regia	350
" sinensis	1850
Chaetoceros sp.	250
Coscinodiscus granii	4350
" excentricus	750
Fragilaria sp.	100
Rhizosolenia sp.	100
2. Protozoa	
Noctiluca miliaris	2750
3. Ctenophora	
Pleurobrachia pileus	100
4. Crustacea	
Copepoda	
Acartia sp.	550
Acartia with eggs	50
Centropages sp.	50
Temora longicornis	100
Nauplius larva Cop. sp.	50
Harpacticoida	
Harpacticoida sp.	400
Mysidacea	
Mesopodopsis slabberi	100
5. Ectoprocta	
Membranipora membranacea	100
6. Eggs	
Fish	50

Sediment $\pm \frac{1}{10}$ contents
(mud, sand, vegetable rests)
Fishermen caught blennies.

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

Haul XIII "Pier"A, Scheveningen two hours before high tide

Date: 10th March 1975.

Hauls XIII	"Pier"A, Scheveningen
1. Situation Place of hauling	Pier Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Clearings of the sky, with locally a shower. In the evening of the 8th of March rain coming from South-Western direction. Wind light to moderate, Southern Maximum temperature 11 C.
4. Weather, while hauling	Blue sky, but mostly overcast by light, white clouds some sunshine. Visibility rather poor. Weather calm, sea calm, not much wind. Sea grey at the distance, near place of hauling light green and rather transparent.
5. Distance while hauling	+ 144 meter by walking
6. Temperature	Air 9°C water 7°C.
7. Wind during hauling	Data Semaphore Direction W.N.W. Velocity 3½m/se
8. Tides	2nd H.T. 14.12
9. Time of hauling	12.03 - 12.15
10. Light hours a day	ix 11.29 a day
11. Water Levels	a. during hauling + 5 cm b. L.W. before hauling - 68cm c. H.W. after hauling + 111cm
12. Direction of streams	Two hours before High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Ammonium (NH ₄ ⁺ - N) 0.4 mgr/l
Chloride mg/l	Silicaat Si ⁴ 0.5 mgr/l
NH _y and NO ₃ taken for N	Nitraat (NO ₃ ⁻ - N) 0.8 mgr/l
PO ₄ taken for P	Chloride (Cl ⁻) 15,9 gr/l
	Fosfaat (PO ₄ ⁻⁻⁻) ortho 0.08 mg/l
	Ortho + hydrolyseerbaar fosfaat 0.09 mg/l

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

Haul XIII "Pier" A, Scheveningen, 2 hours before High Tide

Date: 10th March 1975.

Hauls	XIII "Pier" A, Scheveningen
1. B a c i l l a r i o p h y c e a e	
Bellarochlamalleus	500
2. Biddulphia sp.	7750
" alternans	500
" mobiliensis	250
" regia	500
" sinensis	4000
Cerataulina sp.	200
Chaetoceros sp.	250
Coscinodiscus excentricus	750
" granii	2500
2. P r o t o z o a	
Noctiluca miliaris	1000
3. N e m a t o d a	
Nematoda sp.	50
4. P o l y c h a e t a	
Polychaeta larva	100
5. C t e n o p h o r a	
Pleurobrachia pileus	50
6. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	50
Centropages sp.	300
Microcalanus pusillus	100
Nauplius larva Cop.sp.	150
Temora longicornis	100
H a r p a c t i c o i d a	
Harpacticoida sp.	250
C i r r i p e d i a	
Cypris larva Cir.	100
Nauplius larva Cir.sp.	50
7. C h a e t o g n a t h a	
Sagitta sp.	100
8. E c h i n o d e r m a t a	
Bipinnaria larva	300
9. E g g s	
Evertebrata	250
Fish	50

Sediment $\pm \frac{1}{6}$ contents

(mud, vegetable rests)

Fishmen caught some small dabs.

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

XIV Haul "Pier" A, Scheveningen ± High Tide

Date: 22nd April 1975.

Hauls	XIV "Pier" A, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Very cloudy with rain, or dizzle during some time. Wind mostly moderate, at first Southern- Western ; Later on veering to South-Western. Minimum temperature about 7°C, maximum temperature 12°C.
4. Weather, while hauling	Blue sky with light clouds very hazy. The visibility was poor and the horizon could not be seen. The fog-horn was heard. Not much wind; at the end of the haul the sea was getting more choppy. Sea grey at the distance, near place of hauling brown-green and somewhat transparent.
5. Distance, while hauling	± 144 meter by walking
6. Temperature	In the air 12°C, in the water 10°C
7. Wind during hauling	Data Semaphore Direction N. Velocity 3½ m/sec.
8. Tides	1st H.T. 12.15
9. Time of hauling	12.18 - 12.30
10. Lighthours a day	14.18 a day
11. Water Levels	a. during hauling + 88 cm b. L.W. before hauling - 91 cm c. H.W. after hauling + 95 cm
12. Direction of streams	± High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Ammonium (NH ₄ ⁺ - N) 0.5 mgr/l
Chloride mg/l	Silicaat (Si) 0.9 mgr/l
NH ₄ and NO ₃ taken for N	Nitrate (NO ₃ ⁻) 1.2 mgr/l
PO ₄ taken for P	Chloride (Cl ⁻) 12.8 gr/l
	Phosphate (PO ₄ ⁻⁻) 0.11 mgr/l
	Ortho + hydrolyseerbaar phosphate 0.12 gr/l

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

Haul XIV "Pier"A, Scheveningen, High Tide.

Date: 22nd April 1975.

XIV Haul "Pier"A, Scheveningen	Total numbers of organisms in haul
1. B a c i l l a r i o p h y c e a e	
Bellarochea malleus	100
Biddulphia sp.	2750
" aurita	1500
" regia	100
" sinensis	1250
Halosphaera viridis	present
Coscinodiscus granii	150
Lauderia borealis	50
Phaecocystis	abundant
2. P r o t o z o a	
Noctiluca miliaris	1000
3. C o e l e n t e r a t a	
Obelia sp.	50
4. P o l y c h a e t a	
Terebella larva	50
5. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	800
Acartia sp. with eggs	100
Acartia sp. with parasites	200
Calanus finmarchicus	100
Centropages sp.	1000
Microcalanus pusillus	50
Nauplius larva Cop.sp.	200
Temora longicornis with eggs	50
Temora longicornis with parasites	50
M y s i d a c e a	
Mesopodopsis slabberi	100
H a r p a c t i c o i d a	
Harpacticoida sp.	50
D e c a p o d a	
Zoea larva Decapoda sp.	50
Zoea larva Portunus sp.	50
6. E c h i n o d e r m a t a	
Bipinnaria larva	200
Echinopluteus "	100
7. E g g s	
Everttebrate:	
Everttebrata sp.	2100
Pocket with eggs	150
Fish	100

Sediment $\pm \frac{1}{6}$ contents

(mainly mud + vegetable rests)

Fishermen only caught some small dabs

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

Haul XV "Pier" A, Scheveningen two hours before high tide.

Date: 12th May 1975.

Hauls	XV "Pier" A, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Sunny periods but in the afternoon locally some showers. Wind light to moderate, mainly between South and West. Maximum temperature from 12° near the sea to 13° inland.
4. Weather, while hauling	Blue sky, sunny, light clouds. Visibility rather good. Sea rather calm, though a little choppy. Colour at the distance greyish, near place of hauling brown-green, somewhat transparent.
5. Distance, while hauling	± 144 meter by walking
6. Temperature	In the sea 11°C in the water 10½°C
7. Wind during hauling	Data Semaphore Direction S.S.W. Velocity 3½ m/sec
8. Tides	2nd H.T. 16.03
9. Time of hauling	14.37 - 14.49
10. Lighthouse a day	15.30 a day
11. Water Levels	a. during hauling -48cm b. L.W. before hauling - 87 cm c. H.W. after hauling 93 cm
12. Direction of streams	± 2 hours before H.T.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat (NO ₃ ⁻ - N) 0.7 mgr/l
Chloride in g/l	Ortho + hydrolyseerbaar fosfor
NH ₄ and NO ₃ taken for N	0.10 mgr/l
PO ₄ taken for P	Chloride 15.0 gr/l

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

Haul XV "Pier" A, Scheveningen, two hours before High Tide

Date: 12th May 1975.

