ACC. NOS. 172586 and 176603

From: L. P. Schultz, U. S. National Museum, Washington, D.C.

38,709 fishes, crustaceans, reptiles, echinoderms, mollusca, corals, annelids, worms, coelenterates and algae collected by L. P. Schultz and Capt. Earl S. Herald during Crossroads Project 1946, in the Marshall Islands, Pacific Ocean. Cataloged in Fish Cat. 29.

Field Data Records on This Accession

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Kodachrome slides

80.	
S-46-62	
S-46-210	
S-46-260	1030-1 to 7
S-46-267	1030-9 to 12 1031-1 to 7
S-46-286	1031-9 to 12 1032 1 to 5
S-46-306	1035-6 to 12 1033-1 to 12 1036-1 to 7
S-46-333	?1063 1 to 12 1064?

S-46-483	6259 (9) 6266 1-12
S-46-508	6251 1-12 6261 1-12 6262 (9)
S-46-533	6274 6275 6276
S-1019	6263-1013 6264 1-12
S-1041	6265 1-12 6273 1-12 6277 1-12

5-46-359	1066 - 1812
	1067 - 1846
5-46-361	1067 - 7812
	1068 - 1 812
	1069 - 1 812
5-46-405	6254 - 1812?
	6255 - 1862
5-46-422	6256 ? (1962)
5-46-442	6258 - 1 812
	6260 - 1
	6259 - 1

The following number of species were collected in the Phoenix and Samoan islands by poisoning with Rotenone.
Data taken from my report on the 1939 Phoenix & Samoan Fishes.

Canton Island
April 30 May 12 in lagoon - 47
April 25-28 - Ocean surface ref - 58
May 13 - Wide channel, ref - 40
May 25-26 - Lagoon - 26
May 23-26 - Lagoon coral heads - 70

Swains Is.
May 3-9 - reef - - - 76

Enderbury Is.
May 15-19 - reef - - - - - 81

Fairtula Is.-
June 1 - Faga Pago reef - 56
June 8 - Fagasa reef - 47
Alofau reef - - - 113
Pagai reef - - 53

Rose Is.
June 11-14 - reef - - - - 109
June 12-20 - lagoon - - - 62

Tau Is.
June 27 - Siulagi reef - - 84

Hull Is.
July 8-12 Channel reef - - - 57
" 7-17 Channel reef - - - 63
" 12-15 Ocean reef - - - 68

Estimated No - 50

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-2; S-46-1 to 14, 15 to 23, 29 to 34 Sta. No. _____

State or Country: Bikini Atoll lagoon

County: _____ City: _____

Locality: eastern end of lagoon off Bikini Island out to Big Channel at Entrance

Drainage: _____ Date: March 11-31 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: 1/2 mile Tide: _____

Depth of capture: bottom Depth of water: 100 feet.

Method of capture: Hook and line fishing - Crew of Bowditch

Collected by: U.S.S. Bowditch - V. Brock and J. Marr. D

~~Preservative:~~ L. P. Schultz Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

snapper - Lutjanus
grouper - Ephinephelus
labrid - short body - and broad caudal.
sea bass -
blue lined snapper - L. spilurus
goatfish -
Ulua - Caranx
Kyphosus
Kuhliidae
Mullets
Lagocephalus - S-46-15 - this tag is an error and should have been tied on Diodon hystrix in S-46-15

~~2 ballike sea urchins~~ retagged S-46-7

S-46-12 and 14

Two large tuna taken on March 16 of unknown species

Pig fish (~~Labridae~~) - S-46-11. Lethrinus

Echeneis - S-46-13

over.

This collection represents the specimens brought to me from the eastern end of the lagoon by fishermen fishing off the Bowditch as well as some collected by Brock and Morr, myself and enlisted men. Because of the general nature of the collecting I can not use these specimens in ~~-~~ Unit of effort — fishing.

The monacanthid in life was Brown with a yellow eye, pale yellow fins translucent; Caudal fin with yellow margin, ~~and~~ enclosing black lines arranged obliquely, a submarginal back band, ~~basal~~ 2/3 orange.

tin tagged fish —
S-46 — 16 and 17 — tuna
S-46 - 18 tuna
S-46 - 19 Caranx
S-46 - 20 - Echenais
S-46 - 21 - Elegatis bipinnulatus
S-46 - 22 - grouper
S-46-23 - Lutjanus
S-46-29 - Tylosurus
S-46-30 - Tuna
S-46-31 - tuna
S-46-32 - Tuna
S-46-33 - Tuna?
S-46-34 - Chorinemus? Leatherjacket

fish. 1

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-1 Sta. No. _____

State or Country: North Pacific Ocean

County: _____ City: _____

Locality: Lat. 20°17'45" N.; Long 162°28'45" W

Drainage: _____ Date: March 2, 1946

Water: _____

Vegetation: _____

Time: 1100 AM.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface Depth of water: _____

Method of capture: trolling at 11 knots with lure

Collected by: U.S.S. Bowditch - ~~Rowland Ware~~

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 specimen of Yellowfin tuna - Photographed in color.

Neothunnus macropterus

FISHES--------OPERATION CROSSROADS

CROCK CONTENTS

Crock No. One (1)
Scarids—Parrot Fishes

3 83
9 84
27 261
62 1 with tag lost
63
64

Crock No. Two (2)
Serranids

22 88 186
36 96 207
40 107 208
50 154 229
52 179

Crock No. Three (3)
Serranids

24 276
187 296
220 328
237 330
243 390

Crock No. Four (4)
Snappers—Haemulids

8 170 234
23 171
25 172
28 227
157 228

Crock No. Five (5)
Tunas—Mackerels—Bonitos

1 32 101
14 33
16 76
17 82
18 100

Crock No. Six (6)
Carangids

19 77 87 205
21 79 90 244
30 80 102 461
31 81 117
70 86 161

Crock No. Seven (7)
Carangids

54 239 387
71 240 388
162 283
199 285
206 385
233 386

Crock No. Eight (8)
Fistularids

92
264
255
349 (67 juveniles)

Crock No. Nine (9)
Sharks

76

Crock No. Ten (10)
Sharksuckers

13 178
20 185
118 189
160 190
177 191

458

Crock No. Eleven (11)
Needlefish—Barracudas—Puffers

29 396 Barracuda
47 396 "
173 13 Puffer
230 45 Porcupine fish
256 67 " "
257 329 " "

Crock No. Twelve (12)
Miscellaneous

4 Zebrasoma veliferum
308 Monacanthus
113 Acanthurus nigricans?
155 " " ?
176 Trigger Fish
211 " "

~~PARTIAL CONTENTS:~~

~~[illegible]~~

~~12 Tuna~~

~~76 Dolphin~~

~~43 Kalabon Runner (Elegatis bipinnulatus)~~

~~74 Dolphin~~

~~N60 White-tip shark (6 feet in 2 sections)~~

~~910 Barracuda (5 feet in 2 sections)~~

~~S-46-477 Robalo, Snook & Tarpon~~

~~S-46-460 Bait-Eels~~

Big Tuna

~~Marlin Navy SLO~~

~~Sling Navy~~ S-46-421

Big Tuna

Tunas 12

Acks Two

Barracuda

~~54~~ 568

~~HA73~~ — 19 2 rec.

277

396

Cocks 12

~~15 Barracuda~~

329 ~~Tuna~~ Yellowfin tuna

45 " "

67 " "

~~75 Tuna~~

Cocks 13

Scards

463

465

409

486

487

488

~~464~~

466

467

Index continued

S-46-233 & 236 see S-46-222.
S-46-237 - also 243, 244 June 27.
S-46-238 - June 28
S-46-239, 240 June 28
S-46-241 - June 29
S-46-242 June 28
S-46-243-244 see S-46-237.

S-46-399-400 see S-46-169
S-46-401 - see S-46-8
S-46-402 - a station number added upon return.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-220 Sta. No. _____

State or Country: Rongelap atoll

County: Mellu dstand City: _____

Locality: Lagoon reef nos Cuter & lagoon shore

Drainage: _____ Date: June 19, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Index to Serial numbers.

S-46-99 - April 19 Bikini
S-46-100, 101 - see S-46-93
S-46-102, 103 - see S-46-72
S-46-104, 105, 106 - see S-46-96
S-46-107 - see S-46-98.
S-46-108 - April 23
S-46-109 - April 1946
S-46-110 - April 17
S-46-111 - April 23
S-46 112 - " 24
S-46-113 " 24
S-46-114 " 25
S-46-115 " 24, 25
S-46-116 " 26
S-46-117 see S-46-72
S-46-118 " S-46-72
S-46-119 April 29
S-46-120 May 1
S-46-121 May 4
S-46-122 May 5
S-46-123 May 7, see S-46-72
S-46-124 May 8
S-46-125 - May 10
S-46-126 - May 11
S-46-127 - May 13-14
S-46-128-152 - May 14
S-46-153 - May 15.

S-46-154-157, May 20, Envelob.
S-46-158 May 19
S-46-159 May 20
S-46-160-173; May 20 see S-46-154,
176;
S-46-174 May 21 ~~S-46-15~~
S-46-175 May 22
S-46-176 May 23 - see S-46-154
S-46-177-179 May 23, 25 see S-46-154
S-46-180 May 26, also 185; 190-194 May 26-30
S-46-181 May 25
S-46-182 May 23
S-46-183 May 24
S-46-184 May 25
S-46-185 May 26-30
S-46-186 May 28
S-46-187 - May 29
S-46-188 - May 29
S-46-189 - May 30

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

acc. 172586 for 1946

acc. 176603 for 1947

Index to serial numbers.

