

OCEANOGRAPHICAL STATION LIST

**of Investigations made by the Division of Fisheries,
Commonwealth Scientific and Industrial Research
Organization, Australia**

Volume 22

**Further Onshore Planktological Investigations
in Eastern Australia, 1945-54**

**COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH
ORGANIZATION, AUSTRALIA
MELBOURNE 1955**

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FURTHER ONSHORE PLANKTOLOGICAL INVESTIGATIONS IN EASTERN AUSTRALIA,
1945-54

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I. INTRODUCTION

This volume is a continuation of Volume 19 (Kott 1954), which set out data compiled from onshore planktological investigations in New South Wales and Queensland.

The information set out below has been compiled from N70 plankton hauls taken mainly in conjunction with the Division's hydrology programme (Rochford 1951) along the coast of Tasmania at St. Helens, Cape Pillar, and Maria Island; on the Victorian coast at Port Phillip Heads; and at several other stations in Bass Strait and Tasmanian waters.

II. STATIONS

The stations were occupied by F.R.V. *Liawenee* and by F.R.V. *Derwent Hunter*. Those stations occupied by the *Derwent Hunter* appear in the vessel's log sheets under the station numbers in Table 1.

TABLE 1

Maria Island (148°16'E., 42°46'S.) (wide 148°30'E., 42°32'S.)	St. Helens (148°30'E., 41°18'S.)	Cape Pillar (148°07'E., 43°13'S.)	Port Phillip Heads (144°30'E., 38°30'S.)
DH 46/52 wide	DH 44/52	DH 48/52	DH 12/52
47/52	6/53	2/53	27/52
DH 3/53 wide	48/53	52/53	40/52
4/53	77/53	81/53	41/52
50/53 wide	100/53	96/53	13/53
51/53	57/54	107/54	35/53
79/53	110/54	113/54	42/53
80/53 wide			57/53
97/53			65/53
98/53 wide			65/54
105/54			66/54 wide
106/54 wide			94/54
112/54			95/54

III. COLLECTION OF MATERIAL

N70 "Discovery"-type nets have been used consistently. Horizontal surface hauls (shown as nil depth, 0 M) and vertical hauls (shown as a range of depth, e.g. 50-0 M) have been made. Vertical hauls on the continental shelf were generally

open bottom-to-surface hauls, but some layered hauls (net closed below the surface) were made. At stations on the continental slope, e.g. Maria Island wide, layered vertical hauls were generally made.

IV. LABORATORY TREATMENT OF MATERIAL

Counts have been made of all individuals in one-tenth of the haul (Kott 1953) except where the haul was small, when the total haul has been counted. All Appendicularia, Acopa, Copepoda, Euphausiacea, and Cladocera have been identified.

V. PRESENTATION OF DATA

Under the heading "Station" details of location, date, time, and depth of haul are given whenever this information was recorded.

Data are presented in columns with abbreviated headings as follows:

Fl Fish larvae	E Euphausiids
Fe Fish eggs	Co Copepods
Ap Appendicularia	Cl Cladocera
Ac Acopa	Ch Chaetognaths

There is an additional column for miscellaneous forms not included in the above list.

Quantities are indicated by symbols when

$$x = 1-10$$

$$x^2 = 100$$

$$4x^3 = 4000$$

x^n = swarms present.

These symbols are followed by a key letter representing the dominant and subdominant species, though it was found expedient to list only the three most plentiful copepods occurring in each haul.

The following list indicates the key letter used for the species identified in the collections:

APPENDICULARIA

a <i>Oikopleura longicauda</i>	g <i>Oikopleura cornutogastra</i>
b <i>Oikopleura fusiformis</i>	h <i>Fritillaria megachile</i>
c <i>Oikopleura rufescens</i>	i <i>Fritillaria borealis</i>
d <i>Oikopleura dioica</i>	j <i>Oikopleura albicans</i>
e <i>Fritillaria pellucida</i>	k <i>Oikopleura haplostomata</i>
f <i>Stegosoma magnum</i>	l <i>Oikopleura megastoma</i>

ACOPA

a <i>Thalia democratica</i>	g <i>Pyrosoma atlanticum</i>
b <i>Ihleia magathanica</i>	h <i>Salpa maxima</i>
c <i>Salpa fusiformis</i>	i <i>Cyclosalpa</i> spp.
d <i>Doliolum denticulatum</i>	j <i>Thetys vagina</i>
e <i>Doliolum gegenbauri</i>	k <i>Brooksia vostrae</i>
f <i>Iasis zonaria</i>	

EUPHAUSIACEA

- a *Calyptopsia*
- b *Thysanopoda johnstoni*
- c *Nyctiphanes australis*
- d *Pseudeuphausia latifrons*
- e *Euphausia recurva*
- f *Euphausia lucens*
- g *Euphausia similis similis*
- h *Euphausia similis armata*
- i *Euphausia hemigibba*
- j *Euphausia spinifera*
- k *Thysanoessa gregaria*
- l *Thysanoessa vicina*
- m *Nematoscelis* sp.
- n *Stylocheiron* spp.

COPEPODS

- a *Acartia clausei*
- b *Paracalanus parvus* and/or *aculeatus*
- c *Calanus finmarchicus*
- d *Calanoides brevicornis*
- e *Undinula darwinii* and/or *vulgaris*
- f *Centropages kroyeri*
- g *Centropages bradyi*
- h *Temora turbinata*
- i *Clausocalanus arcuicornis*
- j *Neocalanus gracilis*
- k *Sapphirina* spp.
- l *Pleuromanna gracilis* and/or *abdominalis*
- m *Oncoeca* spp.
- n *Nannocolanus minor*
- o *Centropages furcatus*
- p *Acrocalanus gibber* and/or *gracilis*
- q *Euchaeta* spp.
- r *Coryceus* spp.
- s *Canthocalanus pauper*
- t *Centropages orsini*
- u *Eucalanus* spp.
- v *Rhincalanus* spp.
- w *Oithona* spp.
- x *Labidocera acutum*
- y *Labidocera cervi*
- z *Copilia* spp.
- A *Mecynocera* sp.
- B *Tortanus barbatus*
- C *Labidocera minutum*
- D *Lucicutia*
- E *Metridia*
- F *Harpacticord*

CLADOCERA

- a *Penilia smackeri*
- b *Evadne tergestina*
- c *Evadne spinifera*
- d *Evadne nordmanni*
- e *Podon polyphemoides*

MISCELLANEOUS

- a Amphipods
- b Ctenophora
- c Coelenterates
- d Decapod larva
- e Mollusc larva
- f Ostracods
- g *Creseis*
- h *Firoloida*
- i *Lucifer*
- j Nauplii
- k Echinoderm larva
- l Crustacean eggs
- m Isopods
- n Mysids

VI. ACKNOWLEDGMENTS

Thanks are due to Mr. D. J. Rochford, of this Division, who made his field staff available to take hauls; to the hydrological field staff and personnel of the various research vessels who under many adverse conditions maintained the stations;

and to Mrs. P. Wyllie and Miss McGrath, who assisted greatly in the compilation of these lists. The organisms were identified by Miss P. Kott with the exception of the Euphausiacea, which were identified by Dr. M. Blackburn with the help of Mr. K. Sheard.

