

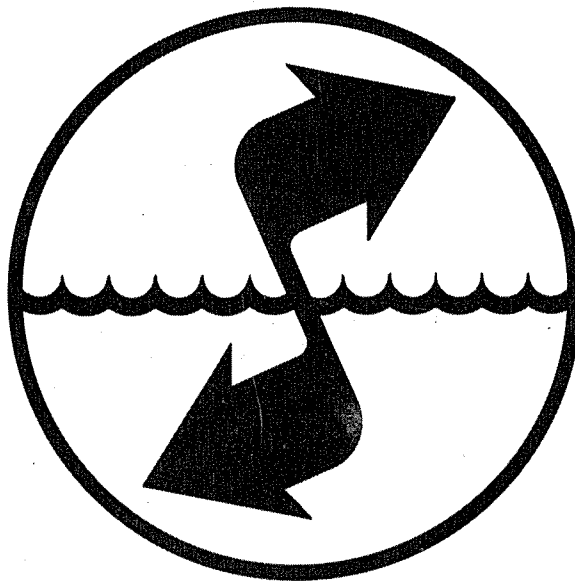
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U.S. PROGRAM IN BIOLOGY
INTERNATIONAL INDIAN OCEAN EXPEDITION

FINAL CRUISE REPORT
ANTON BRUUN CRUISE 6
OCEANOGRAPHIC DATA
BATHYTHERMOGRAPH POSITIONS
STATION LISTS *for* BIOLOGICAL COLLECTIONS

INTERNATIONAL

INDIAN



OCEAN

EXPEDITION

Woods Hole Oceanographic Institution

ATLAS-GAZETTEER COLLECTION

WOODS HOLE OCEANOGRAPHIC INSTITUTION

JULY, 1965

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Cruise 6
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Woods Hole Oceanographic Institution
ATLAS-GAZETTEER COLLECTION

U. S. PROGRAM IN BIOLOGY
INTERNATIONAL INDIAN OCEAN EXPEDITION
Final Report: R/V ANTON BRUUN, Cruise 6

CONTENTS

Introduction.

Cruise track (Figure 1).

Itinerary, Cruise 6 (Table 1).

Key to abbreviations (Table 2).

Summary of activities (Table 3).

Reduced oceanographic data.

Bathythermograph positions.

Biological log - plankton collections.

Biological log - midwater trawl collections.

Biological log - miscellaneous collections.

Methods and techniques (APPENDIX I).

List of participants (APPENDIX II).



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INTRODUCTION

Cruise 6 of the R/V ANTON BRUUN, originating from Bombay on May 15 and terminating at Durban, South Africa on July 16, 1964, was the second of two cruises on which a special effort was made to sample the meso- and bathypelagic fauna of the western Indian Ocean. Collections were made with a 10-ft. Isaacs-Kidd midwater trawl at 61 stations from about 18° N. latitude to 41° S. latitude, along the 65° E. meridian. In addition to the midwater trawl collections, the basic program of hydrography, biological oceanography, and primary production was continued.

Presented in this report are the reduced oceanographic, chemical, and biological data, station lists of plankton, midwater trawl, and miscellaneous biological collections, and bathythermograph positions for Cruise 6. A narrative report of Cruise 6 was issued as News Bulletin No. 8 of the U. S. Program in Biology, IIOE, dated December, 1964.