S-46-1 - March 2, 1946
S-46-2 - March 11; S-46-11 to 14; 15 to 23; 29 to 34
S-46-3 to 6, March 12
S-46-7 March 11
S-46-8, March ~~5~~ 16; - S-46-24 to 28
S-46-9, March 19; S-46-35 to 40
S-46-10; March 20.
S-46-11 to 14 - see S-46-2
S-46-15 to 23 - " " " " metal tag S-46-15 belongs with S-46-2
S-46-15, March 22; S-46-45
S-46-24 to 28 see S-46-8
S-46-29 to 34 see S-46-2
S-46-35 to 40 see S-46-9
S-46-41 March 25
S-46-42 March 26
S-46-43 March 28
S-46-44 March 29
S-46-45 - see S-46-15
S-46-46 March 30.
S-46-47 April 1
S-46-48 April 2 also S-46-67 to 69
S-46-49 " 3
S-46-50, 70, 71, " 3
S-46-51 " 4
S-46-52, 88, 89, 92 " 6
S-46-53, " 6-7; S-46-57 to 60
S-46-54 " 6; S-46-61 ← 54 to 56,
S-46-62 to 66 " 7
S-46-67 to 69 - see S-46-48
S-46-70, 71 - see S-46-50
S-46-72-87 - April 1 to 22; also 102, 103, 117, 123
S-46-88, 89, 92 - see S-46-52
S-46-90 to 91 - April 6
S-46-92 - see S-46-88
S-46-93 - ~~also~~ 100, 101 - April 13.
S-46-94 - April 15
S-46-95 - April 15
S-46-96 - April 16, also # 104, 105, 106
S-46-97 - " 17
S-46-98 - " 18, also #107

Estimated no. 20

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-3 to 6 Sta. No. _____

State or Country: Marshall Islands

County: Bikini Atoll City: _____

Locality: Enyu island lagoon

_____

Drainage: _____ Date: March 12, 1946

Water: _____

Vegetation: _____

_____ Time: 2 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: to 30 feet Depth of water: _____

Method of capture: Diving and spearing

Collected by: Vernon Brock U.S.S. Bowditch

Preservative: _____ Temp: 81 to 82° Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Tagged fish

S-46-3 - Bluegreen parrot fish - Scarus - photo
S-46-4 - Zebrasoma veliferum - surgeon fish
Pomacanthus imperator -S-46-5 - ~~Pygoplites diacanthus~~ - photo
S-46-6 - sea cucumber out of whose intestine a pearl fish was obtained and this is to be wrapped separately

Untagged were one each of Balistes aculeatus;
Pomacanthus imperator Pygoplites diacanthus; a serranid with two oblique, white, with dark edges, bars across caudal fin.

2 specimens

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-7 Sta. No. _____

State or Country: Marshall Is.

County: Bikini atoll City: _____

Locality: North end of lagoon

Drainage: _____ Date: March 11, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 15 fut Depth of water: _____

Method of capture: Diving - 15 fut

Collected by: U.S.S. Bowditch - V. Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Globular echinoderm - dark reddish brown color with olive patches - tagged with S-46-7, another not tagged but same & be wrapped with tagged one.
Note - these both were wrapped seperately.

849 specimens preserved
17 " discarded
866

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

For description of reef see note book, 28;40at;

Acc. No. _____ Tag No. S-46-8,247 to 248 Sta. No. _____

State or Country: Marshall dslands

County: Enyu dsland City: _____

Locality: at reef at entrance; just inside lagoon.

Drainage: _____ Date: March 15 16 1946

~~Water:~~ 300 feet of rocky crevived reef 30 feet
~~Vegetation:~~ Was poisoned with 50 lb. cubi root.
25 feet out and 15 feet down. Time: 7:15 & 12:00 hours.

Bottom: _____

Shore: _____ Current: slight

Distance from shore: on reef edge Tide: + .9 at 8 A.M.

Depth of capture: to 20 feet Depth of water: _____

Method of capture: Cubi root 5.2 rotenone 45 lb. used

Collected by: U.S.S. Bowditch - Schultz, Brock & Morr and

~~Preservative:~~ 6 other men. Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: 32 gallons of fish.

Following discarded: Standard lengths mm.

Stenochaetus strigosus -

135-1	150-11
140-1	155-1111
	160-11
	170-11
	175
	180-1

Scarus - plain dark brown to blackish

180-1	185-1
115-1	140-1

a parrot fish and goat fish were packed without tags.
They belong with this collection.

2 or 3 sea cucumbers
1 - octopus of fair size and a few very small ones
2 - slate pencil sea urchins
Crabs - a few specimens
Spiny lobsters seen on reef but none taken.
1 - tiny gekko (lizard)
Species of fish too numerous to list now - may have time when packing them.

Following tin tagged fish
S-46-24 - Xyrichtys [illegible] 410 mm.
S-46-25 - Lethrinus [illegible] with orange fins, a few scales black blotched - 355 mm.
S-46-26 - Lutjanus niger blackish - 410 mm.
S-46-27 - Scarus - plain bluegreen 440 mm
S-46-28 - Lutjanus gibbus 325 mm.

Following fish measured when wrapped for shipping, also counted as follows.

Acanthuridae

221-230	-1
211-220	
201-210	
191-200	-1
181-190	-1
171-180	-IIII
161-170	-IIII
151-160	-++++ ++++
141 150	-++++ ++++ II
131-140	-++++ +++ I
121-130	-III
111-120	-I
101-110	-II
91-100	-+++ III
81-90	-+++
71-80	-+++ II
61-70	-IIII
51-60	
41-50	-III
31-40	-II
21-30	
11-20	

Holocentrus	Myripristis	Holotrachys
231-240 -1		
230		
220 -III		
210 -II		
200 -II		
190 -II	III	
180 -I	IIII	
170 -I	++++ IIII	
160	+++	
150 -III	++++ +++/++++ ++++	
140 -II	+++	
130 -II	IIII	
120 -III	IIII	
110 -III	II	III
100 -+++ +++ +++	II	II
90 -+++ (+++ IIIII	I	I
80 -I	I	
70 -I		
60 -I		
50 -I	I	
40		
30		
20		

Continued S-46-8

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-8 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: March 16, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Description of reef —
The area poisoned consisted of a rock ledge deeply crevived and eroded with rich growth of Halimeda (algae) These crevices varied from a few inches to a foot or two in width, with big waves surging up and down and in and out washing the poison down to the bottom of this ledge to a depth of 15 feet. The poison was effective for 300 feet and out from the ledge 75 feet. It drifted slowly seaward and was soon diluted to in effectiveness. The

majority of the fishes settled to the bottom, but some floated. Vernon Brock, with diving mask, picked up a small percentage from the bottom. In all there were 9 men along the reef and in the water collecting the fish. See my note books for other details.

Following fish measured when waffel for shipment.

Apogonidae

141-150-1
140
130
120-1
110-11
100-111
90-𝍸 𝍸 𝍸 𝍸 111
80-𝍸 𝍸 11
70-𝍸 𝍸 1111
60-1
41-50-𝍸 1
40-11
30-𝍸 𝍸 11
11-20-1

Serranidae

301-310-11
241-250-1
161-170-11
160-11
150-1
140-11
130-1111
120
110-𝍸
100-1111
90-11
80-𝍸
61-70-𝍸 1
60-1
50-1
40-11

Scaridae

331-330-1
221-230-1
201-210-1
200-1
190-11
180-𝍸 1111
170-𝍸
160
150-1111
140-1111
130-𝍸
120-11
110-11
91-100

Mugilidae

121-130-1 see below
120
101-110-1

Pempheridae

171-180-1

Balistidae

101-110-1

Gymnothorax

12 specimens

Ophichthyidae

2 specimens

Mullidae

271-280-1
181-190-1
180
170-1
160-1
150-1111
140-𝍸 𝍸
130-1111
120-11
110
91-100
81-90-1

Lethrinidae

171-180-1111
161-170-11
160
150
140
130
120
110-𝍸
91-100-1

Labridae

161-170-1
160
150
140
130-1
120-1
110-111
100
90-11
80-1111
70-𝍸 1
51-60-𝍸 𝍸 11
50-111
40-1

Chaetodontidae

161-170-1
101-110-1
91-100-1

Pomacentridae

abudefduf-
81-90-1
80-111
61-70-111

Lutjanus

340-1

Mugilidae

41-50-𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 1111
31-40-𝍸 𝍸 𝍸 𝍸 111

Kenrokamplidae

171-180-1

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-8 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following fish measured & counted when dropped for shipment.

Pomacanthidae
91-100-1
90
80-////
70
60-///
50-//
31-40-//
21-30-//

Synodontidae
91-100-1
90-1
80-1

Chaetodontidae
91-100-1
90-//
80-//

Kuhlia
61-70-1
60
50-////1
40-////11
30-///11
20-//

Scalebar blennies
121-130-1
120-1
110-///
100-////
90-////1
80-///111
70-///
60-///////1
50-///////111
40-///////
30-///////111
11-20-//

Balistidae
101-110-1

Monacanthidae
61-70-1
60
41-50-1

Tetraodontidae
51-60-1
41-50-////

Dinematichthys
81-90-//
80-///
70-
60-////1
50-/////////111
40-/////////////11
21-30-///

Cirrhitidae
71-80-1
70
60-1
50-1

Miscellaneous fishes counted, Number of specimens.

Scaly blennies - 27

Miscellaneous species of several kinds } - 69

Apodes - 22

Ophichthyidae - 3

Moringuidae - 5

46

Tentative Index of Relative Abund. = $\frac{\text{Total fish picked up}}{\text{Area in sq. yds x man hours.}}$

actual # of men picking up fish at one time was 5 over period of 4 hrs.

$\frac{856}{1000 \times [illegible]} = .046$

(25 x 100 yds) ([illegible] 4 hrs.)

Index of Abundance = $\frac{\text{\# fish}}{\text{Area in sq. yds}} = \frac{856}{[illegible]} = [illegible]$

$\frac{856}{100 \text{ yds} \times 16} = \frac{856}{1800} = .481$

601 specimens preserved in this collection
544 " discarded in field.
1145

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-9j 35 to 40 Sta. No. _____

State or Country: Marshall Islands

County: Ebon-Erik City: _____

Locality: Enibrikku island at western end on ocean side - area 100ft by ~~250~~ 300 ft

Drainage: _____ Date: March 19, 1946

~~Water~~: 30 pounds of cubé root used.

Vegetation: Algae, corals, shells, in abundance

Time: 10:30 & 1:30 P.M.

Bottom: Also sand among corals.

