

# **VERSLAGEN EN TECHNISCHE GEGEVENS**

Instituut voor Taxonomische Zoölogie (Zoölogisch Museum)

Universiteit van Amsterdam

No. 58

**Amsterdam Expeditions to the West Indian Islands**

Report 69

Station list  
1980

**J.H. STOCK**

Instituut voor Taxonomische Zoölogie

Universiteit van Amsterdam

P.O. BOX 4766

1009 AT Amsterdam

Nederland

# **VERSLAGEN EN TECHNISCHE GEGEVENS**

Instituut voor Taxonomische Zoölogie (Zoölogisch Museum)

Universiteit van Amsterdam

No. 58

Amsterdam Expeditions to the West Indian Islands  
Report 69

Station list  
1980

J.H. STOCK

Instituut voor Taxonomische Zoölogie  
Universiteit van Amsterdam  
P.O. BOX 4766  
1009 AT Amsterdam  
Nederland

In 1980 members of the Institute of Taxonomic Zoology (Zoölogisch Museum) of the University of Amsterdam, have sampled the stygofauna fauna of a number of West Indian islands.

The present report records the stations in which stygobionts (= groundwater organisms) were collected. The main purpose of the program was to test the value of various biogeographic models for explaining the insular fauna.

Financial support of the following organizations is gratefully acknowledged:

- Beijerinck-Popping Fonds, Amsterdam;
- Fonds Landbouw Hogeschool, Wageningen;
- Treub Maatschappij, Utrecht.

The following maps have been used for the nomenclature of the localities and for calculations of their geographic position:

Aruba, map in 4 sheets, 1:25,000 (1962/63), Netherlands Antilles, Cadastral Survey Department, Willemstad, Netherlands Antilles.

Bonaire & Klein Bonaire, map in 5 sheets, 1: 25,000 (1962/63), Netherlands Antilles, cadastral Survey Department, Willemstad, Netherlands Antilles.

Puerto Rico, map in 9 sheets, 1:20,000 (1960-1972), United States Department of the Interior Geological Survey, Washington.

Mona Island, map in 1 sheet, 1: 20,000 (1944), U.S. Geological Survey, Washington.

The geographical latitudes and longitudes have been calculated from the available maps. When a locality was not shown on the map, its coordinates are given as "estimated position" or "approximate". Even when properly shown on the map, the position of a locality, such as a spring or a well, can only be expressed with a reliability of some 3 to 4". Sometimes different maps of the same area yield slightly different results of the same magnitude (3-4").

In the station list, the following abbreviations are used for the gear employed:

CvL	= Cvetkov self-closing vertical net, large, diam. 30 cm.
CvS	= same, but small, diam. 10 cm.
h	= handnet (mesh 0.3 mm).
pl	= handnet (mesh 0.05 mm).
sh	= shovel.
K-Ch	= Karaman-Chappuis method.

The chlorinities of the samples have been determined with the aid of an E.E.L. electric chlorinitymeter

Alphabetical index to the islands and regions sampled (80)

Aruba .....	80/01-80/20
Bonaire .....	80/21-80/48, 80/52-80/60
Klein Bonaire .....	80/49-80/51
Puerto Rico .....	80/101-80/111, 80/114-80/119
Mona Island .....	80/112-80/113

Stations 80/01 through 80/51 have been sampled by L. Botosaneanu and J. Notenboom;  
Stations 80/101 through 80/113 by E.S.W. Weinberg.