Haul XV "Pier" A, Scheveningen	Total numbers of organisms in haul
1. B a c i l l a r i o p h y c e a e	
Bellarochea malleus	4750
Biddulphia sp.	13750
" mobiliensis	750
" regia	2500
" sinensis	10500
Coscinodiscus excentricus	50
" granii	1750
Fragilaria sp.	250
Skeletonema costatum	10750
2. C o e l e n t e r a t a	
Rathkea octopunctata	29600
Young Tubularia sp.	50
3. N e m a t o d a	
Nematoda sp.	50
4. P o l y c h a e t a	
Terebella larva	50
5. E c h i n o d e r m a t a	
Bipinnaria larva	100
Echinopluteus "	150
6. E g g s	
Evertebrata	350

Sediment $\pm \frac{1}{6}$ contents.

There were in the haul a great number of Rathkea octopunctata present.

To observe them was bewildering. I never had seen this before. Though the great majority had the three marginal tentacles placed in eight groups, there were variations. In the sediment the number of dead species were ~~numerable~~, but they were shrunk to balls.

Fishermen only caught some dabs.

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

Haul XVI "Pier" A, Scheveningen, one hour before high tide

Date: 6th June 1975.

Hauls	XVI "Pier" A Scheveningen
1. Place of hauling	Pier Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	During the night very cloudy but most places will have dry weather. Minimum temperature about 8°C. On the 6th of June rather sunny and warmer. Maximum temperature 20°C to 24°C, only near the sea somewhat cooler. Wind light to moderate Southern.
4. Weather, while hauling	Time weather, blue sky and a little hazy near the horizon. The first real summer day. Water grey-blue near the place of hauling dark-brown, somewhat transparent. Visibility at the distance not too good, as it was hazy. Sea calm.
5. Distance while hauling	+ 144 meter by walking
6. Temperature	In the air 20°C in the water 14½°C
7. Wind during hauling	Data Semaphore Direction W.S.W. Velocity 3½ m/sec.
8. Tides	2nd High Tide 12.51
9. Time of hauling	11.25 - 11.37
10. Lighthours a day	16.32 a day
11. Water Levels	a. during hauling + 55 cm b. L.W. before hauling - 85 cm c. H.W. after hauling + 85 cm
12. Direction of streams	+ one hour before H.T.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat ($\text{NO}_3^- - \text{N}$) 1,1 mg/l Ortho + hydrolyseerbaar fosfaat P. mg/l 0.12 mg/l Chloride in g/l 12,8 (Cl^-) g/l

DATA SAMPLING MARCH, APRIL, MAY AND JUNE 1975.

XVI Haul "Pier" A, Scheveningen, one hour before High Tide.
Date: 6th June 1975.

XVI "Pier", A Scheveningen	Total numbers of organisms in Haul
1. B a c i l l a r o p h y c e a e	
Bellarochea malleus	1000
Biddulphia sp.	15000
" mobiliensis	750
" sinensis	4000
Cerataulina sp.	abundant
Coscinodiscus concinnus	1750
" excentricus	6000
" granii	25250
Eucampia zoodiacus	12000
Lauderia borealis	250
Fragilaria sp.	250
Skeletonema costatum	2000
Thalassiosira sp.	250
2. P r o t o z o a	
Foraminifera sp.	250
Noctiluca miliaris	1750
3. C t e n o p h o r a	
Pleurobrachia pileus	100
4. C o e l e n t e r a t a	
Hydrocodon profifer	150
Strenstrupia nutans	300
5. N e m a t o d a	
Nematoda sp.	150
6. P o l y c h a e t a	
Polychaeta sp.	50
Polychaeta larva	600
Terebella larva	700
Empty vase Terebella larva	700
7. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	150
" with parasites	50
Centropages	100
Microcalanus pusillus	50
Nauplius larva Cop.sp.	100
C i r r i p e d i a	
Cypris larva Cir.sp.	50
Nauplius " " "	100
H a r p a c t i c o i d a	
Harpacticoida sp.	50
A m p h i p o d a	
Amphipoda sp.	50
D e c a p o d a	
Megalapa larva	150
Carcinus sp.	
Zoea larva carcinus sp.	200
8. E c h i n o d e r m a t a	
Echinopluteus larva	250
9. F i s h	
Fish larva Clupea sp.(3mm)	100
Gadus Fish larva Gadus sp.(6mm)	50

Z.O.Z.

DATA SAMPLING JUNE AND JULY 1975.

XVII Haul "Pier" A, Scheveningen, two hours before High Tide.

Date: 15th June 1975.

Hauls	"Pier" A, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Cloud-banks with possibly some rain or drizzle in the North of the country. Especially in the South also periods of sun. Wind light to moderate near the coast later on strong wind from Western directions.
4. Weather, while hauling	Sky fully overcast; occasionally some drizzle. Hazy. Sea greyish Calm weather. It was a late haul Sea choppy, but not rough. Visibility poor. Colder after warm summer days.
5. Distance, while hauling	+ 400 meter by walking
6. Temperature	In the air $10\frac{1}{2}^{\circ}\text{C}$ In the water $13\frac{1}{2}^{\circ}\text{C}$
7. Wind during hauling	Data Semaphore Direction N.E. Velocity $3\frac{1}{2}$ m/sec
8. Tides	2nd High Tide 19.09
9. Time during hauling	17.08 - 17.20
10. Lighthours a day	16.42 a day
11. Water Levels	a. during hauling - 25 cm b. L.W. before hauling - 62 cm c. H.W. after hauling + 9 5cm.
12. Direction of streams	+ 2 hours before High water
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat - Nmg/l 0.3
Chloride in g/l	Ortho + hydrolyseerbaar fosfaat
NH ₄ and NO ₃ taken for N	P mg/l 0.06
Phosphate for P	Chloride 1 mg/l 15,6

DATA SAMPLING JUNE AND JULY 1975

XVII Haul "Pier" A, Scheveningen, two hours before high tide
Date: 15th June 1975.

XVII Haul "Pier" A, Scheveningen.	Total numbers of organisms in Haul
1. B a c i l l a r i o p h y c e a e	
Bellarochea malleus	200
Biddulphia sp.	700
" sinensis	1200
Cerataulina sp.	400
Coscinodiscus concinnus	800
" excentricus	800
" granii	1800
Eucampia zoodiacus	6600
Rhizosolenia sp.	800
Rhizosolenia alata	600
2. P r o t o z o a	
Noctiluca miliaris	78200
Flagellata sp.	abundant
3. C t e n o p h o r a	
Pleurobrachia pileus	200
4. C o e l e n t e r a t a	
Bourgainvillia ramosa	100
Hydroid Obelia sp.	150
" Tubularia sp.	150
Leuckartiara octona	50
Phialidium hemisphericum	200
Rathkea octopunctata	500
Steenstrupia nutans	850
5. N e m a t o d a	
Nematoda sp.	
6. P o l y c h a e t a	
Empty vase Terebella larva etc,	8500
Polychaeta larva	1100
Terebella Larva	5100
7. C r u s t a c w x e a	
C o p e p o d a	
Acartia sp.	100
Centropages sp.	50
Temora longicornis	50
C i r r i p e d i a	
Cypris Larva Cir.sp.	50
8. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Larva Cardium spsp.(0.25mm)	50
9. E c h i n o d e r m a t a	
Echinopluteus larva	1750
10. S a l p i d e	
Oikopleura XXXX dioica	50
11. E g g s	
Evertebrata	200

Sediment + 2/7 contents. (mud, vegetable rests empty vases Terebella larva)

Fishermen caught cel (byones)

DATA SAMPLING JUNE AND JULY 1975

XVIII Haul "Pier" ~~B~~, Scheveningen, four hours after High Tide
Date: 3rd July 1975.

<p>Hauls</p> <p>1. Place of hauling</p> <p>2. Situation</p> <p>3. Weather forecast</p> <p>4. Weather, while hauling</p> <p>5. Distance, while hauling</p> <p>6. Temperature</p> <p>7. Wind during hauling</p> <p>8. Tides</p> <p>9. Time during hauling</p> <p>10. Lighthours a day</p> <p>11. Water Levels</p> <p>12. Direction of streams</p> <p>13. Direction of streams at Scheveningen</p> <p>14. Chemical analysis Chloride g/l NH₄ and NO₃ taken for N Phosphate for P</p>	<p>XVIII "Pier" B, Scheveningen Pier, Scheveningen + 300 meter from the beach Dry and rather sunny. Wind light to moderate; mainly from Northern directions. Minimum temperature about 11°C, maximum temperature on the third of July 23°C, but near the sea some degrees lower</p> <p>Sky fully overcast, wind moderate at times gusts of strong wind. Sea somewhat choppy; colour of the sea at the distance grey, near hauling dark green and somewhat transparent. Visibility not much as it was hazy near the horizon</p> <p>+ 400 meter by walking In the air 19°C, in the water 14°C Data Semaphore Direction N.N.E, Velocity 2m/sec.</p> <p>2nd High Tide 22.01, 1st H.T. 8.31</p> <p>12.35 - 12.47 16.38</p> <p>a. during hauling - 5cm b. L.W. before hauling -75 cm c. H.W. after hauling + 72 cm (2nd H.W. after hauling + 52cm</p> <p>Direction of streams + 4 hours before high water <i>after</i></p> <p>Nitrat - N mg/l 0.2 ortho + hydrolyseerbaar fosfaat P mg/l 0.08 Chloride g/l 16,6</p>
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DATA SAMPLING JUNE AND JULY 1975.