Shore: reef Current: _____

Distance from shore: 300 feet Tide: +.9 low

Depth of capture: ~~1~~ to 4 feet Depth of water: _____

Method of capture: Poisoned about 300' strip of reef*

Collected by: Schultz, Brock and party totaling 5 men for 3 hours

~~Preservative~~: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

We went through the collection March 21 and counted out 134 species of fishes. We preserved 16 gallons of fishes
* with 30 pounds of cubé root.
The following were discarded

Abudefduf - black with slightly pale caudal fin, some with bright blue specks, eye yellow
65 - 85 mm - 269 specimens

Epinephelus with large brown hexagonal blotches.

71 - 80 mm	3	61 - 70 mm	7
81 - 90	7	111 - 120	6
91 - 100	13	121 - 130	7
101 - 110	3	131 - 140	3

Surgeon fish with 2 dark spots, blue on back at base of dorsal & anal fin posteriorly at peduncle, young with tiny yellow specks.

61 - 70 mm	5	81 - 90	7
71 - 80	11	91 - 100	7

Discarded (continued)

Scarus - parrot fish, dark colored most of scales with brown blotch, underside of head reddish around lips.

71-80 mm	1	121-130	33
81-90	2	131-140	10
91-100	7	141-150	26
101-110	19	151-160	5
111-120	31		

Scarus - parrot fish, green blotches on scales, green streaks from lips & eye, third 3 posteriorly, two yellow blotches below dorsal on back.

201-210 mm	2
191-200	3
171-180	2

Scarus with green blotches on scales

160-170 - 3

Scarus - scales with red or brown blotches.

121-130	1	181-190	5
160-170	2	191-200	3
171-180	3		

Mullidae - goatfish with yellow streaks midside

131-140	1	161-170	—
141-150	7	171-180	2
151-160	2	181-190	1

Mullidae - goatfish with 2 or 3 dark bars posteriorly

91-100	2	131-140	
101-110	3	141-150	
111-120	14	151-160	
121-130	4	161-170	1
		171-180	1

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-9 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: March 19, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Description of reef.

The reef on the western tip of Enniskeen dsland, ocean side is made up of an abundant growth of coral heads, branching types and solid ones; these are so close together that it is difficult to walk between them. The bottom is sandy in places, but otherwise rocky with algal growths. The shore is composed of coral ~~slopes~~ slabs partially eroded with a few very superficial tide pools of very small size. At low tide this outer reef was covered with 1 foot & 4 feet of water which flowed westward and

and out to sea in an oblique manner. We selected a favorable stip about 300 feet wide and poisoned this with 30 lb. of cubé root with excellent results. The wind blew so hard the only effective way to find the dead fish was by use of face masks. 7 men helped pick up the specimens.

Following measured and counted when wrapped.

Chaetodontidae
111-120-1
110-111
100-//// //// ////
90-//// //// //// ////
80-//// ///
70-1
60-1
41-50-1

Pomacentridae
111-120-1
110-
100-
90-
80-//// //// //// ////
70-//// //// //// //// //// ///
60-//// //// //// 1
50-//// //// ////
40-//// //// ///
21-30-1

Labridae
181-190-1
180-1
170-11
160-1
150
140-1
130-////
120-1
110-111
100-////
90-//// //// ///
80-//// //// ////
70-//// //// //// //// //// //
60-//// //// ///
50-//// ////
31-40-1

Monacanthidae
71-80-11
61-70-///
60-

Mullidae
191-200-1
190-111
180-1
170-
160-
150-
140-////
130-11
120-11
110-////
100-///
81-90-1

Synodontidae
191-200-1
190
180
1
140-1
130-11
120-111
110-11
100
90-111
80-11
60-1
31-40-1

Paralabrax clathratus

Serranidae
141-150-1
140-1
130-1
120-11
110-111
100-//// ///
90-////
80-11
70-1
60-1
50
40-///

Acanthuridae
131-140-11
130-
120-111
110-
100-//// ///
90-//// //
80-//// ////
70-11
60-1
50-
40-1
21-30-11

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-9 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following fish measured & counted when weighed

Scaridae
211-220-1
210-11
200-11
190-1
180-1
170-1
160-1
150-1
140-111
130-##### 111
120-1111
110-##### ####
100-1

Holocentrus
141-150-1
140-
130-11
120-1111
110-1
100-1
90-1
80-1
70

Holotrachys
71-80-1
61-70—
51-60-1

Kuhlia
101-110-1
100-1
1
40-1
2130-1

Balistidae
111-120-1

Miscellaneous specimens
Counted but not measured

afodes - 66
Mugilidae - 5
Ophichthyidae - 4
Fistularia - 2
Aulostomas - 3
Hemiramphidae - 2
Tetraodon — 5
Miscellaneous species - 65
Specimens.

ORI

Scaleless blennies

101-110-1
100-11
90-1
80-11
70-|||| 1
60-1111
50-|||| 1
40-111
30-
20-1

Apogonidae

91-100-1
90-11
80 —
70-11
60-1
50
40
30-|||| 11
11-20-1

Tentative index of relative abundance = $\frac{\#\text{ fish}}{\text{area} \times \text{Man yds}}$

$\frac{1145}{33 \times 100 \times 1.5} = .023$

Index of Abundance = $\frac{\#\text{ fish}}{\text{area in sq yds}}$

$\frac{1145}{3300} = .347$

tagged fishes

5-46-9 - bluegreen parrot fish - 345 mm
5-46-35 - parrot fish - 285 mm
5-46-36 - Serranid - blue spotted, white edge on soft dorsal and caudal - 340 mm.
*5-46-37 - Mugilid - crenulate lips - 295 mm.
5-46-38 - Pomacanthus imperator - 250 mm.
5-46-39 - Flying fish picked up on beach
5-46-40 - Serranid - 290 mm.

362 fishes preserved –
454 fishes discarded.
816

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-10 Sta. No. _____

State or Country: Marshall Islands

County: Bikini Atoll (Eniu Id) City: _____

Locality: Eniirikku island; a part of the lagoon cut off at low tide amounting to about 1/2 acre.

~~Drainage~~: _____ Date: March 20, 1946

Water: _____

Vegetation: none

Time: 10:30 - 1 P.M.

Bottom: Sand of soft nature, with gravel of porus nature, no corals. ~~Shore~~: _____ Current: none

Distance from shore: _____ Tide: low + .10

Depth of capture: to 2 or 3 feet Depth of water: _____

Method of capture: Poison, 30 pounds used.

Collected by: Schultz, Brocks, and Party.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

The following specimens were discarded after measuring and counting. These species same as others preserved.

Siganus 210 - 270 mm – 17

Mullidae – goatfish with yellow lateral strials.
mm.
80 - 100 - 90
101 - 130 - 60
131 - 150 - 87
151 - 220 - 54

Chelon – mullet with pinkish lower jaw at death

140 - 170 mm. - 19
171 - 200 - 25
81 - 90 - 7
91 - 100 - 17
101 - 110 - 5
111 - 120 - 4
121 - 130 - 3

Pomacentrid – bluegrey plain
60 - 90 mm - 27

over

Discarded (Continued)

Abudefduf with 5 vertical dark stripes or bars with greyish-yellow interspaces.

80 mm - 1
125 mm. 1
145 mm. - 1

Chaetodon with hexagonal brown blotches.

51-60 mm	2	101-110 mm	2
61-70 —	3	111-120 —	2
71-80 —	1	121-130 —	2
81-90 —	2	131-140 —	1
91-100 —	—	141-150 —	—
		161-170 —	1

Lutjanus - with the black blotch on lateral line under rear of spiny dorsal fin.

71-80 mm	1	131-140	1
81-90 —	3	141-150	1
91-100 —	1	151-160	1
101-110 —	1	161-170	1
111-120 —	3	171-180	4

Tentative index of Relative abundance = $\frac{816}{2420} \times 3 \times 2\frac{1}{2} \times .045 = .336$

Index of Abundance = $\frac{\text{total fish}}{\text{area in sq. yds}} = \frac{816}{2420}$

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-10 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: March 20, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following fishes measured and counted when wrapped for shipment

Serranids
211-220-1
210
200
190
187
170-1
160
150
140-1
1
80-11
70
60-1
50
40-1

Lutjanus
171-180-1
170-1
160
150
140-1
130
120
110-1
100
90
80-1
70-1
60-1

Pomacentrids
131-140-1
130-11
120
110
100
90-|||| |||
80-|||| 1
70-|||| 11
60-|||| 1
50-11
40-11

Labridae
101-110-11
100-|||| ||||
90-111
80-111
70-|||| 11
60-|||| 1
50-||||
40-|||| 1
30-11

Miscellaneous
(6)
Apodes (10)
Ophichthyidae - 174

Carangidae
91-100-1
81-90-|||| |||| 11

Aplogonidae
71-80-||||
61-70-111
51-60-1

Mugilidae
161-170-IIII
160-
150-I
140-II
130-I
120-II
110-II
100-IIII
90-++++
80-III
70-
60-
50-IIII
40-III
30-I

Mullidae
161-170-I
160-I
150
140-I
130-IIII

81-90-++++
71-80-++++ III

Holocentrus
141-150-II

Lethrinidae
151-160-I
131-140-I

Sigamus
221-230-II
211-220-II
210-I
200-I

Teuthidae
141-150-I
140 —
130-I
111-120-I
61-70-I

504 specimens fish preserved.
54 specimens discarded
558

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-15; S-46-45 Sta. No. _____

State or Country: Marshall Islands

~~County:~~ Bikini Atoll City: _____

Locality: Reef on outer side of Bikini among scattered coral heads.

Drainage: _____ Date: March 22, 1946

Water: _____

Vegetation: _____

Time: 12 & 3 P.M.

Bottom: _____

Shore: _____ Current: moderate

Distance from shore: 1/3 mile Tide: +1.2 low

Depth of capture: ± 4 fm Depth of water: _____

Method of capture: 30 lb poison on reef

Collected by: Schultz, Brock and party - 3 men picking up, 1 man / hr ledger.