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/01	Anuba Lago Colony Cave (for description see Wagenaar Hummelinck, 1979) (Fifth Avenue no. 363)	well in cave 4.5 + 0.5 m	CvL	21/05	12°25'33"		69°52'39"	1726	stones; calcareous debris; when moving the debris a strong H <sub>2</sub> S smell is there; t. 32.1°C	Gastropoda, Blind Amphipoda, Acari, Heteroptera larvae, Diplopoda, Foraminifera
80/02	Anuba Lago Colony Cave the second well in the cave (Fifth Avenue no. 339)	well in cave	pl	21/05	12°25'33"		69°52'40"	3514	less water than 80/01 but very clean; substrate of mud and sand; t. 32.5°C	Blind Amphipoda, Ostracoda, Insect, Diplopoda
80/03	Anuba Lago Colony Cave, all pools dry, water found in a very small pool	cave pool	pl	21/05	12°25'33"		69°52'39"	1780	water filtered; t. 32.0°C	Foraminifera
80/04	Anuba Fontein (Karst spring)	spring	h	21/05	12°29'46"		69°54'16"	476	close vegetation; sandy bottom; much plant debris;	Quadrivisio, Gastropoda, Foraminifera
80/05	Anuba Well on the property Yarzagaray, at Andicuri, under some coconut-trees, about 350 m from the littoral, close to a dry river bed	well 4 + 0.4 m	CvL	22/05	12°32'04"		69°57'11"	5096	volcanic rock; made in rock; clean; covered; partly cemented; t. 30.5°C	Isopoda, Microparasellidae, Acari, Polychaeta

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chorinity (mg/l)	Observations	Biological composition
80/06	Aruba Playa Indieco Cara p'Abao, at Andicuri, not far from 80/05, on the bottom of a bay, large swell	inter- stitia		22/05	12°32'28"		69°56'54"	24380	gravel; black volcanic rock; t. 30.0°C	Gastropoda, Dipt. larvae, Cyclopi- dae, Microparasellidae (Isopoda), Oligochaeta, Ingolfiellidae, Harpacticoida, Polychaeta, Nema- toda, Halacaridae, Collembola, Zoeas, Janiridae (Isopoda), Sphaeromatidae (Isopoda), Ostra- coda, Amphipoda oculata, Forami- nifera
80/07	Aruba Cueva Indio, at Andicuri, not far from 80/05 and 80/06, with underground lake	sub- terra- nean lake, depth 1 to 1.5 m	CvL	22/05	12°32'28"		69°57'05"	3756	dim light; muddy sediment; t. 27.7°C	Gastropoda, Amphipoda (Ingolfiellidae), Isopoda (Microcharon), Olichogaeta, Foraminifera
80/08	Aruba Rooi Awa Marga, not far from Andicuri, mostly dry river bed, the little water water comes from between stones, pebbles and sand and forms small pools	inter- stitia	K-Ch	22/05	12°32'01"		69°57'44"	4616	stones; sand; rock; t. 30.5°C	Hyalella, Ingolfiellidae, Oligo- chaeta, Polychaeta, Ostracoda, Gastropoda, Insecta, Insect larvae, Diptera, Hemiptera, Coleoptera
80/09	Aruba Well at Ti Bushi, about 800 - 900 m from the sea	well 5 + 7 m	CvL	22/05	12°36'21"		70°02'06"	1988	volcanic rock; t. 30.2°C;	Diptera, Ostracoda
80/10	Aruba Well Pos Grandi (correspond with Stock's 78/301), on the road, not far from San Nicholas	well 1.5 + 0.3 m	CvL	22/05	12°27'56"		69°57'24"	2772	in lime- stone; sand and stones on the bottom; t. 31.5°C	Gastropoda, blind Amphipoda, Cyclopidae, Polychaeta

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/11	Aruba Well at Seroe Canashitu, about 100 m of the well-known Seroe and its caves	well 6 + 0.4 m	CvL	23/05	12°30'46"		69°59'35"	9270	large cemented well; diam. 2.5 m; sediment black; with filamentous algae; t. 28.5°C	Gastropoda, Oligochaeta, Ostracoda
80/12	Aruba Well at Masiduri, very close to the barracks in the Government garden, 100 m alt., about 3 km from the sea	well 4.3 + 2.7 m	CvL	23/05	12°29'21"		69°56'49"	958	clear; covered; made in metamorphic rocks; much sediment with some roots; t. 30.2°C	Cyclopidae, Oligochaeta, Ostracoda, Acari, Collembola, Gastropoda, Nematoda
80/13	Aruba Pos di Rey, on the Shette plateau, about 200 m from the sea, alt. 80 m; corresponding with Stock's 78/291	hole	CvL	23/05	12°31'02"		69°56'09"	273	metamorphic rocks; small hole with little water between the stones, filled with rainwater; t. 28.0°C	Cyclopidae, Ostracoda, Collembola, Acari
80/14	Aruba Well at Daimari, in large coconut plantation, about 200 m from the sea	well 3.5 + 1 m	CvL	23/05	12°31'59"		69°56'35"	2248	clean; covered; walled in to the water level; black sediment with many fine coconut-roots; t. 29.6°C	Polychaeta, Ostracoda, Cyclopidae, Cladocera, Gastropoda