XVIII Haul "Pier" ~~BA~~, Scheveningen, 4 hours after high tide

Date: 3rd July 1975.

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XVIII Haul "Pier" BA , Scheveningen	Total numbers of organisms in haul
1. B a c i l l a r i o p h y c e a e	
Biddulphia sinensis	300
Coscinodiscus granii	150
Eucampia zoodiacus	150
Rhizosolenia alata	1350
Rhizosolenia sp.	1350
2. P r o t o z o a	
Noctiluca miliaris	85500
3. C o e l e n t e r a t a	
Steenstrupia nutans	50
4. N e m a t o d a	
Nematoda sp.	50
5. P o l y c h a e t a	
Empty vase Terebella larva	1250
Polychaeta sp.	150
Polychaeta larva	3950
Plynoid larva	400
Terebella larva	21950
6. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	800
" with parasites	150
Centropages sp.	550
Microcalanus larva Copepoda sp. pusillus	1950
Nauplius larva Cop sp.	50
C i r r i p e d i a	
Cypris larva Cir.sp.	1550
Nauplius " " "	500
D e c a p o d a	
Megalopa larva	150
of Cancer sp.	
X Zoea larva Pagurus sp.	50
Harpacticoida sp. ^{Harpacticoida}	100
7. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Mytilius edulus (0.2mm)	450
8. E c h i n o d e r m a t a	
Echinopluteus larva	100
9. E c t o p r o c t a	
Membranipora membranacea	50
10. E g g s	
Evertebrata egg	150
Fish egg	50

DATA SAMPLING JUNE AND JULY 1975.

XIX Haul "Pier" A, Scheveningen two hours before high tide

Date: 8th July 1975.

Hauls	XIX "Pier" A, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Dry and sunny, but in the North cloud-banks.
4. Weather, while hauling	Light white clouds, sunny weather very hazy at the distance and visibility poor. Sea at the distance grey; near place of hauling light green-brown and somewhat transparent.
5. Distance, while hauling	± 144 meter by walking
6. Temperature	In the air 24°C, in the water 19°C.
7. Wind during hauling	Data Semaphore Direction N.N.E. Velocity 2 m/sec.
8. Tides	2nd H.T. 14.35
9. Time during hauling	11.56 - 12.08
10. Light hours a day	
11. Water Levels	a. during hauling - 36 cm b. L.W. before hauling - 64 cm c. H.W. after hauling + 10 ¹ / ₄ cm
12. Direction of streams	± 2 hours before high water
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat 0.1 mg/l
Chloride in g/l	1 mg/l
NH ₄ en NO ₃ takeb for N	ortho + hydrolyseerbaar 0.36 mg/l
Phosphate for P	Chloride 16.7 g/l

DATA SAMPLING JUNE AND JULY 1975.

XIX Haul "Pier" A, Scheveningen, 2 hours before high tide.

Date: 8th July 1975.

XIX Haul "Pier" A, Scheveningen	Total numbers
1. B A C I L L A R I O P H Y C E A E	
Coscinodiscus granii	150
R h i z o s o l e n i a sp.	4350
2. P r o t o z o a	
Noctiluca miliaris	102000
3. C t e n o p h o r a	
Pleurobrachia pileus	50
Berve Cucumis	50
4. C o e l e n t e r a t a	
Obelia sp.	50
Phialidium hemisphericum	150
5. N e m a t o d a	
Nematoda sp.	200
6. P o l y c h a e t a	
Empty vase Terebella larva	950
Polychaeta larva	2950
Terebella larva	4200
7. C r u s t a c e a	
C o p e p o d a	
Anomalocera patersoni	100
Acartia sp.	2800
Calanus finmarchicus	100
Centropages sp.	1450
Centropages with parasites	50
Microcalanus pusillus	300
Temora longicornis	850
H a r p a c t i c o i d a	
Harpacticoida sp.	50
C i r r i p e d i a	
Cypris larva Cir.sp.	600
Nauplius " " "	200
D e c a p o d a	
Megalopa larva Cancer sp.	50
Zoea larva Crangon vulgaris	50
(last stago)	
8. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Mytilus edulis (+ 0.2mm)	600
9. E c h i n o d e r m a t a	
Echino pluteus pluteus larva	100
Sediment + 1/12 contents	
(mud, vegetable rests, dead Polychaeta)	
Fisherman caught eel and sole.	

DATA SAMPLING JUNE AND JULY 1975.

XX Haul "Pier"^B~~A~~, Scheveningen, two hours after high tide.

Date: 17th July 1975.

Hauls	XX "Pier" B, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Sunny periods, but locally showers too. Wind subsiding to moderate from Western direction.
4. Weather, while hauling	At first sky fully overcast, later on the sun came through with light white clouds and blue sky. Hazy at the distance, yet the visibility was not too back. Sea choppy. Colour sea at the distance grey at first, later on green-grey, nearby dark green transparent.
5. Distance while hauling	+ 144 meter by walking
6. Temperature	In the air 18°C in the water 18°C 19°C
7. Wind during hauling	Data Semaphore Direction W.S.W. Velocity 4½ m/sec.
8. Tides	1st H.T. 9.16
9. Time during hauling	10.54 - 11.06
10. Light hours a day	16.13
11. Water Levels	a. during hauling + 88 cm b. L.W. before hauling - 6 cm c. H.W. after hauling + 103 cm.
12. Direction of streams	+ 2 hours after high water
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat 0.1 mg/l
Chloride in g/l	N mg/l
NH ₄ and NO ₃ taken for N	Ortho + hydrolyseerbaar 0.33
Phosphate for P	Chloride 14,5 g/l mg/l

DATA SAMPLING JUNE AND JULY 1975

XX Haul "Pier" B, Scheveningen, two hours

Date: 17th July 1975.

XX Haul "Pier" B, Scheveningen	Total numbers
1. B a c i l l a r i o p h y c e a e	
Coscinodiscus granii	2750
Rhizisolenia sp.	1500
2. P r o t o z o a	
Noctiluca miliaris	282750
3. C o e l e n t e r a t a	
Phialidium hemisphericum	200
4. P o l y c h a e t a	
Empty vase Terebella larva	50
Polychaeta larva	250
Terebella larva	50
5. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	400
Nauplius " " "	600
C o p e p o d a	
Acartia sp.	400
Acartia sp.with parasites	150
Centropages sp.	1300
" with eggs	100
" " parasites	50
Microcalanus pusillus	100
Nauplius larva Cop.sp.	100
Temora longicornis	200
" " with parasites	100
H a r p a c t i c o i d a	
Harpacticoida sp.	50
D e c a p o d a	
Zoea larva Pagurus sp.(young stage)	50
I s o p o d a	
Isopoda sp.	50
Larva Isopoda sp.	100
(Eurydice pulchra)	
6. M o l l u s c a	
Larva Cardium sp.(0.2mm - 0.3 mm)	250
Larva Mytilus edulis(0-2mm)	100
7. E g g s	
Evertebrata eggs	6700

$\pm \frac{1}{12}$ contents sediment mainly animal rests, some vegetable rests, mud $\frac{1}{2}$.

Fishermen caught a bass (zeebaars). Under the "Pier" island, there were lesser grey mallots (harders, zijn algeneters).

DATA SAMPLING AUGUST 1975.

A Haul XXL "Pier" Scheveningen

Date: 6th August 1975.