Preservative: up for 2 hrs. Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

We poisoned a ship 50 & av. 150 feet wide for 1500 ~~of reef~~, the cloud of cube drifting slowly and dispersing gradually. 8 gallons preserved. Following discarded specimens were counted and measured.

Halfbeaks - tip of lower jaw reddish - same as others preserved. only small portion of school picked up & measured.

231-240 - 2
241-250 - 4
251-260 - 7
261-270 - 8
271-280 - 2

abudefduf - black with yellow eye.

41-50 - 4
51-60 - —
61-70 - 4
71-80 - 4

over

Acanthurus with dark blue spot near base anal and dorsal fins

41-50 - 1 | 61-70 - 2
51-60 - — | 71-80 - 4

Squirrel fish with several red stripes

81-90 - 3
91-100 - 2

Ephinephelus - brown blotches of hexagonal shape.

91-100 - 3
101-110 - 2
141-151 - 2

Following specimens measured and counted when wrapped for shipment. S-46-45 - Diodon Hystrix - 360 mm.

Pennsylvania

291-300-1
290-—
280-11
270-1111
260-1111
250-1111
240-1111
230-1
220-1

Chaetodontidae

151-160-11
150-11
140-1
1
110-111
1
90-1
70-1
60-1

Myripristis

141-150-1

Miscellaneous

(76)

Ephinephelus

171-180-1
170-1
160-
150-111
140-1111
130-1
120-1
110-1
100-111
90-111
80-1111
70-1111
60-1111 1111
50-1111 111
41
31-40-

Holocentrus

201-210-1
111-120-11
110-111
100-11111 1
90-11111
80-111
70-1111
60-1111
50

Pomacentridae

71-80-1111 1111 1111
70-1111 1111 1111 1111 1111 1111
60-1111 1111 1111 1111
50-1111 1111
40-1111 1111
30-1

Apogonidae

91-100-11
90-1111 111
80-1111
70-1111 111
60-1111 1111 1
50-1111 1111 1111
40-1111
30-1111 1111 1111 11

Pomacanthidae

61-70-1
60-111
50-11

Continued next page

continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-15 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: March 22, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Description of reef.

The reef on outer side of Bikini ~~atoll~~ island is a very broad one, in places nearly a mile wide, perhaps 2/3 mile, and level and little pitted with depressions. In places numerous thin coral slabs are strewn about the reef. The place that we poisoned was covered with about 2 to 4 feet of water with scattered coral heads rising 2 to 3 feet in the water. These corals were separated by channels of water 10 to 50 feet wide, and the bottom of this area covered with a thin layer of sand (coral). The coral heads were seldom more than

2 x 4 feet, a few 10 feet in diameter, but not very luxuriant. The wind blew so hard that it was necessary to pick up the fish from the bottom by means of a face mask. The area poisoned consisted of a cloud of cube root (30 lb) spread at the start 50 feet wide - drifting for a 1/3 mile and dispersing & a width of 400 feet, effective perhaps even further but the tide came in making working conditions not practical.

Following measured and counted when waffled.

Acanthuridae

191 - 200 - 1
1
120 - 11
110 -
100 -
90 - 1
80 - |||| |||
70 - |||| |||
60 - ||||
50 - |||| |||| 1
40 - 1

Balistidae

151 - 160 - 1
141 - 150 - 1

Lobridae

141 - 150 - 1
1
110 - 11
100 - 1
90 - 11
80 - |||| 11
70 - |||
60 - |||| 1
50 - |||| |||| |||| ||||
40 - |||| |||
21 - 30 - |||

aprodes about 20?

Parapercis

121 - 130 - 1
120 - 1
110 - ||||
100 - ||||
90 - 11
80 -
70 - 1

Scarus

111 - 220 - 1
120 - 1
110 - 11
100 - 1
90 —
80 - 1
70 - 1
60 - 1
50 - 1

Index of relative abundance = $\frac{558}{500 \times 50}$ = $\frac{558}{25000}$ = .0223

avg sq. yds.

2 specimens
INVERTEBRATES

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-41 Sta. No. _____

State or Country: Marshall Islands

County: Bikini Lagoon City: _____

Locality: Eastern end ~~of~~

Drainage: _____ Date: March 25, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 30 feet Depth of water: _____

Method of capture: Diving - later dissection

Collected by: V. Brock ~~and L.P.~~

Preservative: 70 % Alcohol. Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

There was brought to the surface by Vernon Brock a large Tridacha weighing at least 250 or 300 lbs. While it was on deck I found a small crab in the mantle folds and V. Brock found the shrimp on the deck after dissecting out the flesh. Both were preserved in 70% alcohol.

~~Estimated 100 to 200~~ 93 fish preserved
2 discarded

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-42 Sta. No. _____

State or Country: Marshall Is.

County: Bikini atoll City: _____

Locality: Coral heads in eastern end of lagoon at depth 20 & 25 feet

Drainage: _____ Date: March 26, 1946

Water: _____

Vegetation: _____

_____ Time: AM & P.M.

Bottom: Coral head in deep water

Shore: _____ Current: slight

Distance from shore: 1 mile Tide: _____

Depth of capture: ~~to~~ 30 feet at most Depth of water: _____

Method of capture: Diving by Vernon Brocks

Collected by: Vernon Brocks and L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Discarded one bluegreen parrot fish 200 mm.
Holocentrues - 160 mm.
S-46-42 — brown blotched grouper with bars dorsally
Other specimens bear paper labes with S-46-42.

(1)

3 specimens fish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-43 Sta. No. _____

State or Country: Bikini Atoll

County: Anchorage of Bowditch ~~City~~: about 1 mile

Locality: off Bikini island

Drainage: _____ Date: March 28, 1946

Water: _____

Vegetation: _____

Time: 10-11 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface Depth of water: _____

Method of capture: Light at gangplank of ship - dip net

Collected by: Schultz and Brock

Preservative: alcohol Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

3 fish + 100 invertebrates?

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-44 Sta. No. _____

State or Country: Bikini Atoll

County: _____ City: _____

Locality: Eastern end of lagoon; Dredging

Drainage: _____ Date: March 29, 1946

Water: _____

Vegetation: _____

Time: 1000 & 1430

Bottom: Coral, Algae, Ihorse, etc

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 180 & 200 feet Depth of water: _____

Method of capture: Dredge - 3 hauls totaling 20 minutes

Collected by: Schultz as 99513

Preservative: Alcohol and formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The dredge hauls are marked on my chart and lie in deep water in eastern end of lagoon.

The dredge used was made on the U.S.S. Bowditch and nothing and canvass skirt sewed on by my assistants. It is 4 feet long.

We made 3 hauls 1. 5 minutes
2. 5 "
3. 10 " - this loaded the dredge too full and crushed some of the material badly.

~~Estimated 25 fish~~ + 300 shrimp estimate
64 fish preserved +

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-~~45~~ 46 Sta. No. _____

State or Country: Bibini atoll

County: _____ City: _____

Locality: Bowditch anchorage off Bibini dsland.

Drainage: _____ Date: March 30, 1946

Water: _____

Vegetation: _____

_____ Time: ~~9:00~~ 11:00 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface Depth of water: 100 feet

Method of capture: 100 w light on surface 2 dip nets.

Collected by: Schultz and Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The marine light 100 W. within a few moments attracted a myriad of Crustaceans and other organisms. They teemed around the light. Fish darted in and out. and we caught numerous specimens. On the end of dim light 50-100 feet away, larger fish lurked but never came into range of our dip nets. Saphirina, that brilliantly glowing little animal shone now and then with great radiance. One swoop of 3 feet with my dip net collected a pint of material.

over

The small Mullid was rose colored dorsally with orange barbels; soft dorsal, anal & caudal fins pale yellow, pelvics dark wine red, pectorals plane pale: sides silvery and on sides of head silvery up & the orbit.

These little goat fishes were very active jumping when the net came near them.

The largest goat fish had a pale yellow streak below the side.

The waves caused numerous bubbles which interferred with seeing the fish well.

340 fishes preserved
75 fishes discarded
415

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-47 Sta. No. _____

State or Country: Bikini Atoll

County: _____ (Code - Romuk) City: _____

Locality: Romurikku Island: Coral heads on Ocean side.

Drainage: _____ Date: April 1, 1946

Water: _____

Vegetation: Coral heads widely scattered

_____ Time: 9AM & 1 P.M.

Bottom: _____

Shore: _____ Current: slow

Distance from shore: 500 & 1000 feet Tide: _____

Depth of capture: & 4 feet Depth of water: _____

Method of capture: 20lb. cube root

Collected by: L. P. Schultz and party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The area fished was 50 feet at start widening & 300 feet at a distance of about 1000 feet. 4 men picked up fish. One with a face mask.

The reef fished on Romurikku Island on the ocean side at low water was similar & that on outer reef of Bikini, but there were only about 1/3 the number of coral heads in a narrow belt 200 & 300 feet wide near the shore for a distance of 1500 feet. We poisoned a strip thru these 50 feet at the start, and as it drifted slowly it widened & 300 feet, when it lost its effectiveness at 1000 feet. The water around these coral heads was from 2 & 5 feet deep. About 20 lb of Cube root was used. ones.

ett tools an hour for the poisons to travel across the group of coral heads, then it dispersed seaward, loosing its effectiveness.

The living coral heads were not very luxuriant most of the solid and less branching types. The bottom was of soft sand, everywhere, between the corals, except near shore where beach rocks formed the edge of the island;

A bottle was picked up on the beach that had drifted in during the early morning as the tide was going out. It was covered with ~~goose neck &c.~~ fish eggs and a few goose neck barnacles near the cork end. The bottle and eggs were preserved; mob. flying fish.

Color sketches of 5 fishes were made in the "Fish Notes" notebooks.

5-46-47 tin tag was tied to a large Tylosurus

$$\text{Index of abundance} = \frac{\text{number fish}}{\text{area in sq. yds.}} =$$

$$\frac{415}{16,650} = .025$$

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-48, 67 & 69 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following fishes were measured, counted then wrapped for shipment.
S-46-67 - Diodon hystrix - 370 mm.
S-46-68 - groupers - 260 mm } bronze spots everywhere
S-46-69 - groupers 230 mm } well separated.