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chorinity (mg/l)	Observations	Biological composition
80/15	Aruba Other well at Daimari, also in coconut-plantation, nearby house, about 150 m from the sea	well 2 + 0.20 m	CvL	23/05	12°31'59"		69°56'31"	2768	black sediment, with terrible smell; t. 28.9°C	Cyclopidae, Harpacticoida, Polychaeta, Isopoda, Ostracoda
80/16	Aruba Third well (new well) of the plantation at Daimari (see 80/14 and 80/15), probably located in dry torrent bed	well 1.3 + 0.3 m	CvL	23/05	12°31'56"		69°56'30"	2804	black sediment; t. 28.9°C	Cyclopidae, Insect larvae, Harpacticoida, Oligochaeta, Collembola, Gastropoda, Acari, Insecta, Ostracoda, Polychaeta, Nematoda
80/17	Aruba Mangel Cora Tunnel, near the Lago Colony, about 200 m from the sea	artificial tunnel in cave 0.5 m	pl	24/05	12°25'05"		69°52'34"	3782	stones; fine mud; wood	Cirolanidae, Cyathura, Macrura
80/18	Aruba Two man-made holes in the coarse sand of the beach, at Swat Mangel (near the discharge of asphalt residues of Lago Colony), some 100 - 200 m from the sea	inter- stitia	pl	24/05	12°27'33"		69°52'41"	a) 1900 b) 8164	coarse sand; a) t. 28.2°C b) 30.0°C	Foraminifera, Heteroptera larvae, Gastropoda, Collembola, Nema- toda, blind Amphipoda, Zoea's, Ostracoda, Oligochaeta
80/19	Aruba Beach between Boca Grandi and Pitch Pile (NE of Boca Grandi)	inter- stitia	K-Ch	25/05	12°26'49"		69°52'18"	24438	coarse sand; t. 28.3°C	Polychaeta, Gastropoda, Nematoda, Oligochaeta, Harpac- ticoida, Zoea's, Microcerberus, Amphipoda, Sipunculida, Plana- ria, Diptera larvae, Lamellibran- chia, Microcharon, Foraminifera

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/20	Aruba Diaciase with water at Pos Grandi (very close to 80/10, but at the other side of the road)	cleft	CvL	25/05	12°27'35"		69°57'13"	988	the diaciase is used as a well, with a depth of 2 m	Blind Amphipoda, Acari, Diptera larvae
80/21	Bonaire, Estate Lima "Pos Calbas" (see description of Wagenaar Hummelinck, 1979, pp. 149 - 150); a cave of the "Cueva del Baño" type	water in cave; 0.50 m	pl	27/05	12°07'50"		68°16'15"	3620	the cave is accessible over 10 m; the water permanently covers the floor; the bottom of the cave communicates with a well of 4 + 0.3 m deep; terrible smell of DDT	Oligochaeta, Gastropoda
80/22	Bonaire, Estate Lima Little cave at Pos Calbas about 30 - 40 m from 80/21 (not mentioned by Wagenaar Hummelinck), same type (Cueva del Baño)	small cave pool, depth 0.10-0.20 m	pl	27/05	12°07'46"		68°16'15"	4564	cavity of 3x1 m; half-dark; stones and twigs; feeble smell of DDT; t. 29.5°C	Microparasellidae, Oligochaeta, Gastropoda, Acari, Foraminifera
80/23	Bonaire, Estate Lima "Pos Caranja" (see description by Wagenaar 1979, pp. 152 - 155), also a "Cueva del Baño, but very small	cave/ water	pl	27/05	12°07'13"		68°17'04"	3094	water in the daylight	Gastropoda, Microparasellidae