VII. REFERENCES

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PLANKTON

Station	Fl	Fa	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
16.2.46 wide 0 M		9x ²			3x	x ³ bic		x	x c x f
16.2.46 0 M		3x			4x ² x a	24x ³ iab		2x ²	3x c
11.5.46 wide 0 M	x				5x ² x a	2x ³ baw			2x a x c x b x e x m
11.5.46 0 M	x	x	3x ² ab	2x ² e	2x	3x ³ aif		x	
22.9.46 0 M		15x ²				3x ³ bac		8x	x ² a 8x m
24.9.46 wide 0 M		4x ²			2x ²	3x ³ bjl		x ²	2x a
1.12.46 wide 0 M						3x ³ jib			x d
1.12.46 0 M		3x ³				3x ³ jab			4x c x f
7.9.47 0 M		4x ²	x a			x ³ abi			x d x a
7.9.47 wide 0 M		9x ²			x	3x ³ abi			x ² l 3x d x f x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
25.2.48 wide 0 M		2x ²			6x ² a 2x	15x ³ bli		6x ²	8x a 2x d x c x f
8.11.48 0 M		x ³		5x _{bc} 2x e	2x ² a	3x ³ abf			x a x d x j x c
15.12.48 0 M		x	x b		x	2x bia			4x a x c x d
15.12.48 50-0 M				x c x b x g	x a	3x ² cjb		x	x c x a x e
25.1.49 0 M					x			x	3x ² a
25.1.49 50-0 M					x	x ³ abi		x	
5.4.49 0 M	x	x	4x ab x i		x	2x ³ bAw		x	x d x a x f
5.4.49 50-0 M	x		x ab		x	15x ² bic		x	x d
LH10/49 8.5.59 0 M				2x f		x ⁴ iba		x	2x ² a x e
LH10/49 8.5.49 50-0 M						2x ³ bil		x	x a x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
LH16/49 16.12.49 50-0 M				x^3_b		$2x^2_{ikj}$			
LH3/50 15.3.50 50-0 M 0825 hrs			$2x_{ab}$	x_f	x	$2x^3_{cib}$		$3x$	x_a x_d
LH3/50 15.3.50 0 M 0835 hrs				$2x_f$		$2x^4_{iba}$		$5x^2$	x_d x_a
LH6/60 1.5.50 50-0 M 1045 hrs			x^2_{abc} x_{ie}	x_g	x	$4x^3_{ibw}$		x	x_d x_a
LH14/50 10.8.50 50-0 M 1230 hrs	x					x^2_{ibw}		x	
LH14/50 10.8.50 0 M 1245 hrs		x				$2x^4_{ib}$			x^2_i
DH-H3/50 4.10.50 50-0 M 0755 hrs		x	x_a			$6x^2_{bid}$		x	x_d x_c
DH-H3/50 4.10.50 0 M 0815 hrs		$4x^2$			x	$5x_{acl}$			x_d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
DH-H8/50 27.11.50 50-0 M 0905 hrs		x				2x ³ abi		x	x c x d
DH-H8/50 27.11.50 0 M 0930 hrs		x				4x ³ wab			2x d
DH-H11/50 14.12.50 0 M				x ³ _b 5x c x f		5x ³ bai		5x	5x a x d
DH-H3/51 2.3.51 0 M		2x		x a		2x ³ big		2x	x c x a
DH-H3/51 2.3.51 50-0 M			2x oga		x	4x ² abi		x	4x c x a
DH-H7/51 18.4.51 50-0 M			x ² _e 5x a	x d		5x ² bia	4x b	4x	x g
DH-H7/51 18.4.51 0 M	3x		8x ² _e 3x ² _{ab}	7x a 5x ed	x	16x ³ bha	4x ³ bd x ² _a	x	6x c x d x a
DH-H11/51 23.5.51 0 M						3x ³ abi		2x ²	x ² _e 8x a
DH-H11/51 23.5.51 50-0 M						2x ³ bwc		x ²	

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
4.7.51 0 M			6x a	x c x g		2x ³ lbi		2x ²	x ² a
4.7.51 50-0 M			2x a			3x ² lbj		3x	x e
15.11.51 0 M		2x		2x ² e x i		2x _b			5x ³ e x d
21.3.52 0 M 1207 hrs		2x		8x ² a x c		7x ³ abk			4x ² c 3x d x a
21.3.52 50-0 M 1235 hrs		x	x a	4x a 2x c x g		8x ³ abc			x ³ c 3x ² j 2x ² d 2x a
21.3.52 50-0 M 1245 hrs				2x ² a x c		4x ³ abi			6x ² c 2x d
29.3.52 50-0 M 0700 hrs				2x ² c x g	7x a	2x ³ abc			7x c
29.3.52 50-0 M 0710 hrs				2x a 2x c x i x g		3x ³ iba		x	6x d 6x c x a x b
29.3.52 0 M 0715 hrs	x			2x ³ a 2x c x i x g		2x ² id			x c

PLANKTON

Station	Fl	Fa	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
DH44/52 4.12.52 100-0 M 2056 hrs						8x ² bwf		x	
DH44/52 4.12.52 100-0 M 2103 hrs				2x c 2x b x g x e	5x c	3x ⁴ jbi		3x	2x ² j x a x e
DH44/52 4.12.52 0 M 2150 hrs				3x ² e x ² b x g	6x ³	14x ³ db		4x ²	x c x e x b x m
DH6/53 15.2.53 100-0 M 0140 hrs			x a	x c x g	x h	2x ³ bwi		2x	x a
DH6/53 15.2.53 100-0 M 0150 hrs				4x c	x h	x ³ bwi		x ²	x m x a x b x c
DH6/53 15.2.53 0 M 0233 hrs	x	3x		6x g 3x c	x	2x ³ b			
DH48/53 12.6.53 100-0 M 0230 Hrs			x a	2x g x f x j	4x kc 3x a	6x ³ bic		8x	3x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
DH48/53 12.6.53 100-0 M 0236 hrs			2x ² a	2x g x j	2x k	5x ³ bic		2x ²	x a x c
DH48/53 12.6.53 0 M 0305 hrs			7x a	2x g	2x	18x ³ bia		x ²	7x a
DH77/53 28.9.53 100-0 M 1800 hrs	x	x		x c	x a	15x ² bac		x	2x d
DH77/53 28.9.53 100-0 M 1805 hrs		x		x c		7x ² bcj		x	2x d x a
DH77/53 28.9.53 50-0 M 1810 hrs	x				x a	5x ² abj		x	3x d x a x c
DH77/53 28.9.53 100-50 M 1815 hrs					2x a	4x ² bwc		x	x d x a
DH77/53 28.9.53 75-25 M 1820 hrs					x a	7x ² wpc		x	2x d x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
DH77/53 28.9.53 0 M 1842 hrs	2x			x f	2x ²	36x ³ ajt			2x ³ d 4x ² a 2x f x m
DH100/53 31.12.53 100-50 M 1945 hrs						2x ² bij			x a x e x f x c
DH100/53 31.12.53 75-25 M 1947 hrs			x a	x g	2x a	8x ² biw		x	x a x b x d
DH100/53 31.12.53 50-0 M 1952 hrs				6x g	4x a x c	2x ³ bjr		5x	x d x a
DH100/53 31.12.53 100-0 M 1957 hrs		x	x a	4x g	2x a x c	6x ² cil		x	2x d x b x a
DH100/53 31.12.53 100-0 M 2003 hrs	x			2x ² g	2x ² a 4x c	5x ³ cil		9x	5x d 3x a x b x e x c
DH57/54 9.3.54 100-0 M 1520 hrs				x ² a x c	x a	5x bc		x	x b

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u>									
DH57/54 9.3.54 100-0 M 1527 hrs				4x ² a x ² c x g	x	2x ² cb		x	2x a x b x d
DH57/54 9.3.54 0 M 1555 hrs				6x ³ a x c		2x ⁴ abc			2x ² b 2x d
DH110/54 21.7.54 100-50 M 2035 hrs					x	3x ² blg		x	x m
DH110/54 21.7.54 75-25 M 2040 hrs				x b	x	5x ² blg		4x	
DH110/54 21.7.54 50-0 M 2045 hrs					x	2x ² blg		x	
DH110/54 21.7.54 100-0 M 2050 hrs					x	6x ² wbl		4x	x c
DH110/54 21.7.54 100-0 M 2055 hrs					x	x ² lbg		x	x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>ST. HELENS.</u> DH110/54 21.7.54 0 M 2138 hrs	2x				8x ²	5x ³ wli		3x ²	5x a x m