Holocentridae
191-200-1
161-170-11
160-1
150-111
140-++++ 111
130-11
120-++++
110-+++ ++++
100-+++ 111
90-+++
80-+++ 1
70-+++ +++ 1
60-+++ 1
41-50-1

Pomacentridae
131-140-1
90-++++
80-+++ ++++ ++++ 111
70-++++ +++ ++++ ++++ ++++
60-++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++
50-++++ ++++ ++++ ++++
40-+++ +++ 111
30-1

Miscellaneous
(30)

Apodes
(19)

over

Acanthuridae
151-160-1
120-1
110-1
100-1
80-11
40-11
30-1

Scaridae
171-180-1
150-11
100-1

Pempheridae
(27)

Sparus
231-240-1
230-
220-1
210-1
1
170-1
160-1
150-1
140-11
130-
120-1
110-
100-1
1
70-1

Mullidae
221-230-1
140-1
130-1
1
90-1

Ephinephelus
201-210-1
200-1
160-1
150-
140-1
130-11
120-11
110-11
1
70-1
40-1

Mugilidae
121-130-1

Balistes
161-170-1

Carangids
201-210-1
191-200-1

Labridae
171-180-1
170-
160-
150-1
140-
130
120-
110-11
100-
90-1
80-11
70-////1111
60-//// /// 11
50-/// 1
40-/// 1
30-1111

Apogonidae
81-80-//// 1
70-1111
60-111
50-1111
40-////
30-////

Scaleless blennies
111-120-111
110-1111
100-1111
90-//// ////
80-111
70-//// 1111
60-//// //// 1111
50-//// //// ////
40-//// 11
30-11
11-20-1

456 fish preserved
46 fish discarded

502

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-48, 67 to 69. Sta. No. _____

State or Country: Bikini atoll (Romuk 2d)

County: Romurikku ds. City: _____

Locality: Lagoon side along ledge, with some crevices, near shore.

Drainage: _____ Date: April 2, 1946

Water: _____

Vegetation: Coral heads & algae

Time: 9 AM & 12:30 P.M.

Bottom: Corals and sand bottom

Shore: _____ Current: slow

Distance from shore: _____ Tide: low

Depth of capture: 4 5 feet Depth of water: _____

Method of capture: ~~4 5 feet~~ 20 lb. Cubé root

Collected by: L. P. Schultz and party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The area fished was about 50 feet wide and 600 feet long. 4 men picked up fish for about 3½ hours.

The fishing consisted of using about 20 lb. of Cubé root along a poorly crevied ledge for about 600 feet, where it was effective. At low tide the water was 2 & 6 feet deep along the lagoon side. On top of the ledge were some small tidal pools left when the water receded. The bottom beyond the rock ledge was sand, algae and coral growths of low types, but no extensive area of moving sand. The bottom was pitted with living corals offering a fair habitat for fish. The water was somewhat clouded making

observations difficult even with a face mask.
Halimidia the algae was abundant on
bottom corals and on the rock ledge.

Many large parrot fish were seen but
left when the cube came in contact
with them. A few were killed however and
recovered.

5-46-48 Hooked & a large ~~Bicus blotched~~
~~qsf~~ snapper or ~~Spanish~~

The following fishes were discarded in the field

Holocentrus
261-270-11
251-260-
241-250-1
231-240-
121-230-1
111-220
101-210
~~91-100~~
90

101-170-1
160-1
150-1
140
130-1
120
110-111
91-100-1111

Mullidae
170-1
160 —
141-150-1

Epinephelus
131-140-11
130-11
121 120-1111
1
61-70-1

Acanthuridae
171-180-11
170-
160-11
150-1
140-1
130-11
120-
110-1
91-100-1

Pomacentridae
81-90-1
80
61-70-111

Myripristis
151-160-1
150-11
140-
130-1
120-1

Index of Abundance = $\frac{\text{no fish}}{\text{Area in sq. yds}} = \frac{502}{3,400} = .148$
12 x 200

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-47 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: april 1, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following fishes were counted and measured when packed for shipment

Sparid - S-46-48 - 310 mm

Mullidae
241-250-1
191-200-1
190-1
180
170
160
150-1
140-1
121-130-1

Mugilidae
181-190-1
180-1
170-111
160-1
150-
140-1
130-1
120-1111
40-

Scarus
221-230-1
220
210
200-1
190-1
180-11
160-1
150-1
140-1
130-11
120-11
110-11
100-1
90-11
80-11
70
60-1
50-1
40-1

Lethrinid
211-220-1

Balistes
121-130-11

Siganus
259-260-1

Only

Continued

Chaetodontidae

151-160 - 11
150 - 1
1
101-110 - 1

Carangidae

191-200 -1
181-190 - 1

Labridae

110 - 1
101-100 - 1
90 -
80 - III
70 - IIII
60 - 1
50 - 11
40 - ++++
30 - ++++
20 - 1

Apogonidae

61-70 - ++++ 1
60 - ++++ ++++ ++++ ++++ ++++ 1
50 - +++ +++ +++ III
40 - +++ 1
30 - 11

Pomacentridae

71-80 - +++
70 - +++ IIII
60 - +++ ++++ 1
50 - +++ +++ +++ 11
40 - +++ +++ III
30 - +++ 11
20 - 1

Acanthuridae

131-140 - 1
130 - ++
120 - 11
110 - III
100 - 11
90 - ++++
80 - ++++
70 - 1
60 - 1
50 -
40 -
30 - 1

Miscellaneous

(44)

Apodes

(36)

Holocentridae

161-170 - 1
130 - 1
120
110 - 1
100 - 1
90 - IIII
80 - 1
70 - III
60 - 1
41-50 - 1

Epinephelus

131-140 - 11
130 - 11
120 - 11
110 - 11
100 - IIII
90 - 11
80 - 1
70 - ++++
60 - +++ 1
50 -
40 - 11

281 preserved
31 discarded

312

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-49 Sta. No. _____

State or Country: Bikini atoll

~~County~~: Namu Island. City: _____

Locality: Lagoon side in shallow tidal pools about 50 by 100 feet.

Drainage: _____ Date: April 3, 1946

Water: _____

Vegetation: few shallow corals.

Time: 12:00 & 1:30 P.M.

Bottom: Rocks and sand

Shore: very near shore Current: none

Distance from shore: _____ Tide: _____

Depth of capture: 1½ feet & surface Depth of water: to 1½ feet

Method of capture: 5 lb. Cube root

Collected by: L. P. Schultz and party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This was a group of shallow water tidal pools not over 1½ feet deep containing a few low coral heads and coral rocks. at about 2 feet above tidal level. The area poisoned was about 50 by 100 feet. Because of its shallow nature and in the lee of the inland it was possible to pick up nearly all of the fishes killed. 2 men picked up fishes from 12:30 & 1:30 P.M.

only.

The following fishes were discarded.

Epinephelus	Pomacentrids	Ligianus	
131-140-1	71-80-1111	151-160-1	
130-1	70-11	171-180-1	
120-1	60-1111		
110-11	50-1	Mullidae	
100-—	40-11	121-130-111	
90 —	30-1	101-110 = 1	
80-1	Holocentrus	91-100 ——	
70-11		90 = 1	
60 —		80 = 1	
41-50-1			

$$\text{Index of abundance} = \frac{\text{total \# fish}}{\text{area in sq. yds.}} =$$

$$\frac{312}{561} = .556$$

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-49 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: April 3, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-49 tid on Liganus - 160 mm
Following counted, measured when wrapped

Mugilidae
181-190-111
180-1

Kenrirhamphidae
(150)

Miscellaneous (21)

apodes - (25)

Labridae
101-110-11
100-11
90-1111
80-11
70-1111
60-1
50-111
40-11
21-30-111
~~11-20~~

Chaetodon
101-110-1

Scarus
121-130-1

The tips of the dorsal spines of the Pseudochromids are bright orange red.

ore

Epinephelus

171-180-1
111-120-1
101-110-1
100-
90-1
80-11
70--
60-1
50-—
40-11
30-11

Pomacentridae

81-90-
80-111
70-1
60-1
50-111
40-111

Holocentridae

81-90-1
80-1
70-1

Apogonidae

61-70-1
60-11
50-111
40-1
30 —
20-1

Scaleless blennies

110-120-11
110-1
100-IIII
90-111
80-IIII
70-1111
60-1
50-1

228 fish preserved
185 discarded
413

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-50, 70-71 Sta. No. _____

State or Country: Bikini Atoll

County: Namu ds. City: _____

Locality: Lagoon ~~reef~~ off Namu ds. ~~in atoll~~

Drainage: _____ Date: April 3, 1946

Water: _____

Vegetation: _____

Time: 10:30 & 12:30 PM

Bottom: Corals, algae

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: ± 6 feet Depth of water: ± 5 feet

Method of capture: 20 lb. Cube root

Collected by: L. P. Schultz and party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The reef poisoned was much like that on the ocean side in the surf yet of a smaller scale. The surge in the lagoon are lower only a foot or two high but this is sufficient to give an abundant coral growth, and much alge. The surge of the waves brought the poison over the reef ~~and~~ edge upon the more flat higher portions of the reef where there were pools or depressions some 4 or 5 feet deep.

4 men picked up the fish from 10:30 & 12:30 PM. The area fished was about 150 by 200 feet. over.

The depth of water beyond the reef in the lagoon was 10 & 15 feet deep but we did not get fish from the bottom here.

The following fishes were discarded.

Siganus
199-200-11
190
180-IIII
170-IIII
160-1
141-150-111

acanthurus triostegus
101-110-1
100-IIII
90-III 1
80-11

Mullidae
211-220-1
121-130-1

Epinephelus
151-160-1

Pomacentridae
81-90-IIII IIII
80-IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII 111
70-IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII 111.
60-IIII III 1
50-III 1
40-III
30-1.

Acanthuridae
121-130-1
120-1
110-
100-11
90-11
80-11

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-50, 70 071. Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: April 3, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following fish measured, counted when packed.