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/24	Bonaire, Estate Lima "Cararija Grandi" (see Wagenaar Hummelinck, 1979, pp. 151 - 152), at the beginning of a diachase	cave/ water	pl	27/05	12°07'13"		68°17'13"	4342	half-dark; t. 30.0°C stones	Gastropoda, Foraminifera, shrimp, fish
80/25	Bonaire, Estate Lima "Pos Nobo" at the boarder of the Lima Estate, near the Flamingo airfield, natural well	well 4 + 0.4 m	CvL	27/05	12°07'59"		68°15'43"	1576	wide; t. 31.0°C	Microparasellidae, Acari, Gastropoda, Ostracoda, Cyclopidae, Foraminifera
80/26	Bonaire, Estate Lima Hole ("casimba"), about 200 m from the ruins, called "Cas de Lima"	water- hole, 0.75 + 0.75 m	CvL	27/05	12°07'00"		68°15'09"	970	in rock; diam. 0.30 m	Foraminifera, Ostracoda
80/27	Bonaire, Estate Lima "Pos di Wanapa" very close to the Sorobon- road and a wind pump	well 2.5 + 1 m	CvL	27/05	12°07'47"		68°14'23"	1722	natural hole transformed into well; diam. 1.5 m; covered; high cemented edge; stones; filamentous algae; t. 30.5°C	Gastropoda, Ingolfiellidae, Cyclopidae, Diptera larvae, Acari, Ostracoda
80/28	Bonaire, Estate Lima Two wells at Wanapa, about 150 m from 80/27	wells 1.8 + 0.8 m and 2 + 0.4 m	CvL	27/05	12°07'45"		68°13'29"	2508	one circular well and one square well; cemented edges; t. 30.3°C filamentous algae	Ostracoda, Gastropoda, Porifera, Oligochaeta, Plecoptera, Cyclopidae, Coleoptera larvae
80/29	Bonaire Two wells in the garden of Tom van 't Hoff at Kralendijk, not far from the sea	wells 1.5 + 0.5 m	CvL	27/05	12°09'11"		68°16'28"	1096	covered; roots; dirty; t. 30.0°C	Cyclopidae, Diptera larvae, Ostra- coda, Insecta, Hydracarina

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/30	Bonaire Large well very close to the Estate "Fontein"	well 10 + 0.25 m	CvL	28/05	12°14'26"		68°17'38"	541	windpump; covered; on the bottom stones and fine sediment; t. 29.5°C	Isopoda (terr.), Polychaeta, Ostracoda, Gastropoda, Acari, Ingotiellidae, Oligochaeta
80/31	Bonaire Small cave very close to "Boca Onima" (see the description of the last cave by Wagenaar Hummelinck, 1979, p. 131)	small waterhole	pl	28/05	12°15'35"		68°18'37"	4402	half-dark; stones	Gastropoda, Coleoptera, Micro- parasellidae, Pseudoscorpions, Coleoptera larvae, Ostracoda, Acari, Dipt. larv., Ingotiellidae, Harpacticoida, Planaria, Foraminifera, Cyclopidae, Collembola
80/32	Bonaire Pedro Bonaire, on the road Onima - Marcotin, between the road and the sea	well	pl	28/05	12°15'42"		68°18'07"	1064	handpump; little sediment	Cyclopidae, <i>Microcharon</i>
80/33	Bonaire "Pos di Tochi", very large well made in lime- stone on the place Tochi	well 6 + 0.6 m	CvL	28/05	12°16'15" estimated position		68°20'26"	102	covered by large concrete plate; diam. ca. 4 m;	Ostracoda, Cladocera, Polychae ta, Isopoda (Oniscoida)
80/34	Bonaire, Rincón "Pos Dominica", also known as "Pos di Rincón", at the foot of the Serre of Rincón	well 10 + 0.2-0.4 m	CvL	28/05	12°13'55"		68°20'15"	1154	in limestone; very large; covered with concrete; little sediment	Diptera larvae, Collembola, Cladocera