Haul XXI "Pier", Scheveningen

- | | |
|---|---|
| 1. Place of haul | "Pier" Scheveningen |
| 2. Situation | ± 300 meter from the beach |
| 3. Weather forecast | During the night and early morning local thunderstorm; mostly dry and sunny. Wind mostly moderate between East and South, but near the coast temporarily from the sea. Minimum temperature 19° C. but maximum temperature during the day 25° C - 30° C. |
| 4. Weather, while hauling | Sky blue. Hazy near the horizon
Sea grey-green. Near hauling green transparent. Sea very calm. Visibility not very good. |
| 5. Distance, while walking | ± 144 meter by walking |
| 6. Temperature | Air 28° C Water 21° C. |
| 7. Wind during hauling | Data Semaphore:
Direction S.S.E. Velocity 3½m/sec |
| 8. Tides | 2nd H.T. 14.19 |
| 9. Time of hauling | 11.08 - 11.20 |
| 10. Lighthours a day | 13.15 |
| 11. Water Levels | a. during hauling - 63 cm
b. L.W. before hauling - 75 cm
c. H.W. after hauling + 88 cm |
| 12. Direction of streams | ± 3 hours before High Tide |
| 13. Direction of streams at Scheveningen | |
| 14. Chemical analysis (NH ₃ ⁺) | Ammonium 0.4 mgr/l
Nitrate (NO ₃ ⁻) 0.26 mgr/l
Silicaat 0.2 mgr/l
Chloride 16.9 gr/l
Ortho + hydrolyseerbaar fosfaat (PO ₄ ⁻) 0.05 mgr/l |

DATA SAMPLING AUGUST 1975

XXI Haul "Pier" Scheveningen

Date: 6th August 1975.

Haul XXI "Pier" Scheveningen

1. P r o t o z o a	
Noctiluca miliaris	53450
2. C o e l e n t e r a t a	
Hydroid of steenstrupia nutans	50
Phialidium hemisphericum	200
3. P o l y c h a e t a	
Empty vase Terebella larva	100
Polychaeta larva	300
Terebella larva	100
4. N e m a t o d a	
Nematoda sp.	100
5. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	100
C o p e p o d a	
Anomalocera patersonii	200
Acartia sp.	7950
" " with parasites	200
Centropages sp.	1650
Microcalanus pusillus	1200
Nauplius larva Cop.sp.	100
Temora longicornis	550
H a r p a c t i c o i d a	
Harpacticoida sp.	100
C l a d o c e r a	
Evadna sp.	250
Podon sp.	850
6. E g g s	
Evertabrata egg	300

DATA SAMPLING SEPTEMBER 1975.

Haul I "Pier" A, Scheveningen, 2 hours before High Tide

Date: 2nd September 1975.

Hauls	Haul I "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	During the night and early morning locally mist; for the rest dry and rather sunny. Wind light to moderate, Northern. Maximum temperature 22 °C.
4. Weather while hauling	Sunny, but sky overcast by light, white clouds. Sea a bit choppy, summer-autumn weather. On the Monday before the wind was so strong that I had to go back, visibility rather good. Sea at the distance grey-brown, near hauling brown and somewhat transparent.
5. Distance while hauling	± 1400 meter by walking
6. Temperature	In the air 22 °C in the water 18 °C
7. Wind during hauling	Data Semaphore Direction N.N.E. Velocity 5½ m/sec
8. Tides	1st H.T . 11.55
9. Time of hauling	10.08 - 10.20
10. Lighthours a day	
11. Water Levels	a. during hauling - 5 cm b. L.W. before hauling - 70 cm c. H.W. after hauling + 58 cm
12. Direction of streams	± 2 hours before High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrate (NO ₃ ⁻ N) 2.8 mgr/l
Chloride mg/l	Chloride (Cl ⁻) 16.0 gr/l
NH ₄ ⁺ NO ₃ ⁻ taken	
as N	
PO ₄ ⁻ taken for P	

DATA SAMPLING SEPTEMBER 1975.

Haul I "Pier" A, Scheveningen, two hours before High Tide

Date: 2nd September 1975.

Haul I "Pier" A, Scheveningen	Total numbers
1. B a c i l l a r i o p h y c e a e	
Coscinodiscus concinnus	3750
" excentricus	4000
" granii	1500
Fragilaria sp.	750
2. P r o t o z o a	
Noctiluca miliaris	142250
3. C t e n o p h o r a	
Pleurobrachia pilyeus	150
4. C o p l o n t e r a t a	
Phialidium hemisphaerica cum	550
5. P o l y c h a e t a	
Polychaeta larva	60750
Terebella "	50
6. C r u s t a c e a	
C i r r i p e d i a	
Cyprus larva Cir.sp.	2150
C o p e p o d a	
Acartia sp.	3000
Centropages sp.	1050
Centropages sp.with parasites	100
Microcalanus pusillus	2800
Temora longicornis	700
H a r p a c t i c o i d a	
Harpacticoida sp.	3000
Harpacticoida sp.with eggs	300
7. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Larva Mytilus edulis (0.2mm)	200
Larva Spisula (0.2mm)	150
8. E g g s	
Evertebrata eggs	300

Sediment $\pm \frac{1}{7}$ contents

(mud, many larvae polychaeta) some vegetable rests and pellets).

Fishermen caught only \pm one eel

DATA SAMPLING SEPTEMBER 1975.

Haul I "Pier" B, Scheveningen two hours after High Tide

Date: 2nd September 1975.

Hauls	Haul I "Pier" B, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 400 meter from the beach
3. Weather forecast	During the night and early morning local mist, for the rest dry and rather sunny. Wind light to moderate, Northern. Maximum temperature 22 °C
5+ Weather while hauling	Sun, blue sky, white clouds more hazy than in the morning and visibility less than in the morning, though still rather good. Sea grey-blue at the distance. Brown transparent near place of hauling.
5. Distance while hauling	+ 144 meter by walking
6. Temperature	In the air 21½ °C in the water 19½ °C
7. Wind during hauling	Data Semaphore Direction N.N.E. Velocity 4m/sec.
8. Tides	1st H-T. 11.55
9. Time of hauling	14.04 - 14.16
10. Lighthours a day	
11. Water Levels	a. during hauling + 18 cm b. H.W. before hauling + 58 cm c. L.W. after hauling - <i>See ml</i>
12. Direction of streams	+ 2 hours after High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	
Chloride mg/l	
NH ₄ ⁺ NO ₃ ⁻ taken as N	<i>No data</i>
PO ₄ ⁻⁻⁻ taken for P	

DATA SAMPLING SEPTEMBER 1975.

Haul I "Pier" B, Scheveningen, two hours after High Tide

Date: 2nd September 1975.

Haul I "Pier" B, Scheveningen	Total numbers
1. B a c i l l a r i o p h y c e a e	
Chaetoceros sp.	2250
Coscinodiscus concinnus	2000
" excentricus	2500
" granii	1500
Fragilaria sp.	1750
Skeletonema costatum	500
2. P r o t o z o a	
Noctiluca miliaris	316500
3. C t o n o p h o r a	
Pleurobrachia pileus	100
4. C o e l e n t e r a t a	
Phialidium hemisphericum	200
Sarsia sp.	150
5. P o l y c h a e t a	
Polychaeta larva	2450
Terebella larva	50
6. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	1300
Mauplius larva Cir.sp.	150
c C o p e p o d a	
Acartia sp.	900
Centropages sp.	350
Microcalanus pusillus	600
Nauplius larva Cop.sp	50
Temora longicornis	150
C l a d o c e r a	
Podon sp.	50
H a r p a c t i c o i d a	
Harpacticoida sp.	700
7. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Larva Mytilus edulis (0.15mm)	50
Larva Spisula sp (0.2mm)	50
G a s t r o p o d a	
Veliger larva	50
8. C h a e t o g n a t h a	
Sagitta sp.	50
9. E v e r t e b r a t a e g g s	
Evertebrata sp.	900

Sediment = $\frac{1}{8}$ contents
 (mainly mud, vegetable rests,
 Noctiluca miliaris, some pellets
 and sand)

Fishermen caught some eel.

DATA SAMPLING SEPTEMBER 1975.

Haul III "Pier" A, Scheveningen, one hour before High Tide

Date: 8th September 1975.

Hauls	Haul II "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Most places dry weather with sunny periods, but near the "Wadden" (The Dutch shallows) and later on also somewhere else cloud-banks. Maximum temperature 20°C. Wind Southern to Southern-Western, light to moderate.
4. Weather, while hauling sky	Sky partly overcast, sunny, visibility rather good, though slightly hazy, at the distance. Colour seawater at the distance grey; near hauling brown-green and somewhat transparent. Sea somewhat choppy.
5. Distance, while hauling	± 144 meter by walking
6. Temperature	In the air 21°C. In the water 19°C
7. Wind during hauling	Data Semaphore Direction W. Velocity 4m/sec.
8. Tides	2nd High Tide 16.52
9. Time of hauling	15.37 - 15.49
10. Lighthours a day	13.11
11. Water Levels	a. during hauling + 5 cm b. L.W. before hauling -90 cm c. H.W. after hauling + 100 cm
12. Direction of streams	± one hour before High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat (N) 0.5 mg/l
Chloride mg/l	Orthohydroleesbaar fosfaat P mg/l
NH ₄ ⁺ NO ₃ ⁻ taken	0.10
PO ₄ ⁻ as N taken for P	Chloride gr/l 15,0

DATA SAMPLING SEPTEMBER 1975.