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
CAPE PILLAR									
14.3.46 0 M				4x ² g	x ²	4x ⁴ icb		7x ²	4x ² a x ² b x ² d
14.3.46 0 M						2x ³ bc			x d
10.5.46 0 M				x f		4x ² abi			x c x b
10.5.46 0 M	x	x		x ³ e	8x	x ³ cbi		7x ²	3x b x a x d x e
26.9.46 0 M	x	2x ²			x	3x ⁴ bif	3x d 2x e		2x d x f
26.9.46 0 M		x ³				2x ³ bia			x a
28.11.46 0 M		x				x ³ jbi		x	x ³ l
22.5.47 0 M	x		x a		4x	6x ² cib		x	6x a x c x f x b
11.12.47 0 M		3x				3x ³ bia			x ³ k x a
15.2.48 0 M				x ² g	x	x ³ bcj		x	2x c x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR.</u>									
26.2.48 0 M						x^2 abi		x	x^2e x^2l x a x f
17.6.48 0 M						$2x^3$ ab		x^2	x^2l $2x a$ x c x d
17.6.48 0 M						$2x^3$ ab		8x	x^2l $2x a$ x c x e
11.8.48 0 M		x			x	$2x^3$ wba		2x	x^2l $2x a$ x c x d
11.8.48 0 M		4x			x	$15x^3$ ib		2x	x^2l x a x f
LH1/48 5.11.48 50-0 M		x		x b		$7x^2$ cja		2x	$2x d$ x c
LH1/48 6.11.48 0 M		x^2		$2x^2e$		x^3 cjf		2x	4x d
LH8/48 16.12.48 0 M			x^2d		x^2	$3x^2$ ifb			$5x^2a$ x^2d x^2l x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR</u>									
LH8/48 16.12.48 50-0 M		x	x a	x b	x a	4x ² bcf			x d x c x e x l
LH1/49 23.1.49 0 M	x	3x	x a	x f x c	2x ³	x ⁴ cbw		8x	6x a 3x m x d
LH1/49 23.1.49 50-0 M		x			5x ³	3x ³ bci		x ²	x ² l x a
LH8/49 8.4.49 50-0 M						2x ² cb			3x a x f x d
LH8/49 8.4.49 0 M						x ⁴ wba		2x ²	x a
LH9/49 1.5.49 50-0 M				x f		x c			
LH9/49 1.5.49 0 M					2x	8x ² ibg	x a	x	x a x d
LH20/49 18.12.49 50-0 M				x ² b 3x g		x ⁴ bic			2x d
LH22/49 18.12.49 0 M						x i			

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR.</u>									
LH6/50 7.3.50 0 M				6x f	6x	5x ² iba		x	6x a x c
LH6/50 7.3.50 50-0 M				4x c x g x f x b		6x ² cbi		2x	x c
LH8/50 4.5.50 0 M				2x f		x ³ cbi		2x ²	3x a x c
LH8/50 4.5.50 50-0 M						x ³ ibc		4x	5x a x b
LH9/50 6.7.50 0 M		x			2x	5x ³ iwb		2x ³	2x b x c x e
LH9/50 6.7.50 50-0 M			x a			5x ² wbi		x ²	
LH16/50 15.8.50 0 M						x ⁴ ib		2x ²	x a x m
LH16/50 15.8.50 50-0 M		x				x ² icg			
DH-H1/50 1.10.50 0 M		2x ²	2x ² ab			x ³ wba		2x	x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR</u>									
DH-H1/50 1.10.50 50-0 M		6x	x _{ab}			x ³ abw	x _d x _e	2x	x _d x _j
DH-H10/50 30.11.50 0 M		3x			3x	4x ³ iab		x	2x _c x _d x _a
DH-H10/50 30.11.50 50-0 M						6x ³ bcj		x ²	x _c
DH-H1/51 1.3.51 0 M			6x _{ga}	x _g x _b		3x ³ bia			2x _c 2x _d
DH-H1/51 1.3.51 50-0 M					x x _a	3x ² wba		x	
DH-H9/51 24.4.51 0 M						3x ³ wbi			
DH-H9/51 24.4.51 50-0 M			x _a			3x ² abc		x	
DH-H9/51 19.5.51 50-0 M						3x ² bcl			x _a
18.3.52 0 M				x _g	3x ²	2x ² ai			2x _a
18.3.52 50-0 M			x _a		x	2x ³ bia			8x _j

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR.</u>									
18.3.52 50-0 M					x ² a	3x ² biw			
4.4.52 0 M			2x a	x c		5x ³ wab		3x	x ² d 2x j x a
4.4.52 50-0 M						3x ³ cwb		2x	5x a
DH48/52 7.12.52 100-0 M 1432 hrs			x a	x b x e x g		5x ² jb			2x d
DH48/52 7.12.52 100-0 M 1443 hrs				2x e x g		7x ² jbi		x	x ² d 7x e
DH48/52 7.12.52 0 M 1527 hrs		x			x	x ² jai			x d x c
DH2/53 10.2.53 100-0 M 1819 hrs				x g	2x ck	4x ³ wc		3x	3x a
DH2/53 10.2.53 100-0 M 1826 hrs				x g	x c	2x ³ bc		5x	2x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR.</u>									
DH2/53 10.2.53 0 M 1900 hrs				x f	2x x ² a	7x ³ bc		4x	2x a x d x f
DH52/53 17.6.53 100-0 M 1355 hrs			x ² a		x ck	4x ³ lai		2x ²	x a x c
DH52/53 17.6.53 100-0 M 1403 hrs			7x a		x k	3x ³ iol		x ²	2x f
DH52/53 17.6.53 0 M 1431 hrs		x	3x a		x	12x ³ ibw		4x ²	8x a x c
DH81/53 3.10.53 100-0 M 0730 hrs		2x			3x ² a	2x ³ abi	3x d 3x e	x	4x d 2x a x f
DH81/53 3.10.53 100-0 M 0740 hrs		2x	x f		x a	3x ³ abc	7x e	x	3x f 2x d
DH81/53 3.10.53 50-0 M 0745 hrs		3x	7x a		2x ² a	2x ³ wbt	6x d 2x e	x	x f x d x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR</u>									
DH81/53 3.10.53 100-50 M 0750 hrs		x			4x ² _a x k	2x ³ bcf	3x d 2x e	x	2x d
DH81/53 3.10.53 75-25 M 0755 hrs		x	x a		9x a	7x ² lfb	x e x d	x	x f x d
DH81/53 3.10.53 0 M 0820 hrs		7x	x ² _a	x c	6x a	6x ³ abi	4x e 3x d	x	3x d 2x f x b x c
DH96/53 29.12.53 100-50 M 2135 hrs					x ² _c	4x ² _j			
DH96/53 29.12.53 75-25 M 2145 hrs					x ³ _c	x ³ _{ja}		x	2x a x m
DH96/53 29.12.53 50-0 M 2150 hrs					3x ³ _c	7x ² _j		x	x j
DH96/53 29.12.53 100-0 M 2157 hrs					2x ³ _c	x ³ _j		3x	x e x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR.</u>									
DH96/53 29.12.53 100-0 M 2205 hrs	x				9x ² c	x ³ jo			x m x d
DH96/53 29.12.53 0 M 2305 hrs					4x ⁴ x ² a	7x ⁴ jg		x ³	2x ² d x ² e x a
DH107/54 24.6.54 100-50 M 1210 hrs			x a			x ² bml		x	
DH107/54 24.6.54 75-25 M 1215 hrs			x a		x k	x b		x	
DH107/54 24.6.54 50-0 M 1220 hrs			x a			5x wg		2x	
DH107/54 24.6.54 100-0 M 1225 hrs			x _{aj} x e		x k	4x ² Awl		7x	x a x f x c
DH107/54 24.6.54 100-0 M 1230 hrs		x	x a		x k	4x ² bAw		6x	x a x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>CAPE PILLAR</u>									
DH107/54 26.6.54 0 M 1300 hrs		x ³	2x a			x ³ Abi			3x c
DH113/54 22.7.54 100-50 M 1520 hrs			sand and debris						
DH113/54 22.7.54 75-25 M 1525 hrs			debris						
DH113/54 22.7.54 50-0 M 1530 hrs						x ² big		5x	x a
DH113/54 22.7.54 100-0 M 1535 hrs						4x ² bgi		4x	
DH113/54 22.7.54 100-0 M 1600 hrs		x				2x ³ wbi		4x	

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
4.5.45 wide O M						x ⁴ bic		3x	x ⁰ x ^a
13.9.45 O M					5x	3x ³ baj		x	x ^e
5.10.45 wide O M		4x	x ² ab		x	5x ³ awj	x d		x ^e x ^f
5.10.45 O M		4x			x ³ a	25x ³ bij			x ⁴ e
14.2.46 O M				x g	25x ²	x ² abc			x ² a
14.2.46 wide O M					9x	2x ³ bif		x	x ^f x ^c
15.3.46 wide O M					6x ²	5x ² cba		x	2x ^a x ^e x ^b
15.3.46 O M				x i	2x	2x ³ abc		x	x ^a
26.4.46 O M		x		2x e x i	2x ²	2x ⁴ bai		6x ³	3x ^a
26.4.46 wide O M		x		x ² e		3x ⁴ big		5x ²	x ² e
10.5.46 O M					4x	5x ³ bcf		x ³	x ² e x ² a 2x ^b