Station code (year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/35	Bonaire "Dos Pos", about 3 km from Rincon (= Stock 76/19)	well 3.2 + 4 m	CvL	28/05	12°14'32"		68°21'16"	502	powerfull pump; in limestone; covered	Gastropoda, Polychaeta, Collembola, Cyclopidae
80/36	Bonaire "Pos di Salina Chikita", very close to the Estate Pourier.	water- hole	CvL	28/05	12°14'50"		68°21'35"	632	diam. ca. 2.5 m; not deep; rich swamp-vegetation; decomposition smell	Gastropoda, Diptera, Coleoptera, Oligochaeta, Cladocera, Hemiptera (Pleidae), Foraminifera, Cyclopidae
80/37	Bonaire "Pos di Dentuna", on Estate Bolivia	well 10 + 0.1 m	CvL	29/05	12°11'47"		68°13'52"	2808	windpump; in bad condition; much black sediment	Gastropoda, Coleoptera, Acani, Nematoda, Cyclopidae, Diptera, Oligochaeta, Ostracoda, Insect larvae
80/38	Bonaire "Pos di Can di Playa" Estate Bolivia, (section Bolivia Arriba), about 100 m from the sea	well 5 + 0.5 m	CvL	29/05	12°11'33"		68°12'31"	1068	natural well with enclosure of stones; in limestone; little sediment	Porifera, spider
80/39	Bonaire, Estate Bolivia Large natural well, close to the Spelonk cave, some m. from the coast, on a large marine terrace (probably the first one) (Stock 76/37)	collaps cavern ± 6 m deep	h, pl	29/05	12°13'23"		68°13'17"	14060	large circular opening with 2; lateral corridors; clear; stones; t. 28.0 °C; ligh to half-dark	Gastropoda (terr.), Oligochaeta, Ostracoda, Diptera larvae, blind Amphipoda, Siphonoptera, Microparasellidae, Nematoda, Foraminifera, Cyclopidae
80/40	Bonaire, Estate Bolivia "Pos di Bolivia Abajo", in the same marine terrace as 80/39, but closer to the shore, well no doubt natural, in enclosure of stones	natural well 5 + 1 m	CvL	29/05	12°13'25"		68°15'28"	3744	narrow; H2S rich sediment; stones and loam	Gastropoda, Cyclopidae, Foraminifera, Oligochaeta, Acani, Insect a larvae, Collembola, Micro- charon, Coleoptera, Diptera larvae

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/41	Bonaire, Estate Bacuna Cueba di Antoine, S (SE) of the ruins called "Casa Bacuna"; cave of the "Cueva del Baño" type, with cave lake (3 x 4 m) and dark small gallery, also with water, (=Stock 76/12)	cave waters depth up to 0.5 m	h, pl	30/05	12°07'34"		68°13'09"	2644	muddy; algae; half-dark to dark	Coleoptera, Ostracoda, Oligochaeta, Acari, Cyclopidae Microparasellidae, Gastropoda, Insect larvae
80/42	Bonaire, Estate Bacuna Pos di Soldatchi, partly natural and partly artificial well (= Stock 75/12)	well	h, pl	30/05	12°07'37"		68°12'26"	4012	water level directly accessible for man; much algae; mud; decayed wood	Gastropoda, Cyclopidae, Ostracoda, Microparasellidae, Coleoptera, Acari, Ingolfiellidae, Siphonoptera, Insecta larvae (Odonata), Algae, Diptera larvae
80/43	Bonaire, Estate Bacuna "Pos di Moirino", about 200 m from Pos di Cerca, and about 250 m from station 80/42	well 6 + 0.1 - 0.2 m	CvL	30/05	12°07'29"		68°12'65"	2464	narrow; stones on the bottom; open; little sediment; ruined windpump	Microparasellidae, Ingolfiellidae, Hydracari, Oligochaeta, Cyclopidae
80/44	Bonaire, Estate Lima "Pos di Wayaka"	coenote	CvL	30/05	12°06'31"		68°16'19"	1600	calcareous rocks; semi-dark; t 30.0°C - 30.5°C	Nematoda, Gastropoda, Acari, Cyclopidae, fish
80/45	Bonaire, Estate Lima 2 - 2.5 km from the transmitting aerial "Trans World Radio"	natural water- hole, 0.3 m deep	h	30/05	12°06'36"		68°16'44"	2356	natural hole in lime stone; diam. ca. 0.30 m	Cyclopidae, Ostracoda, Gastro- poda, Acari (terr.)