Haul II "Pier" A, Scheveningen, two hours before High Tide

Date: 8th September 1975.

Haul II "Pier" A, Scheveningen	Total numbers
1. B a c i l l a r i o p h y c e a e	
Bellarocha malleus	150
Biddulphia sp.	150
" sinensis	750
Cerataulina bergonii	450
Chaetoceras sp.	4350
Concinodiscus concinnus	4800
" excentricus	8250
" granii	6900
Ditylum brightwelli	600
Eucampia zoodiacus	900
Rhizosolenia alata	300
Thalassiosira sp.	150
2. P r o t o z o a	
Foraminifera sp.	1050
Noctulica miliaris	31050
3. C t e n o p h o r a	
Pleurobrachia pileus	50
4. C o e l e n t e r a t a	
Phialidium hemisphericum	100
Sarsia sp.	50
5. P o l y c h a e t a	
Empty vase Terebella larva	150
Polychaeta larva	950
Terebella larva	150
6. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	1250
Nauplius " " "	150
C l a d o c e r a	
Podon sp.	700
C o p e p o d a	
Acartia sp.	9200
Centropages sp.	2550
Microcalanus pusillus	300
Nauplius larva Cop.sp.	200
Temora longicornis	400
H a r p a c t i c o i d a	
Harpacticoida sp.	450
M y s i d a c e a	
Mesopotopsis slabberi	50
A m p h i p o d a	
Amphipoda sp.	50
7. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Mactra corallina (0.250mm)	150
Spisula sp. (0.2mm)	200
8. S a l p i d a	
Trochophora larva	900
9. E g g s	
Fish egg	50
Evertabrata egg	7600

Sediment + 1/10 contents (mud + detritus)
 Few Fishermen present, some eel was caught.

DATA SAMPLING SEPTEMBER 1975.

Haul II "Pier" B, Scheveningen, two hours after High Tide

Date: 8th September 1975.

Hauls	Haul II "Pier" B, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Most places dry weather with sunny periods, but near the the "Wadden) (The Dutch shallows) and later on also somewhere else cloud-banks. Maximum temperature 20°C. Wind Southern to South-Western, light to moderate.
4. Weather, while hauling	Late in the afternoon. The sun was setting in a red sky. Very calm Weather though moderate to strong wind was forecasted for the following day. Sea at the distance grey, near hauling more green-brown, transparent, visibility not too good, hazy.
5. Distance while hauling	± 144 meter by walking
6. Temperature	Air 19°C. In the water 19°C
7. Wind during hauling	Data semaphore Direction S. Velocity 2½m/sec.
8. Tides	2nd High Tide 16.52
9. Time of hauling	18.53 - 19.05
10. Lighthours a day	13.11
11. Water Levels	a. during hauling + 30 cm b. H.W. before hauling + 100 cm c. L.W. after hauling - 101 cm
12. Direction of streams	± 2 hours after High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis Chloride mg/l NH ₄ ⁺ NO ₃ ⁻ taken as N PO ₄ ⁻ taken for P.	

DATA SAMPLING SEPTEMBER 1975.

Haul II "Pier" B, Scheveningen, two hours after High Tide.
Date: 8th September 1975.

Haul II "Pier" B, Scheveningen	Total numbers
1. B a c i l l a r i o p h y c e a e	
Biddulphia mobiliensis	100
Chaetoceros sp.	2500
Coscinodiscus concinnus	500
" excentricus	4350
" granii	1850
Eucampia zoodiacus	350
Fragilaria sp.	250
2. P r o t o z o a	
Ceratium fusus	50
Noctiluca miliaris	5100
3. C t e n o p h o r a	
Pleurobrachia pileus	100
4. C o e l e n t e r a t a	
Phialidium hemisphericum	950
5. P o l y c h a e t a	
Polychaeta larva	3500
Terebella larva	50
6. C r u s t a c e a	
C i r r i p o d i a	
Cypris larva Cir.sp.	1400
Nauplius " " "	1200
C l a d o c e r a	
Podon sp.	5550
C o p e p o d a	
Acartia sp.	3050
Acartia sp. with parasites	150
Centropages sp.	1400
Microcalanus pusillus	550
Nauplius larva Cop.sp.	600
Temora longicornis	200
H a r p a c t i c o i d a	
Harpacticoidasp.	100
C u m a c e a	
Cumacea sp.	50
7. M o l l u s c a	
Cardium sp. (0.2mm)	50
Mytilus edulis (0.15 mm)	100
Spisula sp. (0.15mm)	100
8. S a l p i d a	
Trochophora larva	1400
9. E g g s	
Evertebrata sp.	2000

Sediment $\frac{1}{12}$ contents (mud + detritos,
 slimy, rests of Noctiluca miliaris)

One fisherman present caught dn eel.

DATA SAMPLING OCTOBER 1975.

Haul III "Pier" A, Scheveningen, two hours before High Tide

Date: 2nd October 1975.

Hauls III	"Pier" A, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	± 300 meter from the beach.
3. Weather forecast	During some time rain, especially in the South of the country; but also a few times clearing up of the sky, Wind light to moderate at first Eastern; later on shifting to the West. Minimum temperature about 11°C, maximum temperature during the daytime 17°C.
4. Weather, while hauling	Sunny, blue sky with clouds, white and dark and occasionally there was no sun. Sea steel-blue at the distance; nearby greenish and near place of hauling, transparent, visibility good. Sea choppy. Wind moderate to fresh.
5. Distance while hauling	± 144 meter by walking.
6. Temperature	In the air 18°C; in the water 16°C
7. Wind during hauling	Data semaphore Direction S.W. Velocity 5½ m/sec.
8. Tides	1st High Tide 12.39
9. Time of hauling	10.30 - 10.42
10. Lighthours a day	11.16
11. Water Levels	a. during hauling + 50 cm b. L.W. before hauling - 69 cm c. H.W. after hauling + 90 cm
12. Direction of streams	± 2 hours before High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat (NO ₃ ⁻ - N) 0.7 mgr/l Ammonium (NH ₄ ⁺ - N) 0.3 mgr/l Chloride 15,2 gr/l Ortho-fosfaat (PO ₄ ⁻⁻⁻) 0.06 mgr/l Ortho-hydrolyseerbaar fosfaat 0.10 mgr/l

DATA SAMPLING OCTOBER 1975.

Haul III "Pier" A, Scheveningen, two hours before High Tide.

Date: 2nd October 1975.

Haul III Pier" A, Scheveningen	Numbers of organisms
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	300
" alternans	150
" sinensis	750
Chaetoceros sp.	750
Coscinodiscus concinnus	450
" excentricus	8250
" granii	8700
Eucampia zoodiacus	150
Fragilaria sp.	300
Skeletonema costatum	900
2. P r o t o z o a	
Noctiluca miliaris	1200
3. C o e l e n t e r a t a	
Phialidium hemisphericum	250
4. P o l y c h a e t a	
Polychaeta larva	850
5. C r u s t a c e a	
C i r r i p o d i a	
Cypris larva Cir.sp.	1000
Nauplius " " "	100
C o p e p o d a	
Acartia sp.	8000
Acartia with parasites	700
Anomalocera patersoni	400
Calanus sp.	50
Centropages	7600
" with parasites	700
Microcalanus pusillus	500
Nauplius larva Cop.sp.	200
Temora longicornis	350
H a r p a c t i c o i d a	
Harpacticoida sp.	3350
H y p e r i i d a e	
Hyperia galla	100
D e c a p o d a	
Zoea larva Cancer sp.	50
6. M o l l u s c a	
G a s t r o p o d a	
Late veliger larva Gastropoda sp.	100
L a m e l l i b r a n c h i a t a	
Mactra corallina (0.25mm)	50
Mytilis edulis (0.2 mm)	100
Spisula sp. (0.35mm)	100
7. E c h i n o d e r m a t a	
Echinopluteus larva	150
8. E c t i o p r o c t a	
Membranipora membranacea	100
9. P a r a s i t a e	
Copepoda sp.	200
10. E g g s	
Evertebrata sp.	500

Sediment + 1/12 contents (pellets, vegetable rests, mud, sand). No fishermen about.

DATA SAMPLING OCTOBER 1975.

Haul III "Pier"B, Scheveningen, two hours after High Tide

Date: 2nd October 1975.