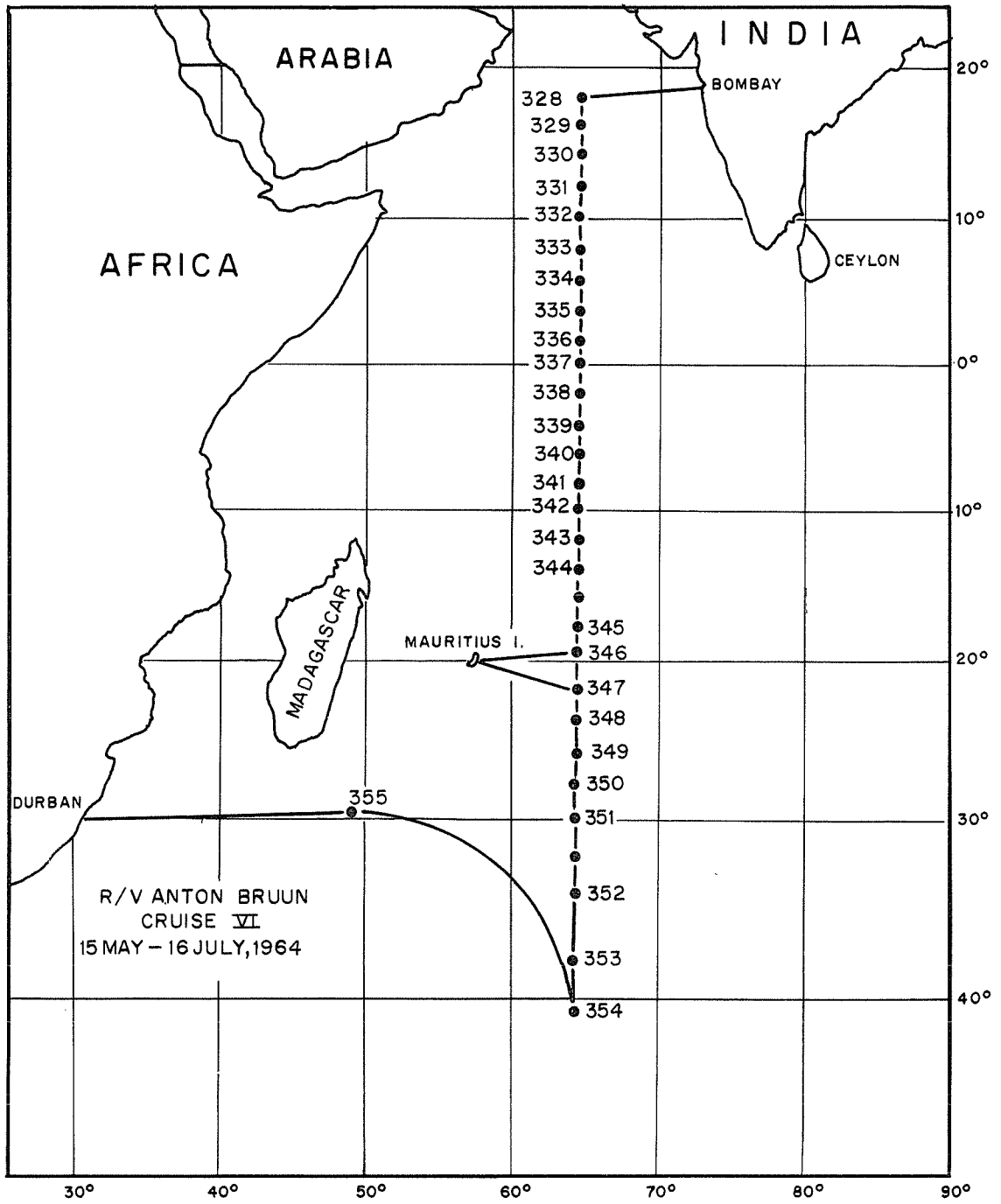


Figure 1 - Cruise track and station positions

Table 1.

Itinerary, Cruise 6

May 15, 1964	Departed Bombay, India
May 17-June 8	Occupied Stations 328 to 346 from 18° N. to 19° S. latitude on 65° E. longitude.
June 11	Arrived Port Louis, Mauritius.
June 21	Departed Port Louis.
June 23-July 4	Occupied Stations 347 to 354 from 22° S. to 41° S. latitude on 65° E. longitude.
July 11	Occupied Station 355.
July 16	Arrived Durban, South Africa - end of Cruise 6.

Table 2.