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/46	<u>Bonaire</u> "Pos di Watapana" on Estate Lima, about 100 m from Pos Calbas, cueba del Bafo-type (descr. in Wagenaar Hummelinck, 1979: 147-149)	pool, 2.5 x 2.5 m, 3-4 m under limestone surface; depth 0.2 m	pl	30/05	12°07'41"		68°16'13"	986	not deep bottom black; half-dark; t. 30.5°C	Plecoptera, Collembola, Cyclopi- dae, Gastropoda, Diptera sp., <i>Typhlatia</i>
80/47	<u>Bonaire</u> "Playa Coccolishi" Estate Washington (National Park), little beach	inter- stia	K-Ch	31/05	12°18'32"		68°22'00"	23862	the beach is protected from surf by a reef barrier; coarse sand; t. 29.5°C	Gastropoda, Oligochaeta, Poly- chaeta, Cyclopiidae, Insecta, Bryozoa, Foraminifera, Lamellibranchia, Nematoda, Diplopoda, Heteroptera, Sipun- culida, Diptera larvae, Isopoda (Microcerberidae)
80/48	<u>Bonaire</u> National Park Washington "Pos Labra", near the Old House Labra	well 9 + 2.2 m	CvL	31/05	12°15'17"		68°23'52"	407	reconstructed not long ago with a wind- pump; cemented cover; volcanic rock	Isopoda (Oniscoidea), Phyllopoda, Ostracoda, Collembola, Oligochaeta, Diplopoda, Diptera larvae
80/49	<u>Klein Bonaire</u> Small well (Pos di Cabritu ??) NE coast	casimba, h rather deep		01/06	12°10'02"		68°18'19"	1740	stones	Gastropoda, Isopoda (terr), Diplo- poda, Cyclopiidae, Harpacticoida, Acani, Macrura

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/50	<u>Klein Bonaire</u> A "Pos" on Klein Bonaire, near small house, "Cueva del Baño"-type	well water depth a few cm	CvL	01/06	12°09'34"		68°17'42"	786	in lime-stone; muddy; half- dark; filamentous algae	Ostracoda, Oligochaeta, Cyclopi- dae, Gastropoda
80/51	<u>Klein Bonaire</u> Little "Pos" about 400 m from 80/50 and close to a large depression filled with water (probably rainwater and subterranean water), called "Pos Blauw Duij"	natural hole, depth ca. 1 m	h	01/06	12°09'40"		68°17'40"	1576	in limestone; light; stones on bottom	Gastropoda, Zoeas, Cyclopidae, Ostracoda, Insecta, spider, Insect larvae
80/52	<u>Bonaire</u> "Cueva di Barcadera", (see description Wagenaar Hummelinck, 1979, pp. 139 - 146), in southernmost part of Estate Colombia, about 200 m from SW shore of island	(archi- haline ?) cave pool, depth 2 m	h	02/06	12°12'41"		68°18'43"	1904	easily accessible at several points; large pool; complete darkness; t. 27.5°C; fragile calcite (cave ice) on bottom	Gastropoda, Zoeas, oculate shrimp
80/53	<u>Bonaire</u> same cave as 80/52	vide supra						2660	pool 1 m; semi-dark; less calcite plates; in decaying wood; t. 28.5°C	Microparasellidae, Oligochaeta, Nematoda
80/54	<u>Bonaire</u> Well at Hato (Stock 76/16)	large natural well	CvL	02/06	12°11'09"		68°17'20"	972		Gastropoda, Ostracoda, Cyclopi- dae, Cladocera, Acari, Oligo- chaeta, <i>Typhlatia</i> , Diptera larvae, Foraminifera