PLANKTON

Station	Fi	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
10.5.46 wide O M			x a	2x ³ e x g x i	x ²	3x ³ blg		5x ²	x ² e x a
19.6.46 O M						5x ³ ba		x ²	x ² l
19.6.46 wide O M		2x		4x a		4x ³ b		4x	x ³ l 5x a
16.7.46 O M						3x ³ bAa		x	x ² l x a
16.7.46 wide O M						3x ³ bwa		9x	x ² l
27.8.46 O M						4x ³ ba		2x	x ² l
27.8.46 wide O M		x				x ⁴ ba		x	x ² e x a
25.9.46 wide O M	x	2x				2x ³ bai		2x	x ² e x a
25.9.46 O M		4x			x	x ³ bji		3x	x ² e
19.10.46 wide O M						15x ³ bf			x ³ l x ² j 3x d
19.10.46 O M					8x a	15x ² baf			x ² l

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
28.11.46 O M		6x				15x ² cab			x ² 1 x e 2x d
23.5.47 O M					x	4x ³ awb			x a x f
13.6.47 wide O M			2x a		x	4x ³ bia		2x	x ² 1 x a x c x f
13.6.47 O M	x					5x ³ abc		x ²	x ² 1
24.7.47 wide O M			x a			2x ³ baw		2x	x ² 1 x e x a
24.7.47 O M		2x				8x ³ bc		6x ²	x ³ 1 x a x c x f
19.8.47 wide O M						3x ⁴ b		x	x ² 1
19.8.47 O M		x				x ³ ba		x	x ² 1 x d
4.9.47 O M		x	x a			8x ³ b		9x	x ² 1 3x a 2x d
4.9.47 wide O M		x	x a			12x ³ bia		x	x ² 1 x c x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND</u>									
27.10.47 wide O M	x					8x ³ _b			x ² _l 5x d x f
27.10.47 O M		2x ²				4x ³ _b			x d x c x e
26.2.48 O M		4x	x d		x	6x ² baA		4x	x ² _l x f
24.3.48 O M		2x			6x	6x ³ woa		12x ²	2x d x a x c
28.4.48 O M						8x ² abw		x	x ² _l x a x m
28.4.48 wide O M						4x ⁴ ib		2x	x m
17.6.48 wide O M						2x ³ bA			2x c
17.6.48 O M						3x ³ bA		2x	x ² _l 2x c
12.7.48 O M			x a		2x	4x ³ jbg		x	x ² _l 2x c 2x a x d x f x e

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
12.7.48 wide 0 M	x	x	x ² da		6x	15x ³ abl		2x ²	6x a 4x c x m x d
11.8.48 wide 0 M			2x a		4x ²	6x ³ bal		9x	x ² l 9x a x f
11.8.48 0 M		4x			x	5x ³ bcg		x	x ² l 6x a x e x d x f x m x c
16.10.48 0 M	x	2x	x a			2x ³ jci			2x ² d x c x e
LH2/48 7.11.48 0 M		x ³		x e x b		x ³ bjc		x	x c x d
LH2/48 7.11.48 50-0 M				6x ² b		x ³ bcj			x ² l x d
LH7/48 16.12.48 50-0 M 0130 hrs			2x b		x	x ⁴ abc		4x	x c x e
LH7/48 16.12.48 0 M 0145 hrs		x ²			2x ⁴	x ⁵ abc		6x ²	15x ² a 6x ² d x ² e

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
LH2/49 23.1.49 50-0 M 1405 hrs	x	x			5x	16x ² bca		5x	x a
LH2/49 23.1.49 0 M 1410 hrs		3x			2x ³	x ³ bc			7x a
LH7/49 6.4.49 20-0 M 1000 hrs			x d		x a	2x ³ bcw		x	x d x e
LH7/49 6.4.49 0 M 1000 hrs	x		x ² d x k		2x ²	2x ³ bi			6x a
LH11/49 9.5.49 50-0 M 0900 hrs						x ² wba		x	x a x d
LH11/49 9.5.49 0 M 0930 hrs					x	4x ³ bac		5x	3x a x d
LH16/49 29.10.49 0 M 0930 hrs		4x ²	x d			2x ³ abj			x e x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
LH16/49 29.10.49 50-0 M 0930 hrs	x		5x ² adb			2x ³ cab		x	x a x e x d
LH19/49 17.12.49 0 M 1105 hrs						6x ⁴ bac		2x ²	
LH19/49 17.12.49 50-0 M				2x e x f		15x ³ bac			2x a
LH2/50 9.3.50 0 M		3x				6x ³ bfa			8x ² a x ² l
LH2/50 9.3.50 50-0 M			x bc	6x f x g	x a	2x ² abc		x	x a
LH7/50 2.5.50 0 M					8x	x ³ bwc			x ² a
LH7/50 2.5.50 50-0 M						8x ² bwc		x	
LH10/50 6.7.50 50-0 M 1510 hrs			x a			16x ² abc		3x ²	x f

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
LH10/50 6.7.50 0 M 1540 hrs	2x				2x	4x ³ biz		3x ³	x ² l x m x a
LH15/50 11.8.50 50-0 M 1445 hrs						2x ² bic		x	
LH15/50 11.8.50 0 M 1515 hrs	x	x	x a			8x ³ bi		8x	x ² l 2x a x f
DH-H2/50 2.10.50 50-0 M 1655 hrs						5x ² bwc		2x	x f x a
DH-H2/50 2.10.50 0 M 1715 hrs		2x				5x ² iba			x ² l x ² e x d
DH-H9/50 29.11.50 50-0 M 1200 hrs					x	2x ³ bjc		5x	
DH-H9/50 29.11.50 0 M 1230 hrs		x				x ² ab			x a x d x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH-H12/50 14.12.50 50-0 M 1345 hrs				2x ² c	x	7x ³ bjc		3x ²	
DH-H12/50 14.12.50 0 M 1605 hrs		2x			x ²	8x ³ bcd		2x ²	x ³ e 9x a 4x d
DH-H2/51 1.3.51 0 M			2x g	x a x i	4x	3x ³ bif		3x	x a x d
DH-H2/51 1.3.51 50-0 M			x ² cg		x	8x ² bci		x	x a x d
DH-H8/51 19.4.51 0 M						x ³ bai			x c
DH-H8/51 19.4.51 50-0 M			x a			8x ² bac		x	
DH-H10/51 20.5.51 0 M					2x ²	8x ² wcb			3x a
DH-H10/51 20.5.51 50-0 M						5x ² bac		x	x c
6.7.51 0 M	x	x				5x ² ibc		x	x ² l 2x a x f x e