S-46-70 - Caranx 340 mm. | S-46-50-grouper-360mm
S-46-71 " 330 m

Echinichthys
161-170 - 1
130 - 1
120 - 1
110 - 1
100 —
81-90 1

Pomacentridae
81-90 - 1
80 - ||||
70 - ||||
60 - ||||
50 -
40 - |||
21-30 - ||

Mugilidae
211-220 - 1

Mullidae
131-140 - 1

Lethrinidae
151-160 - 1

Erganus
181-190 - 1

Balistes
171-180 - 11
150 - 1
140 - 1

Scarus
231-240 - 1
150 - 1
140 -
130 - 1
120 - 1
110 - 11
100 - 11
81-90 - 1

Over

Acanthuridae	Labridae	Holocentridae
201-210-1	161-170-	151-160-1
200-1	160-	150-1
190-	150-1	140-
180-	140-1	130-
170-1	130-1	120-
160-1	120-11	110-1
150-	110-1111	100-111
140-1	100-++++ ++++ 1	90-1
130-++++ 11	90-++++ 1111	80-1
120-1111	80-++++ 1	70-1111
110-++++ 1	70-++++ 111	
100-++++	60-11	Ahogoridae
90-++++ 1111	50-111	71-80-111
80-1111	40-11	61-70-1111
70-1	30-	1
	20-1	21-30-1

Scaleless blennies
111-120-1
61-70-1

miscellaneous (30)
apodes - (24)

Index of abundance = $\frac{\text{Total no. fish}}{\text{area in sq. yds.}} =$

$\frac{413}{6656} = .\frac{413}{3350} = .123$

50 x 67

133/preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-51 Sta. No. _____

State or Country: Bikini Atoll

County: Namu ds. City: _____

Locality: Outer edge of reef on northeast corner of Namu ds.

Drainage: _____ Date: April 4, 1946

Water: _____

Vegetation: Corals, Algae

Time: 11:00 – 1 PM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: 1/4 mile Tide: _____

Depth of capture: surface & 1 ft Depth of water: surf & breakers

Method of capture: 2 lb. Cube rot

Collected by: L. P. Schultz & party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The outer reef at ocean was made up of channels through which the breakers surged up and down among the luxuriant growths of corals and algae. Photographs were taken – movies. The area fished consisted of 2 channels, 50 feet by 50 feet. Within 5 minutes all of the poisons had washed out and disappeared. The surge of the surf brought a few of the fish upon the solid part of the reef where we picked them up. The breakers rose 6 & 8 feet, and at times 10 feet. The reef approaching the outer edge was level, with shallow

depressions. Large sea urchins and Cats eyes shells were abundand. About the only fish effected were blennies & holocentrids. 4 men picked up the fishes.

The black Pseudochromid was yellowish anteriorly, blackish posteriorly, helvirs and pectorals yellowish, body behind and below dark pectorals purplish grading into the blackish posteriorly, with belly a pale purplish tinge, ~~anteriorly~~ the upper lateral line greenish yellow for most of its length. - length 37 mm.

$$\text{Index of abundance} = \frac{\text{Total \# fishes}}{\text{area in sq. yds.}} =$$

$$\frac{133}{289} = .~~513~~ .460$$

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-51 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: April 4, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-51 - Tied to Eulamia melanopterus - 450 mm from tip of snout to middle rear edge of caudal fin.

Following measurements counted when wrapped.

Holocentridae

181-190 - 1
180 - 11
170 - 111
160 - 11
150 -
140 - 1
130 -
120 -
110 - 1
100 - 1
1
61-70 - 1

Pomacentridae

151-160 - 1
51 - 60 - 111
41 - 50 - ~~IIII~~ I
31 - 40 - 1111

Scaleless blennies

71-80 - 11
70 - 1111
60 - ~~IIII~~ 1
50 - ~~IIII IIII IIII IIII IIII~~ 11
40 - ~~IIII IIII IIII IIII~~ 111
30 - ~~IIII IIII IIII~~ 11

Acanthuridae

131-140 - 1
130 - 1
80 - 1
70 - 11

Scarus

291-300 - 1
251-260 - 1

Labridae

91-100 - 1
60 - 111
50 - 11

Miscellaneous (14)

Apodes (2)

440 fish preserved
183 fish discarded
623

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-52, '88-89, '92 Sta. No. _____

State or Country: Bikini Atoll

County: Bobororyuru ds. - Boro Isd. City: _____

Locality: Reef next to Boboro - - Channel, area poisoned about 100 × 150 feet

Drainage: _____ Date: April 6, 1946

Water: _____

Vegetation: Corals, algae,

Time: 2 to 4:30 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: to 5 or 6 ft Depth of water: _____

Method of capture: 25 lb. tube

Collected by: L. P. Schultz and Vernon Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

~~Fish preserved in tanks 12 in field - changed later.~~

S-46-52 Tin tag was tied to a brown spotted grouper. - 300 mm.

This reef was full of channels, pools 2 to 5 feet deep with an abundance of coral growths and algae. We both used a face mask and worked for about 2 hours picking up the fishes, which were on the bottom of the pools. The bottoms were sandy in these pools.

5-46-88 - grouper 320 mm
5-46-89 " 270 "
5-46-92 Trumpet fish

orey

There were discarded: 12 Acanthurids (Hoch)
30 Pomacentrids
25 Parrot fishes
that were not measured.

The following were measured
Scarus - green one
271 - 280 - 1
270 - 1
260 - 1
250 - 11
240
1
200 - 1
1
130 - 1

Naso literatus - 222 - 1

Index of abundance = $\frac{\text{total no fish}}{\text{area in sq yds.}}$

$= \frac{623}{1650} = .377$

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-52 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: April 6, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following fish measured and counted when wrapped & packed.

Scarus

~~251-260-~~
201-210-11
200-11
190-
180-1
170-1
160-11
150-1
140-111
130-~~IIII~~111
120-111
110-~~IIII IIII~~1111
100-~~IIII~~1
90-1111
80-11

Mugilidae

219-220-1
210-1
200-111
190-1
180-11
~~170-~~
140-1
130-11
120-111
110-1

Acanthuridae

201-210-111
160-1
120-1
110-111
100-~~IIII~~1111
90-~~IIII IIII~~11
80-~~IIII IIII IIII~~11
70-~~IIII IIII~~11
60-1
41-50-1
~~40~~

Miscellaneous (150)

Apodes (49)

Chaetodons
161-170-1
140-1
110-1
100-1
90-1
80-111
70-1

Mullidae
131-140-1
130-1
110-11
100-11

Balistes
171-180-1
140-1
120-1
70-1

Pomacentridae
71-80-1111
61-70-111+
60-111
50-1
30
20-11

Scaleless blennies
90-1
80-1
50-1
40-1

Ephinephelus
141-150-1
140-
130-1
120-11
110-111
100-11
90-1
80
70
60-11
50-1

Labridae
201-210-1
190-1
150-1
140-1
130-1
120-
110-1111
100-1111 1111
90-111 1
80-111 111 11
70-111 111
60-1111
50-111
40-111
30-

Apogonidae
61-70-1
50-11
40-1

182 preserved.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-53, 57 to 60; Sta. No. _____

State or Country: Bikini Atoll

~~County:~~ Bokoro -- Channel City: _____

Locality: Western end of atoll

Drainage: _____ Date: April 6, 7, 1946

Water: _____

Vegetation: _____

Time: 8:30 & 10:30 PM on two nights.

Bottom: _____

Shore: _____ Current: moderate

Distance from shore: 1/3 mile Tide: outgoing

Depth of capture: surface Depth of water: _____

Method of capture: Marine light off stern of YP 15413

Collected by: L. P. Schultz and Vernon Brocks.

~~Preservative~~: diprnet Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

We were aided by the Crew of YP 5413 in making these collections.

S-57 & 60 — flying fish

This collection took about 3½ hours. on the two nights & picks up the fish with 1 dip net for 2 hours and 2 dipnets for 1½ hours.

Light shorted, burned wires ~~off~~ off, and whole of apparatus dropped into the sea, down and down

8 fish preserved,
14 discarded

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-54 to 5[illegible] 61 Sta. No. _____

State or Country: Bikini atoll

County: Bokoro channel at City: _____

Locality: Western end of atoll.

Drainage: _____ Date: April 6, 1946

Water: _____

Vegetation: _____

Time: 3:30 & 6 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hook and line with tuna fish pieces as bait.

Collected by: Schultz, Brock and Crew of YMS 413

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Following grey sharks were captured.

1	121 cm	♀	45 lb.	no embryos	
2	110	♂	27	"	"
3	118	♂	31	"	"
4	91	♀	17	"	"
5	123	♀	55	"	"
6	130	♀	57	one embryo	
7	90	♀	15	~~no~~	"
8	109	♀	31	"	"
9	97	♂	23	"	"
10	122	♀	49	Two embryos	
11	109	♀	35	no	"
12	98	♀	23	"	"
13	81	♀	11	"	"
14	77	♀	10	"	"
15	82	♀	13	"	"
16	119	♀	54	Two embryos	

Two of above smaller ones preserved and carry tin tags 5-46-54 and 55. Embryos preserved and carry tag 5-46-61 tied around all 5.

This gray sharks when swimming had a narrow blackish band on posterior edge of upper lobe of caudal fin. Back and upper

sides grayish-blacks fins generally grayish above becoming quite blackish distally but not "black tipped" like the sharks E. melanopterus.

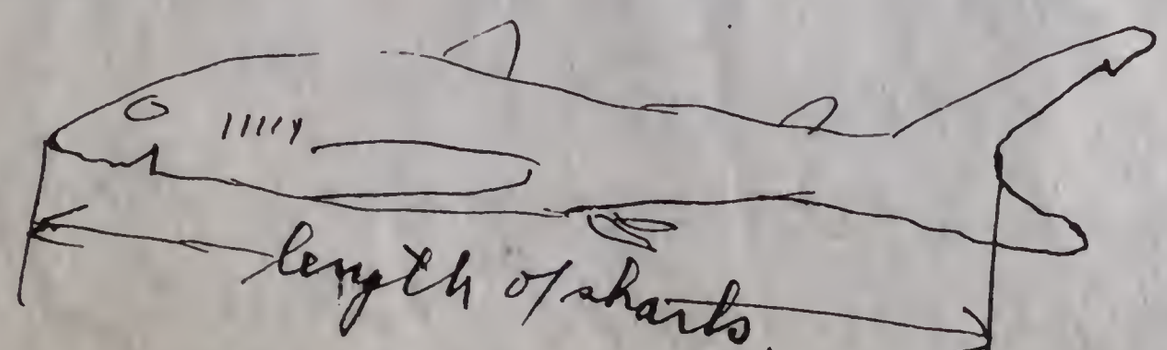
All of above discarded except the two smaller ones preserved.