Hauls	III "Pier"B, Scheveningen
1. Place of hauling	Pier, Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	During some time rain, especially in the South of the country; but also a few times clearing up of the sky. Wind light to moderate at first Eastern; later on shifting to the West. Minimum Temperature about 11°C, maximum during the daytime 17°C.
4. Weather while hauling	Sky for the greater part overcast; only occasionally a vague sunshine. Visibility not too good, somewhat hazy. Sea grey near the horizon, blue and near place of hauling green-brown transparent. Wind changing.
5. Distance while hauling	+ 144 meter by walking
6. Temperature	In the air 19°C, In the water 14°C.
7. Wind during hauling	Data Semaphore Direction S.S.W. Velocity 5½m/sec.
8. Tides	1st High Tide 12.39
9. Time of hauling	14.34 - 14.46
10. Lighthours a day	11.16
11. Water Levels	a. during hauling + 35 cm b. L.W. before hauling <i>~90cm</i> c. H.W. after hauling + 90cm
12. Direction of streams	2 hours after High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO_3^- 0.5 mg/l Ammonium NH_4^+ 0.2 mg/l Chloride 16.0 g/l Orthofosfaat 0.97 mg/l Ortho + hydrolyseerbaar fosfaat 0.11 mg/l

DATA SAMPLING OCTOBER 1975.

Haul III "Pier" B, Scheveningen, two hours after High Tide

Date: 2nd October 1975.

Haul III "Pier" B, Scheveningen	Numbers of organisms
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	600
" alternans	300
" sinensis	600
Chaetoceros sp.	150
Coscinodiscus excentricus	1500
" granii	2700
Fragilaria sp.	150
Skeletonema costatum	150
2. P r o t o z o a	
Noctiluca miliaris	300
3. C o e l e n t e r a t a	
Phialidium hemisphericum	300
Sarsia sp.	50
4. P o l y c h a e t a	
Empty vase Terebella larva	100
Polychaeta larva	350
5. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	150
Nauplius larva Cir.sp.	50
C o p e p o d a	
Acartia sp.	900
Centropages sp.	700
Centropages sp.with parasites	450
Microcalanus pusillus	200
Nauplius larva Cop.sp.	50
H a r p a c t i c o i d a	
Harpacticoida sp.	100
6. M o l l u s c a	
G a s t r o p o d a	
Late veliger larva Gastropoda sp.	100
L a m e l l i b r a n c h i a t a	
Mytilus edulis (0.2mm)	100
7. E g g s	
Evertibrata sp.	150

DATA SAMPLING OCTOBER 1975.

Haul IV "Pier" A, Scheveningen, two hours before High Tide

Date: 16th October 1975.

Hauls	IV "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Sometimes clearing of the sky. During the night locally mist and during the daytime locally a shower. Wind moderate to fresh. Southern to South-Eastern. Minimum temperature about 4°C , maximum temperature about 12°C .
4. Weather, while hauling	Sky fully overcast. Misty and visibility poor. Sea calm, only somewhat choppy. Sea at the distance grey, near hauling green-brown. Not much wind. Leaving the Pier for a moment the sun came through (+ 2 o'clock)
5. Distance while hauling	+ 144 meter by walking
6. Temperature	In the air 14°C . in the water 13°C
7. Wind during hauling	Data semaphore Direction S.S.E. Velocity $4\frac{1}{2}\text{m/sec}$.
8. Tides	2nd H.T. 13.00
9. Time of hauling	10.57 - 11.09
10. Lighthours a day	10.42
11. Water Levels	a. during hauling no data b. L.W. before hauling " " c. H.W. after " " "
12. Direction of streams	+ 2 hours after before High Tide.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO_3^- 0.6 mg/l Ammonium NH_4^+ 0.3 mg/l Chloride (Cl) 16.0 g/l Orthofosfaat 0.09 mg/l Orthohydrolyseerbaar fosfaat 0.11mg/

DATA SAMPLING OCTOBER 1975.

Haul IV "Pier" A, Scheveningen, two hours before High Tide

Date: 16th October 1975

Haul IV "Pier" A, Scheveningen, 1975.	Numbers of organisms
1. B a x i l l a r i o p h y c e a e	
Biddulphia sp.	300
" mobiliensis	150
" sinensis	300
" regia	300
Chaetoceras sp.	300
Coscinodiscus concinnus	1650
" excentricus	5250
" granii	3750
Fragilaria sp.	200
2. P r o t o z o a	
Noctiluca miliaris	2400
3. C t e n o p h o r a	
Pleurobrachia pileus	150
4. C o e l e n t e r a t a	
Bipinularia larva	50
Phialidium hemisphericum	250
Sarsia sp.	50
5. P o l y c h a e t a	
Polychaeta larva	400
6. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	8250
Acartia sp. with parasites	200
Centropages sp.	2250
Microcalanus pusillus	400
Nauplius larva Cop.sp.	100
Temora longicornis	150
C i r r i p e d i a	
Cypris larva Cir.sp.	250
H a r p a c t i c o i d a	
Harpacticoida sp.	950
" " with eggs	400
C u m a c e a	
Cumacea sp.	50
M y s i d a c e a	
Mesopodopsi slabberi	50
7. M o l l u s c a	
L a m e l l i b r a n c h i a t i	
Mactra corallina (0.3mm)	50
Trochophora larva	300
8. C h a e t o g n a t h a	
Sagitta larva	50
9. S a l p i d a	
Oikopleura dioica	150
10. E c t o p r o c t a	
Membranipora membra nacea	150
11. E g g s	
Evertebrata eggs	550
Sediment + 1/10 contents, detritus, mainly vegetable rests. No fishermen about.	

DATA SAMPLING OCTOBER 1975.

Haul IV "Pier" B, Scheveningen, two hours after High tide.

Date: 16th October 1975.

Hauls	IV "Pier" B, Scheveningen
1. Place of hauling	"Pier", Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Sometimes clearing of the sky. During the night locally mist and during the daytime locally a shower. Wind moderate to fresh. Southern to South-Eastern. Minimum temperature about 6°C, maximum temperature about 12°C.
4. Weather while hauling	Sky fully overcast and no sunshine, though some light clouds were visible sky . During hauling the sky got darker and there was some drizzle. Visibility better than in the morning. Sea grey with some blue near the horizon. Near hauling green-brown. Sea choppy.
5. Distance while hauling	± 144 meter by walking
6. Temperature	In the air 14½°C. in the water 15°C
7. Wind during hauling	Data Semaphore Direction W.S.W. Velocity 2½m/sec.
8. Tides	2nd H.T. 13.00
9. Time of hauling	14.51 - 15.03
10. Lighthours a day	10.42
11. Water Levels	a. during hauling no data b. L.W. before " " c. H.W. after " "
12. Direction of streams	± 2 hours after High Tide.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO ₃ ⁻ 0.5 mg/l Ammonium NH ₄ 0.3 mg/l Chloride (Cl) 15.8 g/l Orthofosfaat 0.09 mg/l Ortho + hydrolyseerbaar fosfaat 0.10 mg/l

DATA SAMPLING OCTOBER 1975.

Haul IV "Pier" B, Scheveningen, two hours after High Tide
Date: 16th October 1975.

IV "Pier" B, Scheveningen	Number of organisms
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	300
" alternans	150
" mobiliensis	150
" sinensis	300
Chaetoceros sp.	1800
Coscinodiscus concentricus	2850
" excentricus	2850
" granii	100
Coscinodiscus sp.	150
2. P r o t o z o a	
Noctiluca miliaris	1650
3. C o e l e n t e r a t a	
Phialidium hemisphericum	1850
4. P o l y c h a e t a	
Polychaeta larva	200
5. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	800
Centropages sp.	250
Microcalanus pusillus	150
Nauplius larva Cop.sp.	150
Temora longicornis	50
H a r p a c t i c o i d a	
Harpacticoida sp.	100
6. M o l l u s c a	
L a m e l l i b r a n c h i a t i	
Modiolus modiolus (0.2 mm)	450
Trochophora larva	400
7. S a l p i d a	
Oikopleura dioica	200
8. E g g s	
Evertebrata egg	150

Sediment + 1/10 contents (detritus,
 pellets and mainly vegetable resta)

Fishermen caught very little, only
 a few dabs.

DATA SAMPLING NOVEMBER AND DECEMBER 1975

Haul V "Pier" A, Scheveningen, two hours before High Tide.

Date: 2nd November 1975.