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
6.7.51 50-0 M			x a			$3x^2$ bac		3x	x c
5.10.51 0 M	x	x			x	$2x^3$ iba			x c
16.11.51 0 M		x		x b		$2x^3$ bai			2x c 2x d x a
16.11.51 50-0 M				3x b 2x c x e		x^3 bca		x	6x a
DH-H1/52 ?. 1.52 0 M		2x			x	$3x^2$ bai			x^2 9x a
DH-H1/52 ?. 1.52 50-0 M		x			x	$2x^3$ bac		x	3x a
27.2.52 50-0 M						$3x^2$ abc			x e
18.3.52 50-0 M 2000 hrs				x^2 b	$4x^2$ c	$12x^3$ bac			$2x^2$ d x a
18.3.52 50-0 M 2000 hrs				$4x^2$ b	$9x^2$ c	$7x^2$ bac			
18.3.52 0 M 2015 hrs	x	x			$3x^3$	$12x^4$ bac		x^2	$3x^2$ d x m x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
2.4.52 0 M 1750 hrs				7x i 4x c 2x g x f	x a	5x abi			3x a
2.4.52 50-0 M 1820 hrs				x b x g	x o	5x abc			x a x c
2.4.52 50-0 M 1825 hrs				4x b 2x c x i x g		6x ² bak			x c
8.8.52 0 M		9x				4x ³ wbi		x ²	x d
27.9.52 50-0 M 1215 hrs		x		2x b	5x a	5x ² abi		x	x e
27.9.52 50-0 M 1220 hrs	x	x		x b		7x ² abi		x	2x c 2x d
27.9.52 0 M 1300 hrs		3x			x	4x ³ abi			2x d
13.10.52 0 M		2x		x b	x	5x ³ bi			x d
13.10.52 50-0 M	x			4x b	2x ² a x c	12x ² abi		x	2x ² c x e x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND</u>									
13.10.52 50-0 M		x	x a	x b		2x ³ abi			7x ² j x ² c 3x d x e
22.11.52 50-0 M					4x a	2x ⁴ ibc		x	2x d
22.11.52 50-0 M				8x b	5x a	15x ³ ibc			3x c
22.11.52 0 M 1153 hrs		2x ²				2x ³ ibg			
DH46/52 5.12.52 550-400 M 1336 hrs				x b x e	x j	x ³ lj		x	x d x a
DH46/52 5.12.52 400-300 M 1400 hrs					x h	3x ² l		x	x e
DH46/52 5.12.52 300-200 M 1419 hrs				x e		5x ² wb		x	x e x j x a x c x f x m
DH46/52 5.12.52 200-100 M 1432 hrs		x		2x ² e x b		7x ² bw		x	x a
DH46/52 5.12.52 100-50 M 1441 hrs				4x e 4x b		4x i			x i x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH46/52 5.12.52 50-0 M 1449 hrs				x b x e		x ³ c j w		x	3x j x e x a
DH46/52 5.12.52 500-0 M 1505 hrs		x		x c x g	2x _{kh}	3x ³ l w b			x a x e x d
DH46/52 5.12.52 500-0 M 1524 hrs	x			7x e x g	6x a 2x _{hf}	4x ³ j l		2x	8x f 4x e 3x a 3x c x j
DH46/52 5.12.52 0 M 1640 hrs		2x		x b x f		5x ² j b			x j 2x c x a
DH47/52 5.12.52 0 M 1910 hrs				2x ³ _b 4x f		5x ³ i b j		5x	9x j x a
DH47/52 5.12.52 85-0 M 2012 hrs				3x e	x a x _{of}	8x ² b c j			2x ² _e 2x d
DH47/52 5.12.52 85-0 M 2019 hrs				4x e 2x a x g	4x c	4x ³ b i c		x	x e

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
24.1.53 0 M		x				2x ⁴ iba			x d
24.1.53 50-0 M				x g	x	4x ³ age			
24.1.53 50-0 M				x g		6x ³ cib		x	3x d x a x b
DH3/53 11/2/53 550-0 M 1340 hrs	x			2x c x f x g x i	x hf	3x ² lm			x b
DH3/53 11.2.53 550-0 M 1408 hrs				5x ² x g	x hf	4x ² li	2x a	x	3x a
DH3/53 11.2.53 550-400 M 1435 hrs				x o	x h			x	
DH3/53 11.2.53 400-300 M 1505 hrs			x a	x c		3x bwa		x	
DH3/53 11.2.53 300-200 M 1525 hrs						x wb			x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND</u>									
DH3/53 11.2.53 200-100 M 1540 hrs				x c		x ² w		x	
DH3/53 11.2.53 100-50 M 1540 hrs				x c		x w			x a
DH3/53 11.2.53 50-0 M 1557 hrs				5x ² c	x m	x			x a
DH3/53 11.2.53 0 M 1624 hrs				6x c		3x ³ bwa			
DH4/53 12.2.53 80-0 M 0735 hrs				x g	x x a	2x ² cbw			x a
DH4/53 12.2.53 80-0 M 0741 hrs				x c x g	6x a x c	2x ³ bca		2x	x a
DH4/53 12.2.53 0 M 0812 hrs				x f	x	8x ³ wba			x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
14. 3. 53 0 M 1140 hrs		x	x a		4x x a	3x ² bw			3x a x m
14. 3. 53 50-0 M			9x a		6x a	4x ³ acb		2x	
11. 4. 53 0 M 1140 hrs						2x ³ aif			x c
11. 4. 53 50-0 M		x		x k	2x ² a	8x ³ bfa		x	x c
8. 5. 53 0 M 1217 hrs					x c	2x ⁴ ib			x c
8. 5. 53 50-0 M			x _{ac}			9x ² bia		3x	x b
DH50/53 15. 6. 53 500-0 M 1635 hrs		x	2x a	x g	4x _{fk}	9x ³ ljq		3x ²	x ² f x a
DH50/53 15. 6. 53 500-0 M 1655 hrs		4x	x a	x j x g	2x fhk	5x ⁴ liq		4x ²	4x ² a 3x ² f x c
DH50/53 15. 6. 53 50-0 M 1710 hrs			6x a	x g	x k	8x ² ibu		3x	x f x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH50/53 15.6.53 550-400 M 1740 hrs	x	x	x a	x d	x a x gk	5x ² lmi		5x	7x f x a x c
DH50/53 15.6.53 400-300 M 1810 hrs		x			x fg	6x ² ib		2x	6x f x c
DH50/53 15.6.53 300-200 M 1825 hrs		x	2x a			x ³ lq		4x	5x f x c
DH50/53 15.6.53 200-100 M 1840 hrs			x f x e		x kfh	x ³ lqb		x ²	3x f x b
DH50/53 15.6.53 100-50 M 1853 hrs			x ² a		x k	2x ³ bid		x ²	2x f
DH50/53 15.6.53 0 M 1925 hrs		x	2x ² a	4x g x f	2x ²	3x ⁴ lbi		3x ²	4x ² a 4x f x c
DH51/53 15.6.53 85-0 M 2120 hrs			x a	x g	8x okf	3x ³ bi		8x	x a x f x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND</u>									
DH51/53 15.6.53 85-0 M 2130 hrs			2x a			8x ck	3x ³ wim	7x	3x f x a x c
DH51/53 15.6.53 0 M 2200 hrs			5x a	2x g	3x ²	4x ⁴ bic		3x ³	3x ² a x m x c
28.7.53 0 M 1045 hrs					x k	4x ³ ib		3x ²	x c
28.7.53 50-0 M			x a		x k	5x ² bjn		5x	x f
14.8.53 0 M						5x ² idg		5x	x c
14.8.53 50-0 M			x a			2x ² blg		5x	x f
16.9.53 0 M 1206 hrs		4x ²				4x ² iba			x d
16.9.53 50-0 M						5x ² baj		x	x d
DH79/53 1.10.53 75-0 M 1620 hrs	x				x ² a	4x ³ abc		3x	x b

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND</u>									
DH79/53 1.10.53 75-0 M 1625 hrs				x g	x ² a	3x ³ dab	x e	2x	x c x b
DH79/53 1.10.53 37-0 M 1630 hrs		x			x ² a x k	x ³ afj	4x d x e	x	
DH79/53 1.10.53 75-37 M 1635 hrs		x			5x a x c	6x ² abc		x	
DH79/53 1.10.53 56-19 M 1640 hrs	x	x	x a		5x ² a	2x ³ abj	2x ² db 8x e	x	x a x d x c
DH79/53 1.10.53 0 M 1700 hrs	x				x a	13x ³ aib	6x ² d 6x ² e		x f x c
DH80/53 2.10.53 500-0 M 1910 hrs	4x			x g	3x ² fkh	4x ³ ljq		7x	4x ² f x a
DH80/53 2.10.53 50-0 M 1925 hrs	x ²				7x fk	2x ² Dj		6x	x j x f