Key to Abbreviations

A. PLANKTON NETS AND TYPES OF TOWS

IOSN: Indian Ocean Standard Net
113 cm diameter
0.33 mm mesh aperture

75M25: 75 cm diameter
0.064 mm mesh aperture (No. 25 mesh)

NV70: Modified Nansen Vertical Net
70 cm diameter
0.239 mm mesh aperture (No. 6 mesh)

B. OTHER SAMPLING GEAR

DR: Dredge

IKMT: Isaacs Kidd Midwater Trawl

C. INSTITUTIONS & INDIVIDUALS

SOSC: Smithsonian Oceanographic Sorting Center
U. S. National Museum
Washington, D. C.

IOBC: Indian Ocean Biological Center
Ernakulam
Cochin, India

WHOI: Woods Hole Oceanographic Institution
Woods Hole, Massachusetts
(R. H. Backus)

GDG: George D. Grice
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts

COH: Daniel M. Cohen
Bureau of Commercial Fisheries
U. S. Fish and Wildlife Service
Washington, D. C.

DB: Donald Bourne
Museum of Comparative Zoology
Harvard University
Cambridge, Massachusetts

NAF: Basil Nafpaktitis
Museum of Comparative Zoology
Harvard University
Cambridge, Massachusetts

Table 2.

Key to Abbreviations (continued)

HALL: John Hall
% Alpine Geophysical Associates
55 Oak Street
Norwood, New Jersey

HUMM: Harold J. Humm
Department of Botany
Duke University
Durham, North Carolina

Table 3.

Summary of Major Activities, Cruise 6
(Positions for IKMT hauls represent starting positions.)

DATE	STA.	POSITION		IKMT (max. depth sampled)	Hydro. Cast	Prim. Prod.	Plankton Tows		
		Lat.	Long.				NV70	75M25	IOSN
17-V-64	328	18°02'N	65°08'E		x	x	x	x	x
17-V-64	328A	18°03'N	65°05'E	875 meters					
18-V-64	328B	17°46'N	65°02'E	468					
19-V-64	329	15°36'N	64°59'E		x	x		x	x
18-V-64	329A	16°05'N	65°01'E	3915					
19-V-64	329B	15°48'N	65°00'E	564					
20-V-64	330	13°36'N	65°03'E		x	x	x	x	x
19-V-64	330A	14°08'N	65°00'E	630					
20-V-64	330B	13°58'N	65°02'E	2870					
21-V-64	331	11°28'N	65°04'E		x	x		x	x
21-V-64	331A	12°07'N	65°00'E	705					
21-V-64	331B	11°47'N	65°01'E	2500					
22-V-64	332	10°04'N	64°59'E		x	x	x	x	x
22-V-64	332A	09°56'N	64°59'E	3250					
22-V-64	332B	09°36'N	64°56'E	510					
23-V-64	333	07°55'N	64°56'E		x	x		x	x
23-V-64	333A	07°55'N	64°55'E	2850					
23-V-64	333B	07°33'N	64°41'E	940					
24-V-64	334	06°01'N	64°59'E		x	x	x	x	x
24-V-64	334A	06°01'N	64°59'E	700					
24-V-64	334B	05°48'N	64°57'E	2868					
25-V-64	335	03°59'N	65°02'E		x	x		x	x
25-V-64	335A	04°02'N	65°03'E	950					
26-V-64	335B	03°46'N	65°05'E	2575					
26-V-64	336	02°01'N	65°03'E		x	x	x	x	x
26-V-64	336A	02°03'N	65°04'E	817					
27-V-64	336B	01°50'N	65°06'E	1250					
27-V-64	337A	00°03'S	65°00'E	525					
28-V-64	337	00°30'S	65°07'E		x	x		x	x
28-V-64	337B	00°14'S	65°03'E	2250					