Hauls	V "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Heavily clouded; locally a shower; clearing up of the sky from South-Western direction. Wind moderate. Temperature about 14°C.
4. Weather while hauling	Very misty, sky fully overcast. Visibility poor. Sea somewhat choppy. Colour at the distance grey; near hauling grey-brown and somewhat transparent. When I left at about 12.30, the sun was momentarily shining ^{through} the hazy atmosphere. ardly
5. Distance while hauling	+ 144 meter from the beach
6. Temperature	In the air 10-14°C. In the water 12°C
7. Wind during hauling	Data Semaphore Direction S.S.W. Velocity 3½ m/sec.
8. Time of hauling	11.50 - 12.02
9. Light hours a day	9.36
10. Tides	2nd High Tide 13.48
11. Water Levels	a. during hauling - 10cm b. L.W. before hauling - 46 cm c. H.W. after hauling + 108 cm.
12. Direction of streams	two hours before H.W.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO_3^- 0,7 mg/l Ammonium NH_4^+ 0.4 mg/l Chloride (Cl) 15.5 g/l Orthofosfaat 0.08 mg/l Ortho + hydrolyseerbaar fosfaat 0.09 mg/l

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul V"Pier" A, Scheveningen two hours before High Tide.

v Date: 2nd November 1975.

V"Pier"A, Scheveningen	Numbers of organisms
1. B a c i l l a r i o p h y c e a e	
Biddulphia alternans	150
" mobiliensis	150
" sinensis	150
Coscinodiscus excentricus	9600
" concinnus	3300
" granii	7650
2. P r o t o z o a	
Foraminifera sp.	50
Noctiluca miliaris	4650
3. C r u s t a c e a	
Phialidium hemisphericum	150
Young Phialidium "	150
4. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	200
C o p e p o d a	
Acartia sp.	650
Centropages sp.	150
Microcalanus pusillus	300
Nauplius larva Cop.sp.	100
H a r p a c t i c o i d a	
Harpacticoida sp.	850
" " with eggs	100
5. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Spisula sp. (0.25 mm)	200
Trochophora larva	200
Modiolus modiolus (0.2 mm)	50
6. S a l p i d a	
Oikopleura dioica	650
7. E g g s	
Evertebrata eggs	500

$\pm \frac{1}{10}$ contents sediment

(some mud, pellets, detritus +
animal and, vegetable rests)

Fishermen caught hardly any thing,
only a few blennies

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul V "Pier" B, Scheveningen, two hours after High Tide.

Date: 2nd November 1975.

Hauls	V "Pier" B, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Heavily clouded; locally a shower clearing up of the sky from South-Western direction. Wind moderate. Temperature 14°C.
4. Weather while hauling	Sky fully overcast and misty. Near the horizon it was not so misty and there was more light in the sky. Visibility not so bad, as in the morning. Sea more choppy; grey near place of hauling, dark green. Leaving at about 16.15, the sun all at once came through.
5. Distance, while hauling	+ 144 meter from the beach
6. Temperature	In the air 11°C. In the water 12°C.
7. Wind during hauling	Data Semaphore Direction S.S.W-S.W. Velocity 4½m/s
8. Time of hauling	15.45 - 15.59
9. Lighthours a day	9.36
10. Tides	2nd H.T. 13.48
11. Water Levels	a. during hauling ⁴⁵ + 22 cm. b. L.W. before hauling - 46 cm c. H.W. before hauling + 108 cm
12. Direction of streams	+ two hours after H.W.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO ₃ ⁻ 0.7 mgr/l Ammonium NH ₄ ⁺ 0.3 mgr/l Chloride (Cl) 15.8 g/l Orthofosfaat 0.11 mgr/l Ortho + hydrolyseerbaar fosfaat 0.13 mg/l

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul V "Pier" B, Scheveningen, two hours after High Tide

Date: 2nd November 1975.

V "Pier" B, Scheveningen	Numbers of organisms
1. B a c i l l a r i a p h y c e a e	
Biddulphia sinensis	100
Chaetoceros sp.	100
Coscinodiscus concinnus	600
" excentricus	1600
" granii	1500
2. P r o t o z o a	
Noctiluca miliaris	350
3. C o e l e n t e r a t a	
Phialidium hemisphericum	100
Young " "	50
Sarsia sp.	100
4. C r u s t a c e a	
C o p e p o d a	
Acartia sp.	150
Centropages sp.	150
C i r r i p e d i a	
Cypris larva Cir.sp.	150
Nauplius " " "	50
H a r p a c t i c o i d a	
Harpacticoida sp.	200
5. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Spisula sp. (0.2 mm)	50
" (0.25 mm)	200
Modiolus modiolus (0.2 mm)	100
Trochophora larva	100
6. S a l p i d a	
Oikopleura dioica	600

Sediment $\pm \frac{1}{25}$ contents

(mud, pellets, detritus, animal and vegetable rests)

Fishermen caught only a few small dabs and plaice.

2

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul VI "Pier"A, Scheveningen, two hours before High Tide.

Date: 3rd November 1975.

Hauls	VI "Pier"A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 300 meter from the beach
3. Weather forecast	Heavily clouded; locally a shower clearing up of the sky from South-Western direction. Wind moderate. Temperature about 14°C.
4. Weather while hauling	Sky fully overcast. At the end of my work, there was some drizzle. Visibility poor. Sea choppy occasionally much wind. Colour sea grey, near hauling greenish-brown not very transparent.
5. Distance while hauling	+ 144 meter from the beach
6. Temperature	In the air 10°C. In the water 11°C.
7. Wind during hauling	Data semaphore Direction S.E.W. Velocity 6½m/sec
8. Time of hauling	12.26 - 12.38
9. Lighthours a day	9.32
10. Tides	2nd H.T. 14.38
11. Water Levels	a. during hauling - 22 cm b. L.W. before hauling - 85cm c. H.W. after hauling + 132 cm
12. Direction of streams	+ two hours before H.T.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO_3^- 0.7 mg/l Ammonium NH_4^+ 0.3 mg/l Chloride (Cl) 15.8 g/l Orthofosfaat 0.10 mg/l Ortho + hydrolyseerbaar fosfaat 0.12 mg/l

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul VI "Pier" A, Scheveningen, two hours before High Tide

Date: 3rd November 1975.

VI Haul "Pier" A, Scheveningen	Numbers of organisms.
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	150
" alternans	300
" sinensis	150
Chaetoceros sp.	150
Coscinodiscus concinnus	2100
" excentricus	12450
" granii	6600
2. P r o t o z o a	
Foraminifera sp.	100
Noctiluca miliaris	2050
3. C o e l e n t e r a t a	
Phialidium hemisphericum	150
Young " "	100
4. P o l y c h a e t a	
Polychaeta sp.	50
(Young Nereis sp)	
5. N e m a t o d a	
Nematoda sp.	50
6. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	100
C o p e p o d a	
Acartia sp.	1650
Anomalocera patersoni	150
Calanus finmarchicus	100
Centropages sp.	900
Microcalanus pusillus	100
Nauplius larva Cop.sp.	50
Temora longicornis	100
A m p h i p o d a	
Amphipoda sp.	50
H a r p a c t i c o i d a	
Harpacticoida sp.	1900
" " with eggs	650
7. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Spisula sp. (0.25mm)	50
Trochophora larva	150
8. S a l p i d a	
Oikopleura dioica	200
9. E g g s	
Evertabrata eggs	1150

Sediment $\pm \frac{1}{10}$ contents

(mud, sand, pellets, detritus
animal and vegetable *residue*)

No fisherment about

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul VII "Pier" A, Scheveningen two hours before High Tide.

Date: 1st December 1975.

Hauls	VII "Pier" A, Scheveningen
1. Place of hauling	"Pier" Scheveningen
2. Situation	+ 300 meter from the beach.
3. Weather forecast	Partly to heavenly clouded with showers, especially later on the day. Wind strong to moderate, South-Western. Velocity of wind four to twelve meter per sec.
4. Weather while hauling	<i>Maximum temperature about 4°C</i> Sky overcast, though more near the horizon there were some blue patches. No sunshine, the wind was getting stronger and very cold. The sea was choppy. Visibility not too bad. Colour of the sea grey-blue, near place of hauling dark-brown-green, somewhat transparent. It was grim weather.
5. Distance while hauling	+ 144 meter from the beach
6. Temperature	In the air 6°C. In the water 7°C
7. Wind during hauling	Data Semaphore Direction S.S.W. Velocity 7m/sec.
8. Time of hauling	11.46 - 11.58
9. Light hours a day	8.08
10. Tides	2nd High tide 13.29
11. Water Levels	a. during hauling +10cm b. L.W. before hauling -65cm c. H.W. after hauling +86cm
12. Direction of streams	+ two hours before H.T.
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat NO ₃ ⁻ 1,2 mg/l Ammonium NH ₄ ⁺ 0.5 mg/l Chloride 14.5 g/l Orthofosfaat 0.11 mg/l Ortho + hydrolyseerbaar fosfaat 0.12 mg/l

06.