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH80/53 2.10.53 800-500 M 1940 hrs	x				x f	16x ² 1dq		x	x ² f x c x d
DH80/53 2.10.53 500-0 M 1945 hrs	5x			5x c x g	8x ² f	3x ³ 1jD		x ²	2x ² f x a
DH80/53 2.10.53 500-400 M 2000 hrs	x				x k	5x ² 1dq		x	x ² f
DH80/53 2.10.53 400-300 M 2020 hrs						3x w			x a
DH80/53 2.10.53 300-200 M 2050 hrs	x				x k	4x ² 1dq		2x	3x f
DH80/53 2.10.53 200-100 M 2100 hrs				x c x g x e	x kf	8x ² 1dq		x	4x f
DH80/53 2.10.53 100-50 M 2110 hrs	3x			x c	x k	2x ² 1jq		3x	x f x d x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND</u>									
DH80/53 2.10.53 0 M 2132 hrs	2x ²			x c x g	x ²	2x ⁴ jlb		2x ²	8x ² a
28.10.53 0 M 1140 hrs		3x ²				2x ⁴ abf			3x ² a 2x c
28.10.53 50-0 M				x b		3x ³ bad		x	x d x c
20.11.53 0 M		6x			x c	x ³ bac			5x ² a 3x a
20.11.53 50-0 M					x c	3x ³ bag			x a x d x c
11.12.53 50-0 M 1117 hrs				6x b x g	x c	2x ³ baj		x	x a x d x c x b
11.12.53 0 M 1130 hrs					x c	3x ³ abg		x	x a x d
DH97/53 30.12.53 85-43 M 0755 hrs				x b	x c 2x a	4x ² jcd		x	x d
DH97/53 30.12.53 62-21 M 0810 hrs				x ² b	x c	x ³ jcd			x e x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH97/53 30.12.53 43-0 M 0820 hrs				x b	x a	4x jc			
DH97/53 30.12.53 85-0 M 0825 hrs				3x b x g	2x a x c	2x ³ jd		x	x d x b
DH97/53 30.12.53 85-0 M 0832 hrs				2x b x g	2x a x _{ck}	8x ² jcp		x	x a x b x e x d
DH97/53 30.12.53 0 M 0910 hrs		x		x g	2x	x ³ bia			x a x e 3x d
DH98/53 30.12.53 950-500 M 1147 hrs	x				x _{hg}	5x ² ljq		x	6x f x d
DH98/53 30.12.53 500-400 M 1220 hrs						2x ² lq		x	5x f x a
DH98/53 30.12.53 400-300 M 1250 hrs		x			x h	2x ² ljD		x	3x f
DH98/53 30.12.53 300-200 M 1310 hrs			x a	x e		x ² bd		x	x f

PLANKTON

Station	Fi	Fa	Ap	Ac	E	Co	Cl	Ch	
MARIA ISLAND.									
DH98/53 30.12.53 200-100 M 1320 hrs		x	x a x e	x g	3x a x c	13x ² big		2x	x ² j x f
DH98/53 30.12.53 100-50 M 1333 hrs			x a	x g	4x a	2x ² gjc		x	x ² j x f x d x e
DH98/53 30.12.53 50-0 M 1342 hrs			x a	2x ² g 3x c	6x a x c	7x ² jd		3x	2x a
DH98/53 30.12.53 500-0 M 1355 hrs			x a	x ² g x c	2x ² a x hmf	9x ³ jdl		x ²	2x ² f x a x e
DH98/53 30.12.53 500-0 M 1415 hrs		x		9x g 2x c	2x ² a x hm	5x ³ jcq		x ²	x ² f 2x a
DH98/53 30.12.53 0 M 1530 hrs		3x ²		2x b x g		4x ³ jbd		2x	x ² e x b x d x c
21.1.54 50-0 M 1040 hrs				x g x c x b		3x ³ bcj		7x	
21.1.54 0 M 1130 hrs		x ³			x ² c	5x ² ac		x	x ² a x ² j x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
18.3.54 100-0 M 1120 hrs				2x b		3x ² cba	3x d x e		4x b x c
18.3.54 100-0 M 1125 hrs			3x _{ca}	2x ² c 7x b 4x a	x ² a	5x ³ cba			4x a 3x b
18.3.54 0 M 1135 hrs				3x ³ a		x ² i			x ² b x ² a
28.4.54 50-0 M 1110 hrs				2x a	x c	4x ³ baf		5x	4x b x a
24.5.54 0 M 1645 hrs				x f	2x	3x ³ ibc		3x	3x a
24.5.54 50-0 M						2x ³ bcf			x c
DH105/54 21.6.54 100-50 M 1405 hrs					x	5x bjf		x	x a x f
DH105/54 21.6.54 75-25 M 1410 hrs			x a			2x b		x	
DH105/54 21.6.54 50-0 M 1415 hrs		x	x a			5x bcj		x	

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH105/54 21.6.54 100-0 M 1420 hrs					x k	x ² bgn		2x	
DH105/54 21.6.54 100-0 M 1426 hrs					x k	2x ² bgn		2x	x c
DH105/54 21.6.54 0 M	x	x ³		x d		6x ³ ibw		2x	x b
DH106/54 22.6.54 750-500 M 1624 hrs		x			x km	x ² Dv		x	
DH106/54 22.6.54 500-400 M 1652 hrs								x	
DH106/54 22.6.54 300-200 M 1710 hrs			x j x e			2x ² plw		x	x f
DH106/54 22.6.54 400-300 M 1730 hrs						x w		x	
DH106/54 22.6.54 200-100 M 1755 hrs					x k	4x ² 1Dq			

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH106/54 22.6.54 100-50 M 1802 hrs					x k	4x ² lpb		x	
DH106/54 22.6.54 50-0 M 1825 hrs				x g	x fh	x ³ l		4x	2x a 2x f
DH106/54 22.6.54 500-0 M 1835 hrs		6x	x j		2x kfm	3x ³ bl		7x	2x e
DH106/54 22.6.54 500-0 M 1855 hrs	x	8x	x a	x g	3x kfm	4x ³ lbp		9x	6x f x a
DH112/54 22.7.54 100-50 M 0925 hrs						5x l			
DH112/54 22.7.54 75-25 M 0930 hrs						x l		x	x a
DH112/54 22.7.54 50-0 M 0935 hrs				x g		2x ² ibD			x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MARIA ISLAND.</u>									
DH112/54 22.7.54 100-0 M 0940 hrs						2x lij		x	
DH112/54 22.7.54 0 M 1017 hrs						5x ³ ibw		3x	3x b

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS</u>									
LH4/48 20.11.48 0 M	x	5x ²				25x ³ a			x d
LH4/48 20.11.48 50-0 M		x	x d			15x ² abf			x d
LH4/49 31.1.49 0 M		x			7x ²	x ² ba			3x ² a x ² l x d
LH4/49 31.1.49 50-0 M		x				4x ² abf			x ² l x a x d
V49/20 14.5.49 0 M 1437 hrs			x ² a		3x	x ⁴ wab		7x ³	2x a x d x e x b
LH14/49 12.6.49 0 M 1345 hrs			x a			3x ³ ab		x	
LH14/49 12.6.49 50-0 M 1315 hrs						2x ³ bc		x	x e
V49/29 27.7.49 0 M 1022 hrs	x					x ⁴ wab	x ² e	x	x ² l 3x d x e x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
V49/29 27.7.49 0 M 1022 hrs		x				5x ³ wab	6x e		x d
LH15/49 9.9.49 0 M		2x			2x	2x ³ bac		x	x d
LH15/49 9.9.49 50-0 M		x				2x ³ bcw		x	x d
V49/42 17.10.49 0 M 0825 hrs		x				2x ³ baw		x	x d
16.11.49 0 M 1233 hrs	2x	x ³		x ² _b		3x ⁴ baw			x ² _d
LH17/49 7.12.49 0 M 1100 hrs		4x ²				x ³ bca			x a x c x d
LH17/49 7.12.49 50-0 M 1000 hrs	x	x				14x ² bac		x	x a x d
14.2.50 0 M 1048 hrs		3x	x a			4x cya			2x ² _a x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
27. 3. 50 50-0 M 1300 hrs			2x ² a		3x ² a x	2x ³ cba		2x	
LH4/50 27. 3. 50 0 M 1325 hrs		7x	x a		8x	2x ² bac		x	4x a 3x d x c
16. 4. 50 0 M 1201 hrs			x a		x x a	3x ³ ab			2x d x a
19. 5. 50 0 M 1134 hrs					x	4x ⁴ abc		x	x a x c
5. 6. 50 0 M 1230 hrs						2x ³ bcw		5x	
14. 7. 50 0 M 1135 hrs	2x					4x ³ a			x d
19. 8. 50 0 M 1107 hrs		x				4x ³ abw			x a
12. 9. 50 0 M 1611 hrs		2x ²		2x b		5x ³ ab			x d x m
DH-H5/50 24. 10. 50 50-0 M		3x	3x a			4x ³ bcf		4x	2x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Ct	Ch	
<u>PORT PHILLIP HEADS.</u>									
DH-H5/50 24.10.50 0 M 0820 hrs		3x ³				3x ⁴ abc			x a x m x b x d
DH-H6/50 7.11.50 50-0 M 1030 hrs		4x	2x a	x b		3x ³ bac		7x	x d
DH-H6/50 7.11.50 0 M 1100 hrs		2x		x b		2x ³ awb			
6.12.50 0 M 0940 hrs					x	x ⁴ abC			
12.2.51 0 M 0908 hrs		x	x a		x	15x ² abB			2x m x d x a
DH-H5/51 14.3.51 0 M		3x	x a			15x ² abc			
DH-H5/51 14.3.51 50-0 M		x	x a		2x a	x ³ abc			x a
25.3.51 0 M		x	2x a	2x b x e	3x a	25x ² aby		3x	x c x b x d
18.4.51 0 M 1102 hrs	x					5x ³ baz			x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
18.5.51 0 M 1123 hrs		x^2				x^4 baB			2x a
DH-H14/51 5.7.51 50-0 M 0800 hrs					x a	$5x^2$ baw			
DH-H14/51 5.7.51 0 M 0845 hrs						x^4 wab			2x a x c
17.8.51 0 M 1330 hrs	x	7x			x	$8x^3$ abw			x a x d
11.9.51 0 M 1712 hrs		$4x^2$			x^2	$4x^4$ ab	$8x^2e$ $2x^2d$		$2x^2a$ x c x d
9.10.51 0 M 1230 hrs		$6x^3$				$15x^2$ aby			6x d
14.11.51 0 M 1355 hrs		3x				x^4 abC			x^2o 2x a
30.1.52 0 M 1402 hrs	2x	$4x^2$				$15x^2$ ab			5x d
25.2.52 0 M 1625 hrs	$2x^2$	$6x^2$			$3x^2a$	$4x^4$ ab			$3x^2d$ x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS</u>									
21. 3. 52 0 M 0938 hrs		6x			4x	3x ⁴ baw		x	5x ³ k 3x d x a
22. 4. 52 50-0 M 0900 hrs					15x ³ a	x ⁴ bac		4x ²	x f
22. 4. 52 50-0 M 0915 hrs			4x a		6x ² a	4x ³ abc		2x ²	x ² k
22. 4. 52 0 M 0946 hrs			x a		2x	15x ² abw			4x ² k
22. 4. 52 0 M 1003 hrs		4x	5x ² a			5x ³ ab			5x ² k 2x d
24. 5. 52 50-0 M 1435 hrs					x a	5x ³ aic			
24. 5. 52 50-0 M 1450 hrs			6x a		3x a	9x ³ baw		x	
24. 5. 52 0 M 1633 hrs		x				3x ⁴ abc			3x d x a
23. 7. 52 50-0 M 1200 hrs						6x ² iaw			