The white tipped shark measured 179 Cms but was not weighed because we had no scales of that capacity. I estimate the weight to be 275 lb. Dissected its stomach was a .2 fat long bone & joint of some beast thrown overboard by a ship in the lagoon. undoubtedly from 21 miles away.

This & white tipped fins ~~& all fins~~ with grayish above pales & white below, with under sides of paired fins nearly white, upper sides of these fins grayish, with tips of fins including median fins, white.

Some Kodachrome pictures were taken.

All measurements were made from tip of snout & posterior edge of concavity of caudal fin thus:



Jaws of White tip shark – 5-½6 – 5 6

6 fish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-62 to 66 Sta. No. _____

State or Country: Bikini Atoll

County: (Boku Isl) City: _____

Locality: Reef of Bokoaetokutoku Is. next to Bokoro channel

Drainage: _____ Date: April 7, 1946

Water: _____

Vegetation: _____

_____ Time: P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: edge of outer reef Tide: _____

Depth of capture: _____ Depth of water: 6 to 8 feet

Method of capture: Spear

Collected by: Vernon Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-62 to 64 - parrot fish -
S-46-65 - Monacanthid
S-46-66 - needle fish Tylosaurus

above fishes photographed - Kodachrome.

1 7

18 fish preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

123

Acc. No. _____ Tag No S-46-72 to 87, 102, 103, 117, 118, Sta. No. _____

State or Country: Marshall Islands

County: Bikini Atoll City: _____

Locality: ~~Lagoon~~ and general region of channels to leeward.

Date: April 1-~~22~~24

Drainage: _____

Water: _____

Vegetation: _____

Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Trolling and hook-line fishing.

Collected by: U.S.S. Bowditch & Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

This collection contains fishes taken by various members of crew, officers and scientists on U.S.S. Bowditch.

S-46-72 - Coryphaena.
S-46 73 - Elagatis bipinnulatus
S-46 74. - Coryphaena
75 - Tuna
76 - Euthynnus yaito
77 - Tuna
78 - Eulamia melanopterus
79 - Tuna
80 - Tuna
81 - Caranx
82 - Tuna
83 - Red colored parrot fish
84 - " " " "
85 - Puffer
86 - Scombroid
87 - Caranx

over

5-46-102 - Scombrids
5-46-103 - Trunk fish speared by
V Brock.
5-46-117 - Rainbow runnell.
5-46-119 - Echeneis
5-46-123 - Puffer - May 7

2 fish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No S-46-90 & 91 Sta. No. _____

State or Country: _____

~~County:~~ Bikini Atoll City: _____

Locality: Rubaoji Channel (Ruji)

_____

Drainage: _____ Date: April 6, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: Near surface Depth of water: _____

Method of capture: Trolling

Collected by: Vernon Brock ~~& party~~ L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-90 - Tuna? caught by trolling
S-46-91 - Emmelichthyid regurgitated by large dog-toothed tuna..

S-46-90 has the two lateral lines and is strictly not a tuna.
The caudal fin of the # 91 was orange yellow in color; backs and upper sides bluish.

about 5 fish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-92 2 Sta. No. _____

State or Country: Bikini atoll

County: _____ City: _____

Locality: Off gangway of U.S.S. Bowditch

Drainage: _____ Date: April 12, 1946

Water: _____

Vegetation: _____

_____ Time: 10 & 11 P.M

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: Surface _____ Depth of water: _____

Method of capture: Light at night, 2 dip nets

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The sea was too rough & catch any fish & night & speals of so & finally quit after an hour of trial - Too many bubbles formed from the waves & could not see into the water.

This trial should not be used in any calculations of abundance

1 fish
4 qts invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

3,100,101

Acc. No. _____ Tag No. S-46-93 Sta. No. _____

State or Country: Bikini Atoll, Marshall Islands.

County: Western half of ~~City:~~

Locality: Bikini Lagoon

Drainage: _____ Date: April 13, 1946

Water: _____

Vegetation: _____

Time: 9A & 3 PM.

Bottom: Coral & algal, some algal sand.

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: & 25 & 30 fathoms Depth of water: sand

Method of capture: 4 ft & 1½ ft dredge

Collected by: ags 13 / Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

5 Dredge Hauls were made — Nos. I and III by 4 ft dredge and II, IV, & V with the 18" dredge. The 4 ft dredge was ruined on the #III Haul when it folded up into a V and the shackle broke - the cable and block flying, and the cable hitting my shoulder, knocking me nearly down. Just missed my neck which would have broken, & received such a wallop.

Each Dredge Haul was 5 & 8 minutes.

One fish only was taken, a goby.

The two little crafts of peculiar shape were bright green, exactly a

perfect mimicry of the green algae.
Most remarkably colored and shaped
of any crabs that I have ever seen.

Lt. Mann caught two
fishes - Euthynnus; by trolling
today - they bear the following
Tag Nos. S-46-100
S-46-101

One other fish was caught by
a crew member it bears the
following Tag no. S-46—

108 fish preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-94 Sta. No. _____

State or Country: Marshall Islands

County: Bikini Atoll City: _____

Locality: Reef at Ocean side in surf opposite Bokonfuzaku island

Drainage: _____ Date: April 15, 1946

~~Water~~: area poisoned 75 by 75 feet

~~Vegetation~~: _____

_____ Time: 9 & 10:30 AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: Cube root about 25 & 30 lb.

Collected by: L. P. Schultz, V. Brock & party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Reef at ocean edge – channels, corals, coraline algae in surf.

The following fishes were measured, counted when wrapped for packing.

Epinephelus 190-1 130-1 90-1 40-1	Apogon 40-1 30-1	Holocentrus 180-1 170-III 120-1 80-II 70-III 60-1 50-1
Labridae 90-1 80-1 70-II 60-III 50-IIII	Blennies Scaleless 100-1 90-II 80-II 70-IIII 1 60-IIII IIII 50-IIII IIII 1 40-IIII IIII 30-IIII 20-1	

Ael

Miscellaneous - (26)

eel - 1

acanthurida

160 - 1
50 - 1

Pomacentrida

60 - 1
50 - 1

Index of abundance = $\frac{\text{total fish}}{\text{sq. yards}} = \frac{108}{625}$

= .173

115 fishes preserved
also invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No: S-46-95 Sta. No. _____

State or Country: _____

County: Bikini Atoll Bokon City: _____

~~Locality~~: Bobonfusalan cleland on ocean side.

~~Drainage~~: Area poisoned about Date: April 15, 1946

~~Water~~: 100 x 100 feet.

Vegetation: _____

Time: 11 & 12:30

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 0 - 1 ft Depth of water: _____

Method of capture: Cube root Pib

Collected by: L. P Schultz & party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

shallow tidal pools, rather high on reef, enclosed, no outlet, a few corals.

The following fishes were measured and Counted when wrapped for shipment.

Epinephelus

170 - 11
160 - 1
150 - 11
140 -
130 -
110 - 11
90 - 1
60 - 11
70 -
60 - 1
50 -
40 - 𝍸 𝍸 𝍸 111
30 - 1

scaleless blennies

100 - 1
90 - 1
70 - 11
60 - 1
50 - 1
40 - 11
30 - 𝍸 𝍸 𝍸
20 - 𝍸 11

over

Miscellaneous 13

Apogon 60 - I

Chaetodon 30 - II

Pomacentridae
60 - III
50 - III
30 - I
20 - I

Acanthuridae
50 - ||||| |||
40 - II
30 - I

Balistes 140 - II

Mullidae
100 - I
90 - |||| I

Labridae
120 - I
70 - II
60 - |||| I
50 - II

$$\text{Index of abundance} = \frac{\text{total fish}}{\text{area sq yds}} = \frac{115}{1089} = .106$$

334 fishes preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-96; 104, 105, 106 Sta. No. _____

State or Country: Marshall Islands.

County: Bikini Atoll City: _____

Locality: Airukiraru Island - Reef on the Ocean side at near, in Surf

Drainage: _____ Date: April 16, 1946

Water: _____

~~Vegetation:~~ Area poisoned 75 by 100 feet

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: 2 lb. tubé root

Collected by: L. P. Schultz and Party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Reef fished with numerous coral and Algal growths but of low type not over 1 or 2 feet high. 3 or four pools 2 to 3 feet deep.

S-46-96 = ~~herring~~
S-46-104 - spiny lobster
S-46-105 - land crab
S-46-106 - trumpet fish

over.

The following fishes were discarded in the field - about 75 pomacentrids not picked up.

about 75 acanthurids not picked up. Both the usual blackcoloured ones.

The blenny with upper edge of caudal fin orange to yellow has bright crimson spots on cheeks and tips of dorsal spines red, lower rays of pectorals red at tips.

C. variolosus

The spotted blenny has a crimson eye (iris) and the upper edge of caudal fin orange, both of above blennies very commonone.

C. brevis

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-96 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: April 16, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following fishes were measured and counted when wrapped.