DATA SAMPLING NOVEMBER AND DECEMBER 1975.

Haul VII "Pier" A, Scheveningen, two hours before High Tide.

Date: 1st December 1975.

VII Haul "Pier" A ,Scheveningen	Numbers of organisms
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	1250
" alternans	250
" mobiliensis	350
" sinensis	6250
" regia	1000
Cerataulina sp.	250
Chaetoceros sp.	350
Coscinodiscus concinnus	3350
" excentricus	8850
" granii	10500
Fragilaria sp.	100
Rhizosolenia sp.	250
2. P r o t o z o a	
Foraminifera sp.	50
Noctiluca miliaris	1100
3. C o e l e n t e r a t a	
Phialidium hemisphericum	650
4. N e m a t o d a	
Nematoda sp.	50
5. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cif. sp.	100
C o p e p o d a	
Acartia sp.	5150
Acartia sp. with eggs	100
Acartia sp. with parasites	350
Anomalocera patersoni	850
Centropages sp.	350
Microcalanus pusillus	600
Temora longicornis	200
" " with parasites	50
H a r p a c t i c o i d a	
Harpacticoida sp.	850
A m p h i p o d a	
Amphipodasp.	50
6. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Larva Venus sp (0.25mm)	250
" Spisula sp. (0.2 mm)	150

Sediment $\pm \frac{1}{12}$ contents

Fishermen caught some small dabs.

DATA SAMPLING DECEMBER 1975, FEBRUARY AND APRIL 1976.

Haul VIII "Pier" A, Scheveningen, two hours before High Tide

Date: 15th December 1975.

Hauls	VIII "Pier" A, Scheveningen,
1. Place of hauling	"Pier" Scheveningen
2. Situation	± 300 meter from the beach
3. Weather forecast	Clearings of the sky, alternating some showers of rain, hail or wet snow. Wind Northern, moderate to strong; near the coast strong to stormy. At the end of the day subsiding. Maximum temperature 40° 4°C.
4. Weather, while hauling	Blue sky, visibility good, not much wind. Sea at the distance light blue-grey. Near the horizon cloud barrier. Sea near place of hauling green-brown somewhat transparent, calm.
5. Distance while hauling	± 144 meter by walking
6. Temperature	In the air 1½ - 2°C. In the water 5°C.
7. Wind during hauling	Data semaphore Direction S.S.E. Velocity 1½ m/sec.
8. Time of hauling	11.12 - 11.24
9. Lighthours a day	7.37
10. Tides	2nd H.T. 12.54
11. Water Levels	a. during hauling + 12 c.m. b. L.W. before hauling - 70 c.m. c. H.W. after hauling + 68 c.m.
12. Direction of streams	± 2 hours before High Tide
13. Direction of streams at Scheveningen	
14. Chemical analysis	Nitrat (NO ₃ ⁻) 1.0 mgr/l Silicaat Sr, 0.9 mgr/l Ammonium (NH ₄ ⁺) 0.5 mgr/l Chloride (Cl ⁻) 14.7 gr/l Ortho Phosphate (PO ₄ ⁻⁻) 0.12 mgr/l Ortho-hydrolyseerbaar fosfaat 0.12 mgr/l

DATA SAMPLING DECEMBER 1975, FEBRUARY AND APRIL 1976.

VII Haul "Pier" A, Scheveningen, two hours before High Tide.

Date: 15th December 1975.

VIII "Pier" A, Scheveningen	Number of organisms.
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	300
" regia	1200
" mobiliensis	600
" sinensis	15900
Cerataulina sp.	3600
Coscinodiscus concinnus	11700 3600
" excentricus	11700
" granii	9900
Fragilaria sp.	600
Rhizosolenia sp.	300
2. P r o t o z o a	
Dinoflagellata sp.	300
Framinifera sp.	300
Noctiluca miliaris	89100
3. C o e l e n t e r a t a	
Phialidium g hemisphericum	450
4. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir sp.	200
C o p e p o d a	
Acartia sp.	2950
" " with parasites	100
Anomalocera patersoni	100
Centropages sp	1050
" " with parasites	50
Eurotomora sp.	50
Microcalanus pusillus	700
Nauplius larva Cop sp.	800
Temora longicornis	50
H a r p a c t i c o i d a	
Harpacticoida sp.	1200
A m p h i p o d a	
Amphipoda sp.	150
M y s i d a c e a	
Mesopodopsis slabberi	50
5. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Modiolus modiolus (0.2mm)	50
Spisula sp. (0.2mm)	150
6. E g g s	
Evertebrata eggs.	1600

Sediment $\pm \frac{1}{20}$ contents (some mud,
vegetable rests + detritus)

Fishermen caught some dab.

DATA SAMPLING DECEMBER 1975, FEBRUARY AND APRIL 1976.

VII "Pier" B, Scheveningen ± two hours after High Tide.

Date: 15th December 1975.

Hauls	VIII VIII "Pier" B, Scheveningen												
1. Place of hauling	"Pier" Scheveningen												
2. Situation	± 300 meter from the beach												
3. Weather forecast	Clearings of the sky, alternating some showers of rain, hail or wet snow. Wind Northern, moderate to strong; near the coast strong to stormy. At the end of the day subsiding. Maximum temperature 4° C.												
4. Weather, while hauling	Blue sky, but less cold than in the morning. Sea grey-blue, at the distance hazy. Visibility not too bad. Near place of hauling brown-green. Somewhat transparent. Sea calm.												
5. Distance while hauling	± 144 meter by walking.												
6. Temperature	In the air 3½° C. In the water -6° C.												
7. Wind during hauling	Data Semaphore Direction S. Velocity 1m/sec.												
8. Time of hauling	14.57 - 15.09												
9. Lighthours a day	7.37												
10. Tides	2nd High Tide 12.54												
11. Water Levels	a. during hauling +10cm b. L.W. before hauling -70cm c. H.W. after hauling +68cm d. L.W. after hauling -80cm ± 2 hours after High Tide.												
12. Direction of streams													
13. Direction of streams at Scheveningen													
14. Chemical analysis	<table border="0"> <tr> <td>Nitrat (NO₃⁻)</td> <td>1.2 mgr/l</td> </tr> <tr> <td>Silicaat (Si)</td> <td>1.0 mgr/l</td> </tr> <tr> <td>Ammonium (NH₄⁺)</td> <td>0.6 mgr/l</td> </tr> <tr> <td>Chloride (Cl⁻)</td> <td>14.0 g/l</td> </tr> <tr> <td>Orthofosfaat (PO₄⁻)</td> <td>0.14 mgr/l</td> </tr> <tr> <td>Ortho + hydrolyseerbaar-fosfaat</td> <td>0.15 mgr/l</td> </tr> </table>	Nitrat (NO ₃ ⁻)	1.2 mgr/l	Silicaat (Si)	1.0 mgr/l	Ammonium (NH ₄ ⁺)	0.6 mgr/l	Chloride (Cl ⁻)	14.0 g/l	Orthofosfaat (PO ₄ ⁻)	0.14 mgr/l	Ortho + hydrolyseerbaar-fosfaat	0.15 mgr/l
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Ortho + hydrolyseerbaar-fosfaat	0.15 mgr/l												

DATA SAMPLING DECEMBER 1975, FEBRUARY and APRIL 1976.

VIII Haul "Pier" B, Scheveningen, two hours after High Tide.
Date: 15th December 1975.

VIII "Pier" B, Scheveningen	Numbers of organisms:
1. B a c i l l a r i o p h y c e a e	
Biddulphia sp.	200
" alternans	200
" mobiliensis	400
" regia	600
" sinensis	9400
Cerataulina sp.	600
Coscinodiscus concinnus	400
" excentricus	3200
" granii	2400
2. P r o t o z o a	
Noctiluca miliaris	14400
3. C o e l e n t e r a t a	
Phialidium hemisphericum	450
4. N o m a t o d a	
Nematoda sp.	50
5. C r u s t a c e a	
C i r r i p e d i a	
Cypris larva Cir.sp.	100
Nauplius " " "	50
C o p e p o d a	
Acartia sp.	1200
Calanus sp.	50
Centropages sp.	1050
Centropages with parasites	200
Microcalanus pusillus	400
Nauplius larva Cop.sp.	350
H a r p a c t i c o i d a	
Harpacticoida sp.	1250
M y s i d a c e a	
Mesopodopsis slabberi	50
6. M o l l u s c a	
L a m e l l i b r a n c h i a t a	
Spisula sp. (0.2 mm.)	100
7. E g g s	
Evertebrata eggs	650

Fishermen caught some dab.

Sediment $\pm \frac{1}{10}$ contents
(mud + vegetable rests + detritus).