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
23.7.52 50-0 M 1215 hrs						3x ³ aiw			x o
23.7.52 0 M 1310 hrs		2x ²				26x ³ a			
DH12/52 13.8.52 62-0 M 2138 hrs			spilt		4x a	8x ² b			
DH12/52 13.8.52 62-0 M 2144 hrs					2x ² a x c	2x ³ abc		x	
DH12/52 13.8.52 0 M 2153 hrs					3x ² a	14x ⁴ bai	2x ² e	2x ²	
DH27/52 27.9.52 62-0 M 1801 hrs		x			x ² a	6x ² bci			x f x b x d x c
DH27/52 27.9.52 62-0 M 1805 hrs		x		x ² a	x ² a	x ³ wci		x	x b x c
DH27/52 27.9.52 0 M 1910 hrs		4x		6x ² a 2x ² c 2x b		12x ³ cwi			2x ³ j 6x ² b 2x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS</u>									
DH40/52 27/10/52 40-0 M 0837 hrs		2x	x a		x ² a	7x ³ abw			x c
DH40/52 27/10/52 40-0 M 0841 hrs					2x ² a	27x ³ abw		x	3x ² k x c
DH40/52 27/10/52 0 M 0950 hrs		14x ²	2x a		2x x a	9x ³ abw			4x c
DH41/52 1.12.52 60-0 M 2030 hrs		x			2x a x c	6x ³ bai			x a x c
DH41/52 1.12.52 60-0 M 2100 hrs					3x a 2x c	11x ³ abw		2x	3x d 3x a 2x c
DH41/52 1.12.52 0 M 2208 hrs					6x ²	18x ⁴ abl		2x ²	4x ² d x m x c
16.12.52 50-0 M 1145 hrs		8x			x c x a	13x ³ iaf		2x	x a x c
16.12.52 50-0 M 1155 hrs		6x			x ² a	15x ³ biw		x	x c x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
16.12.52 0 M 1222 hrs	x	2x ³			2x a	2x ³ bia	4x e		
DH13/53 19/2/53 60-0 M 1444 hrs						13x ² bac			
DH13/53 19.2.53 60-0 M 1450 hrs					4x a	3x ³ bai			x a
DH13/53 19.2.53 0 M 1535 hrs	3x					5x ³ abx			x ² d 3x a x c
DH35/53 17.5.53 65-0 M 1730 hrs					3x a x c	4x ³ bia	2x		x a
DH35/53 17.5.53 65-0 M 1735 hrs			2x a		x a	2x ³ bw		5x	
DH35/53 17.5.53 0 M 1805 hrs			2x ² a		5x ³ a 6x ²	4x ⁵ bi		3x ²	4x ² a x m
DH42/53 8.6.53 61-0 M 1625 hrs			5x a	x b	x a	9x ³ bai		2x ²	

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
DH42/53 8.6.53 61-0 M 1630 hrs			2x a		3x a	x ⁴ bai		3x ²	
DH42/53 8.6.53 0 M 1700 hrs				x ² b		17x ⁴ bi		2x ²	x ² a
DH57/53 15.8.53 58-0 M 1355 hrs						3x ³ sia		3x	3x d x a x b
DH57/53 15.8.53 58-0 M 1400 hrs	x	x				25x ² asi		2x ²	4x d 3x a
DH57/53 15.8.53 0 M 1435 hrs		x ²				3x ⁴ ais		2x ³	x ² a x c
DH65/53 12.9.53 60-0 M 0216 hrs		x				x ³ bai			2x j
DH65/53 12.9.53 60-0 M 0223 hrs					7x a	2x ³ abc		2x	2x d
DH65/53 12.9.53 0 M 0316 hrs		2x ²	2x ² a		2x ³ a x ²	3x ⁵ abc		15x ²	x ² d 5x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>PORT PHILLIP HEADS.</u>									
DH65/54 13. 3. 54 60-0 M 0515 hrs				x b	x c	3x ² bcy			x a
DH65/54 13. 3. 54 60-0 M 0520 hrs				x b	2x c	3x ² cyC			
DH65/54 13. 3. 54 0 M 2530 hrs					5x	4x ⁴ cyb			9x a x d
DH66/54 12. 3. 54 75-0 M 2042 hrs	x				x c	5x bcy			x a
DH66/54 12. 3. 54 75-0 M 2047 hrs	x				7x c	5x ² bcy			7x a
DH66/54 12. 3. 54 0 M 2112 hrs	2x				4x ³	4x ⁴ cby			6x ³ a 2x ² m x d
DH94/54 20. 4. 54 0 M 2215			3x ² a		2x ⁴ a 3x ²	5x ⁴ cbi		2x ²	x ³ k 2x ² c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
PORT PHILLIP HEADS									
DH94/54 20. 4. 54 50-0 M 2240 hrs			x _{ba}		x c	3x ² cbw			x d
DH94/54 20. 4. 54 50-0 M 2247 hrs			x _{ac}		x a	4x ² cbw			x d
DH95/54 14. 5. 54 60-0 M 1200 hrs						2x ³ cbw		x	
DH95/54 14. 5. 54 60-0 M 1206 hrs						x ³ cbw			
DH95/54 14. 5. 54 60-30 M 1210 hrs						x ² bwc			
DH95/54 14. 5. 54 45-15 M 1216 hrs						2x ³ cbw		x	x a
DH95/54 14. 5. 54 30-0 M 1221 hrs						x ³ bc		x	
DH95/54 14. 5. 54 0 M 1245 hrs					x	6x ³ awb			