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/55	Bonaire Well at Hato (Stock 75-20)	natural well	CvL	02/06	12°11'08"		68°17'14"	1818	in limestone; vertical; narrow	Cyclopidae, <i>Typhlata</i> Diptera, Acan
80/56	Bonaire A well between Hato and the village of Narí Salifa (well SB53 of the "Well survey of Bonaire")	partly natural well 5.5 + 0.6 m	CvL	02/06	12°10'59"		68°17'09"	874	in limestone; without pump	Cyclopidae, Microparasellidae, Decapoda, Diptera larvae, Acan, Gastropoda, Foraminifera
80/57	Bonaire, Estate Bacuna "Pos di Cerca" (see also 80/41 - 80/43) (Stock 76/13)	well and cave; water depth 0-1.5 m	h	03/06	12°07'35"		68°12'22"	2816	two natural wells, giving entrance to a large cave; fine calcile mud, many roots; half-dark to dark; smell of DDT; t. 30.7°C	Microparasellidae, Gastropoda, Ingolfiellidae, Oligochaeta
80/58	Bonaire "Fontein" (Stock 76/8 and 76/9)	spring originating from cave tunnel	h	03/06	12°14'34"		68°17'55"	492	percolating ground-water forms a streamlet; sand; calcareous debris; gravel; plant material; t. 29.5°C	Gastropoda, Ostracoda, Collembola, Cestoda, Odonata, Oligochaeta, Insecta, Ingolfiellidae, Polychaeta, Acan, Diptera larvae, Coleoptera

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/59	<u>Bonaire</u> Tubed well at Sta. Barbara (no. SB-59 in the Well Survey Bonaire) in the second marine terrace, four wells with windpump	well 10 + 1.5 m	CvS	04/06	12°11'31"		68°17'20"	1998	very little sediment	Microparasellidae, Cyclopidae
80/60	<u>Bonaire</u> "Lac" (lagoon) at Sorobon, beach	inter- stitia	K-Ch	04/06	12°05'37"		68°14'05"	24600	coarse sand; with many small pieces of coral; t. 30.0°C	Oligochaeta, Polychaeta, Nema- toda, Foraminifera, Gastropoda, Isopoda ( <i>Eurydice</i> ), <i>Callianassa</i> , Ostracoda, Lamelibranchia Harpacticoida
80/61 - 80/100 have been taken outside the West Indies										
80/101	<u>Puerto Rico</u> Finca Antonia, between Parguera and Papayo, Carr. 324 (N, about 1 km),	well 3 m	CvL	09/03	17°59'21"		67°02'08"	-	narrow shaft	Acari, Arachnida, Oligochaeta
80/102	<u>Puerto Rico</u> Finca Antonia, about 100 m N of road 324	well 0 + 10 m	CvL	09/03	17°59'03"		67°02'12"	-	square; diam. 0.40 m; covered;	Acari, Gastropoda, Oligochaeta
80/103	<u>Puerto Rico</u> Papayo, Pozo de la Bruja, about 50 m N. of road 324	well 1 + 5 m	CvL	09/03	17°58'52"		67°01'39"	-	well, 2 x 3 m; square opening; diam. 0.50 x 0.50 m; cemented; covered; clear water	Cyclopidae, Acari, Oligochaeta

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/109	<u>Puerto Rico</u> E. of Palmarajo, about 50 m W of 80/108, further same conditions	pump, depth 12 m	pl	20/04 11/04	18°02'21"		67°04'05"	.	like 80/108	Arachnida, Insecta, Coleoptera, Collembola, Themosbaenacea, Amphipoda ( <i>Bogidiella</i> ), Acari, Oligochaeta
80/110	<u>Puerto Rico</u> E. of Palmarajo, about 50 m E. from 80/108, like 80/108	pump	pl	20/04	18°02'21"		67°04'02"	.	like 80/108	Acari
80/111	<u>Puerto Rico</u> E. of Palmarajo, about 100 m W. of 80/108, like 80/108	pump	pl	20/04	18°02'19"		67°04'08"		like 80/108	Acari, Formicidae
80/112	<u>Mona Island</u> Cueva del Caballo (Playa Pajaro)	hole, depth 1.5 m	CvL	24/04	18°04'05"		67°52'00"	.	circular hole in bottom; diam. 1 m; H 2 S smell; completely dark	Nematoda
80/113	<u>Mona Island</u> Cueva del Caballo	cave, gours depth 0.05 m	pl	24/04	as 80/112			.	2 circular gours; diam. 30 cm	Oligochaeta