DATE	STA.	POSITION		IKMT (max. depth sampled)	Hydro. Cast	Prim. Prod.	Plankton Tows		
		Lat.	Long.				NV70	75M25	IOSN
29-V-64	338	02°38'S	65°01'E		x	x	x	x	x
28-V-64	338A	02°00'S	64°54'E	528 meters					
29-V-64	338B	02°20'S	64°54'E	1650					
30-V-64	339	04°40'S	65°02'E		x	x		x	x
30-V-64	339A	04°01'S	65°00'E	615					
30-V-64	339B	04°14'S	65°02'E	2080					
31-V-64	340	06°00'S	65°10'E		x	x	x	x	x
31-V-64	340A	05°55'S	65°10'E	2250					
31-V-64	340B	05°55'S	64°48'E	746					
1-VI-64	341	08°00'S	64°59'E		x	x		x	x
1-VI-64	341A	08°00'S	65°00'E	3820					
1-VI-64	341B	07°56'S	65°14'E	504					
2-VI-64	342	09°58'S	64°55'E		x	x	x	x	x
2-VI-64	342A	09°57'S	64°55'E	525					
2-VI-64	342B	10°01'S	64°19'E	2250					
4-VI-64	343	12°12'S	65°29'E		x	x		x	x
4-VI-64	343A	12°10'S	64°54'E	798					
4-VI-64	343B	12°11'S	64°11'E	1930					
5-VI-64	344	14°11'S	65°17'E		x	x	x	x	x
5-VI-64	344A	13°57'S	65°05'E	880					
5-VI-64	344B	14°03'S	65°11'E	3080					
6-VI-64	345	16°10'S	64°50'E		x	x			
6-VI-64	345A	15°57'S	64°46'E	2407					
7-VI-64	345C	18°09'S	64°48'E	798					
7-VI-64	345D	18°05'S	65°10'E	2500					
7-VI-64	345E	17°58'S	65°34'E	120					
8-VI-64	346	19°23'S	65°30'E		x	x	x		x
8-VI-64	346A	19°24'S	65°30'E	2600					
23-VI-64	347	22°06'S	64°55'E		x	x	x	x	x
23-VI-64	347A	22°11'S	64°53'E	2500					
24-VI-64	347B	22°34'S	64°55'E	855					

DATE	STA.	POSITION		IKMT (max. depth sampled)	Hydro. Cast	Prim. Prod.	Plankton Tows		
		Lat.	Long.				NV70	75M25	IOSN
24-VI-64	348	24°01'S	65°00'E		x	x		x	x
24-VI-64	348A	24°03'S	65°00'E	3500 meters					
25-VI-64	348B	24°22'S	64°50'E	164					
25-VI-64	348C	24°29'S	64°50'E	1100					
25-VI-64	349	26°06'S	64°58'E		x	x	x	x	x
26-VI-64	349A	26°06'S	64°58'E	780					
26-VI-64	349B	26°24'S	65°02'E	1470					
27-VI-64	350	28°28'S	65°03'E		x	x			x
26-VI-64	350A	27°52'S	64°55'E	680					
27-VI-64	350B	28°05'S	64°58'E	1750					
28-VI-64	351	30°06'S	64°58'E		x	x			x
27-VI-64	351A	29°30'S	64°56'E	592					
28-VI-64	351B	29°45'S	64°58'E	1710					
28-VI-64	351C	31°25'S	65°08'E	540					
29-VI-64	351D	31°45'S	65°08'E	1786					
30-VI-64	352	34°34'S	64°55'E		x	x			
30-VI-64	352A	33°53'S	64°55'E	1428					
30-VI-64	352B	34°14'S	64°58'E	750					
2-VII-64	353	37°58'S	64°59'E		x	x			x
2-VII-64	353A	37°59'S	64°56'E	2394					
2-VII-64	353B	38°15'S	64°45'E	975					
4-VII-64	354	40°57'S	64°27'E		x	x			
4-VII-64	354A	40°48'S	65°03'E	1650					
4-VII-64	354B	40°51'S	64°49'E	885					
11-VII-64	355	29°38'S	49°23'E		x	x	x	x	x
12-VII-64	355A	29°38'S	49°21'E	212					
12-VII-64	355B	29°26'S	49°10'E	1438					
12-VII-64	355C	29°29'S	48°43'E	3410					