PLANKTON

Station	Fl	Fa	Ap	Ac	E	Co	Cl	Ch
<u>BASS STRAIT</u>								
LP3/48 5 miles NNE E. Sister Is. 10.11.48 0 M				5x b		3x ⁴ baf		5x d
LP4/48 Gabo Is. 14.11.48 0 M	x	2x ³	2x ² c	5x a 5x b		4x ⁴ ab		4x ² d 3x ² c 5x a
LP5/48 5 miles N Cliffy Is. 15.11.48 0 M		2x ³	5x ³ a			15x ³ baf		5x ² c 5x ² d
LP6/48 Wilson's Promontory 19.11.48 0 M		4x ²	x ³ a	2x ² b		x ⁵ abf		5x ² c x ² a 5x d
LP7/48 Off Western- port E. Entrance 19.11.48 0 M		x ⁴				2x ⁴ ab		2x ² d
Off Cape Otway LP8/48 30.11.48 0 M						2x ⁴ ab		5x d x c
LP9/48 Off Pt. Fairy 1.12.48 0 M			6x a			8x ³ abi	6x	9x c x b x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>BASS STRAIT</u>									
LH5/48 Low Head 8.12.48 0 M		x ²			x	6x ² ab			x d
LH5/48 Low Head 8.12.48 50-0 M						6x ² abc		x	x c x j x e
LP1/49 Banks Strait 25.1.49 0 M					x x a	x ³ abc			2x a x f
LP2/49 NE Sister Is 26.1.49 0 M		x				5x ² ab			
LP3/49 Cape Otway 29.1.49 0 M		4x			x	4x ⁴ abn			x ³ e
LP4/49 Westernport E. Entrance 22.2.49 0 M						6x ³ abw			4x a 2x d
LP5/49 Pt. Fairy 2.3.49 0 M					x	3x ² abm			x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>BASS STRAIT.</u>									
IP6/49 N New Year Is. 4.3.49 0 M					2x	3x ² bwc			2x d 2x a x f
IP7/49 W Hunter Is 6.3.49 0 M 1200 hrs					x	3x ⁴ bac		x	x a x d
LH5/49 Low Head 12.3.49 0 M 1900 hrs						7x ³ cba	x c		3x ² d x ² c 4x a
LH5/49 Low Head 12.3.49 50-0 M 1900 hrs		x	x c		x	x ² cab			x a x c x d
IP9/49 W Furneaux 19.3.49 0 M 1600 hrs						2x ⁴ bac			4x d
IP10/49 Kent Group 20.3.49 0 M 0700 hrs					x	5x ³ bac		2x	5x d x f
IP11/49 Wilson's Promontory 22.3.49 0 M 1100 hrs						4x ³ ya			x c 2x d

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch
<u>BASS STRAIT.</u>								
LP12/49 Sea Spray 22.3.49 0 M 1830 hrs		x	6x d			6x ³ bfB		x ² e x ² k 2x d
LP13/49 Lakes Entrance 23.3.49 0 M 1000 hrs						x c		5x ² d 2x ² g
LP14/49 Gabo Is. 26.3.49 0 M 1100 hrs				2x ² a	2x ⁴	7x ⁴ cbh	x ⁴ bcd x ² a	x ² x d
LP15/49 E Sister Is. 2.4.49 0 M 1630 hrs		2x	x a		6x ²	8x ² bac	2x	6x c 2x a x k
LP16/49 Banks Strait 5.4.49 0 M 0700 hrs					14x ³	2x ⁴ bca	3x ³	2x ² a 3x c x d
LP17/49 W Hunter Is. 5.6.49 0 M						4x ⁴ bcC	3x ²	
LP17A/49 W Carnie 10.6.49 0 M			3x ² a	2x b		3x ³ bwi	x ²	x ³ l x e x c x f

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>BASS STRAIT.</u>									
LP18/49 Cape Otway 11.6.49 0 M 1445						5x ³ bwc		2x ²	x ³ ₁ x c
LP19/49 Westernport W Entrance 14.6.49 0 M 1430 hrs			5x ² a	3x b	x	8x ³ abw			x a
LH16/49 Low Head 29.9.49 0 M 1500 hrs		x			x	2x bcw		x	
LH16/49 Low Head 29/9/49 50-0 M 1500 hrs	x	x				6x ³ boi		3x	x a x d x e
Adventure Bay, Bruny Is. 6.3.50 0 M.				15x ² c 6x f 3x b	2x ²	x ⁴ bcj			x ³ a
LH6/50 Low Head 26.4.50 50-0 M 1400 hrs					x	2x cab		x	x c

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>BASS STRAIT</u>									
LH13/50 Low Head 8.8.50 50-0 M 1230 hrs			3x _{aj}			3x ³ bwc		5x	2x d x b
LH13/50 Low Head 8.8.50 0 M 1250 hrs		3x	x a			8x ² bca		x	x a x d
DH-H4/50 Low Head 16.10.50 50-0 M 0940 hrs		x		x b		x ³ baw			x d x a x c
DH-H4/50 Low Head 16.10.50 0 M 0955 hrs		5x			x	2x ⁴ wab			x d x e
DH-H7/50 Low Head 25.11.50 50-0 M 0845 hrs						x ³ bcw		x	
DH-H7/50 Low Head 25.11.50 0 M 0915 hrs	x	x ²				15x ² bwc			8x d 2x a

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
BASS STRAIT									
DH-H4/51 Low Head 5.3.51 0 M	x	x ²	2x a		x	15x ³ bcf		3x	4x d 4x a x c x m
DH-H6/51 Low Head 12.4.51 0 M		x	2x a			2x ⁴ abg	6x ³ bdc x a	2x	x e x c x b x d
DH-H6/51 Low Head 12.4.51 50-0 M			2x a			2x ³ bfg	x ² bd		7x d x b x c
DH-H12/51 Low Head 28.5.51 50-0 M	x		4x a		7x	2x ³ bwa		3x ²	x b x d
DH-H12/51 Low Head 28.5.51 0 M			3x ² a		3x	5x ³ wc		9x ²	x d x m
DH-H15/51 Low Head 10.7.51 50-0 M					6x	3x ³ bac		x ²	x b
DH-H15/51 Low Head 10.7.51 0 M			x ² a		7x ²	3x ⁴ bwa		x ³	x ³ b

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MISCELLANEOUS.</u>									
Simpson's Pt 11.11.45 0 M	x ²	7x ²	2x ² da			6x ⁴ bif	x ³ d 3x ² e		3x ² d
Tinderbox 11.11.45 0 M	x	7x	6x a			5x ⁴ abf	6x d 2x e		2x ² d x i x c
Barnes Bay 11.11.45 0 M		2x ²	x ² d			x ⁴ abf	x ² d 2x e		x ² d
Gordon 12.11.45 0 M		2x ²	5x ³ d			3x ⁴ abf	6x d		4x ² c 2x ² d
Gordon 21.1.48 0 m	6x	7x	x b			5x ³ abf		8x	2x d x c
Eddystone N.W. 26.2.48 0 M		2x	2x a		4x ² a 2x	x ⁴ bgl		2x ³	x f x d x a
LP10/48 Table Cape 6.12.48 0 M		x				x ³ abw			x a x d
LP8/49 Table Cape 10.3.49 0 M	x	x				8x ³ wab			x b x d
LH12/49 S. West Cape 23.5.49 50-0 M			x a		x	2x ² bci		x	x ² l x a x e

PLANKTON

Station	Fl	Fe	Ap	Ac	E	Co	Cl	Ch	
<u>MISCELLANEOUS</u>									
LH12/49 S. West Cape 23.5.49 0 M	x		7x a		x	25x ² bic		3x ²	x ² l x d
LH13/49 Cape Sorrell 1.6.49 0 M				x f x g		3x ³ bic		3x	x ³ l 2x a x b
LH13/49 Cape Sorrell 1.6.49 50-0 M			3x a	x g	x	15x ² bwc		x	x d x a x f x e
LH11/50 S. West Cape 10.7.50 0 M	x	x ²	2x ³ a		7x ²	36x ³ biw		2x ³	x ³ a x ² e x ² g x ² d x m
LH11/50 S. West Cape 10.7.50 50-0 M	x		x ² a	x i x c	x	15x ² bai		7x	8x d x a x c x m
LH12/50 Cape Sorrell 14.7.50 0 M		x			9x ²	5x ³ abc		3x	x ⁴ l 8x a 3x f x b x c
LH12/50 Cape Sorrell 14/7/50 50-0 M					x	2x ³ abw		x	x a x c