Station code (year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/104	<u>Puerto Rico</u> 1.5 km W. of Ensenada, just N. of road 324	jet of water	h	09/03	17°58'09"		66°57'25"	-	windpump (inaccessible); jet of water- trough; filtered	Ostracoda, Acari, Diptera larvae, Harpacticoida, Insect larvae
80/105	<u>Puerto Rico</u> Pozo Manatí, about 3 km NE of Balúa Sucid, about 1 km N. of road 303	concrete basin	CvL	09/03	17°59'23"		67°09'02"	-	covered; in valley; with ruined windpump; basin about 1 x 2	Oligochaeta, Polychaeta, Cyclopi- dae, Acari
80/106	<u>Puerto Rico</u> road 305, between road 303 and Maguayo, 20 m N. of road	well 2 + 6 m	CvL	09/03	18°00'40"		67°04'40"	-	circular well; diam. 5 m; covered; inside wall of pilled up natural stones	Oligochaeta, Ostracoda, Acari
80/107	<u>Puerto Rico</u> About 10 m W. of 80/106	bore- hole 7 4 + 11 m	CvS	09/03	18°00'40"		67°04'41"	-	broken windmill; very dirty	Pseudoscorpion, Insect larvae, Acari, Coleoptera, Collembola
80/108	<u>Puerto Rico</u> E. of Palmarejo	pump, depth 12 m	pl	20/04	18°02'23"		67°04'02"	-	at farm; in earth; no rocks	Thermosbaenacea, Amphipoda, (Bogidiellidae, Hadziidae, Insecta, Isopoda, Acari, (Heteroptera)

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/114	Puerto Rico Road no. 3, between Yabucod and Mannabo, 2.6 km E. from crossing roads no 3 and no 939	spring	pl	15/06	18°01'45" estimated position		65°54'12"	.	in granite; coarse sand	Nematoda, Oligochaeta, Acari, Diptera larvae, Brachyura, Cyclopididae, Insect larvae, Planaria, Harpacticoida, Hemiptera, Copepoda, Collembola, Gastropoda
80/115	Puerto Rico Cueva Espiral (Rio Camuy caves)	cave pool 0.10 m	pl	06/07	18°20'40" estimated position		66°49'25"	.	at bottom of a ca. 50 m deep doline; fine mud	Gastropoda, Oligochaeta, Diptera larvae, Cyclopididae
80/116	Puerto Rico Cueva Espiral, close to 80/115	small cave pool	pl	06/07	as 80/115				stones and leaves	Cyclopididae, Diptera larvae, Planaria, Gastropoda, Oligochaeta
80/117	Puerto Rico Cueva Espiral	large pool, depth 0.3 m	pl	06/07	as 80/115				deeper in cave; large pool 1 x 10 m; fine mud	Gastropoda, Insecta, Acari, Oligochaeta

Station code (Year/number)	Island	Habitat	gear	Date (day/month)	Latitude (N)	(U.T.M.)	Longitude (W)	Chlorinity (mg/l)	Observations	Biological composition
80/118	<u>Puerto Rico</u> doline, near Cueva Espiral	doline	CvL	06/07	18°20'40"	estimated position	66°49'25"		second doline, about 50 m deeper than 80/115; Rio Camuy under- ground; about 0.5 - 1 m deep; fast running; 5 m wide; completely dark	Oligochaeta, Ephemeroptera, Acari, Insecta, Macrura larvae, Macrura, Cyclopidae, Diptera larvae, Hydracarina
80/119	<u>Puerto Rico</u> Bayaney, about 0.5 km S of 80/115 - 80/118	well 0.20 m		06/07	18°19'55"		66°49'28"		square; 1 x 1 m;	Acari, Insecta, Coleoptera; Oligochaeta; insect larvae, Amphibia, Gastropoda, Odonata larvae (Zygoptera), frogs