Serranidae
330 - 1
170 - 1
130 - IIII
120 - IIII 1
100 - III
80 - II
70 - IIII
50 - 1
40 - II

Holocentrus
190 - 1
180 - IIII
170 - II
90 - 1
70 - 1

Scarus
150 - 1
120 - IIII

Siganus
200 - III
190 - III
180 - III

Chaetodon
100 - 1

Mullidae
140 - 1

Apogon
70 - 1
40 - 1
20 - 1

Labridae
110 - 11
100 - 1
90
80 - 111
70 - ||| 11
60 - 1111
50 - ||| |||
40 - 11

Pomacentridae
60 - 11
50 - |||
40 - 111
30 - 11

Acanthuridae
260 - 1
230 - 1
220 - 1
200 - 1
170 - 1
130 - 1111
120 - 1
110 - ||||
100 - ||| |||| 1
90 - ||| |||| ||| ||| 11
80 - |||
70 - 111
60 - ||| 1111
50 - |||
40 - 11
30 - 1

8 Calibers
Blennies
110 - 11
100
90 - 1111
80 - ||| 1111
70 - ||| ||| |||
60 - ||| ||| ||| ||| 111
50 - ||| ||| ||| ||| ||| ||| 111
40 - ||| |||
30 - ||| ||| 1111
20 - 11

eels - (9)

Miscellaneous
(56)

Index of abundance $= \frac{334}{25 \times 33 \text{ sq yds.}} = \frac{334}{825} = .405$

285 fishes preserved
168 fishes discarded!!
453

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-97 Sta. No. _____

State or Country: Marshall Islands

County: Bikini Atoll City: _____

Locality: Airukiraru Is. Reef on lagoon side - area fished 200 x 150 feet

Drainage: _____ Date: April 17, 1946

Water: _____

Vegetation: Scattered coral heads - sandy bottom. Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: To 6 feet Depth of water: _____

Method of capture: Cube root 25 & 30 lb.

Collected by: J. P. Schultz & Party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef was on sandy bottom with large but scattered coral heads near shore the reef was nearly solid - from there came the large eleotrids with the black streak across cheek -

Kodachrome pictures taken

Following fishes discarded in field.

Pomacentridae - (98)

Acanthuridae - (43)

Epinephelus - (27)

The following fish were measured and counted when wrapped.

Pomacentridae

90 - 1
80 - ||||-||||-||||-||||
70 - ||||-||||-||||-||||-||||-||||
60 - ||||-|||
50 - ||||-||||
40 - |||
30 - 1
20 - ||

Holocentrus

110 - 1
100 - ||||
90 - |||
80 -
70 - |||
60 - 1

Mullidae

180 - 1
160 - 1
150 - 4
140 - ||
130 - |||
110 - ||
100 - ||
90 - 1

Acanthuridae

140 - 1
130 - 1
120 - 1
1
90 - |||
80 - ||||
40 - 1

250 - 1

Labridae

200 - 1
130 - 1
110 - ||
100 - ||||
90 - |||
80 - ||||-||||
70 - ||||-||
60 - ||||-|||
50 - ||||-||
40 - 1

Apogon

80 - 1
70 - ||||-||
60 - ||||-||
50 - |||
40 - 1
30 - ||||-||||

Eels (21)

Scaleless blennies

80 - ||
70 - |||
60 - 1

Sparidae

160 -
150 - ||
140 - 1
130 - 1
1
90 - |||
80 - ||||
70 - |||
60 - |||

Scarus

100 - 1
50 - 1

Miscellaneous (68)

$$\text{Index of abundance} = \frac{450}{3300} = .136$$

273 fishes preserved
134 discarded
407

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-98, 107 Sta. No. _____

State or Country: Marshall Islands

County: Bikini Atoll City: _____

Locality: Chieruete island-reef on ocean side-not in surf

Drainage: _____ Date: April 18, 1946

Water: _____

Vegetation: Abundant growth of corals with sandy bottom. Time: _____

~~Bottom~~: Area fished 100 x 200 feet but Shore: Area seined was only about ~~100 by 150 feet~~ Current: _____

Distance from shore: not over 750 feet x 200 Tide: low

Depth of capture: to 6 feet Depth of water: _____

Method of capture: 50 lb Cubé root

Collected by: L. P. Schultz & party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef had abundant coral growths from 2 to 4 feet high of a rather solid nature with channels and channel-pools between. The current was moderate causing the cubé root to drift around the end of the island instead of outward to edge of reef.

Following fishes discarded in field:

acanthuridae - (82)
Parrot fish (28)
Siganus (1)
Pomacentridae - (15)
Yellow streaked goat fish (8)

5-46-107 - Serranid - 330 mm.

Following fishes measured and counted when packed.

Serranidae - 120 - III
100 - II

Labridae
180 - I
170 -
160 -
150 - II
140 - I
130 - II
120 -
110 - III
100 - III II
90 - III III III
80 - III I
70 - III I
60 - II
50 - III
40 - II
30 - III I
20 - I

Pomacentridae
90 - I
80 - IIII III
70 - III
60 - IIII
50 - II
40 - III

Scarus
180 - I
170 - I
150 - I
130 - IIII
120 - II
110 - II
100 - II

Acanthuridae
250 - I
200 - I
140 - I
136
120 - IIII
110 - IIII
100 - III IIII
90 - III II
80 - II

Mullidae
170 - II
160 - I
150 - I

Holocentridae
100 - I
90 - I
80 - I
70 - I
60 - II

Chaetodontidae
140 - I
100 - II
90 - II
80 - II
70 - III
60 - IIII
50 - II

Eels (56)

Apogon 70 - I

Scaleless blennies
70 - II
60 - I

Miscellaneous (55)

Index of abundance $= \frac{407}{33 \times 50 = 1650} = .247$

The cloud of poison dusted close in shore around end of island so that the area covered and searched was only about 100 by 150 feet about same size as Bora.

250 fishes preserved

50

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-99 Sta. No. _____

State or Country: Bikini Atoll

County: Chieruti Island City: _____

Locality: Isolated tidal pools high on reef - Area about 20 by 60 feet.

Drainage: _____ Date: April 18, 1946

Water: _____

~~Vegetation~~: solid rock with a few small holes here and there. Time: _____

~~Bottom~~: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 1 ft Depth of water: _____

Method of capture: Cube root 9 lb.

Collected by L. P. Schultz & Party

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following were measured, counted when waffled.
Scalelers Hermis

70 - II
60 - IIII
50 - ||||_|||| II
40 - ||||_|||| |||| |||| II
30 - ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||
20 - ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| ||||_|||| |

Pomacidae

50 - III
40 - ||||_|||| ||||_IIII
30 - ||||_|||| ||||_|||| ||||_IIII
20 - ||||_III

Index abund. $= \frac{250}{200} = 1.25$

2 fishes preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-108 Sta. No. _____

State or Country: Marshall Is.

County: Bikini Atoll City: _____

Locality: Lagoon at north end, One mile south off west end of Bikini Island

Drainage: _____ Date: April 23, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: ~~12 fathoms~~

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 12 fathoms Depth of water: same

Method of capture: 18" dredge

Collected by: Dr. Morrison

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Two small Pomacentrids.

Crabs only
1 hermit

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-109 Sta. No. _____

State or Country: Bikini atoll, Marshall Is.

County: Lagoon City: _____

Locality: Picked out of corals brought up from bottom of lagoon.

Drainage: _____ Date: April 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Dredge

Collected by: Dr. K. Emory

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

8 small crabs - about 6 + 1 Hermit Crab

few Crabs only

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-110 Sta. No. _____

State or Country: Marshall Is.

County: Bikini Atoll City: _____

Locality: Reef at Aerydsland

_____

Drainage: _____ Date: April 17, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Picked up out of Algae.

Collected by: Dr. W. R. Taylor

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

These crabs picked out of algae
Collected by Dr. Taylor

364 fishes preserved.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-111 Sta. No. _____

State or Country: Marshall Is.

County: Bikini Atoll City: _____

Locality: Anchorage of U.S.S. Bowditch in northern end of lagoon

Drainage: _____ Date: April 23, 1946

Water: _____

Vegetation: _____

_____ Time: 9:15 & 10:45 P.M

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Marine Light at night - 22½ mts

Collected by: L. P. Schultz and T. P. E. Morrison

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This collection contains a large number of crustaceans, many larval & other fishes - totaling 1 qt.

576 fishes preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-112 Sta. No. _____

State or Country: Marshall Islands

County: Bikini atoll City: _____

Locality: Anchorage 1 Bowditch, East end of lagoon

Drainage: _____ Date: April 24, 1946

Water: _____

Vegetation: _____ 10:00 PM

_____ Time: ~~7:30~~ to 1 AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Light at night - with 2 dip nets

Collected by: L. P. Schultz and assistant

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The fish and crustaceans have been separated so there is no need to save any that might be the fish. Ample were collected otherwise. Squid are with fish though.

~~3101~~ 350 fishes preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-113 Sta. No. _____

State or Country: Rongerik atoll

County: Bock Island, ~~City:~~

Locality: Ocean reef, tidal pool not fully isolated but high up near shore with scattered coral

~~Drainage:~~ Reads, Date: April 24, 1946

Water:

Vegetation: Area fished 50 x 200 feet

Time:

Bottom: Coral fragments & solid rock.

Shore: Current:

Distance from shore: Tide:

Depth of capture: to 10 ft. Depth of water:

Method of capture: 7 lb. cube

Collected by: V. Brock & J. Marr

Preservative: Temp: Air:

List of species or kinds, with tag numbers if drawn or discussed:

This ref; Mr. Brock says consisted of a few tidal pools with low corals, behind a ledge of beach rock. The tide was not very low.

The following fishes were measured and counted when wrapped for packing.

Labridae

91 - 100 - 1
90 - 11
80 - 1111
70 - 111
60 - ++++ 1
50 - 11
40 - ++++ ++++
30 - ++++ 111
11 - 20 - 11

(38)

Blenniidae
scaleless

130 - 1
120 - 1
110 - 11
100 - +++
90 - ++++ ++++
80 - 111
70 - +++ 1
60 - +++ 1
50 - +++
40 - 11
30 - 1111

(45)

Acanthuridae

111 - 120 - 1
110 - 1
100 - ++++
90 - ++++ ++++ 111
80 - +++
70
60 - 11
50 - 11

(29)

over

Apogonidae

91-100 - ||||
90 - ||||
80 - ||||
70 - ||
60 - ||
50 - |
40 - |||
30 - |||
20 - |

(31)

Mullidae

121-130 - |||
120 - |||
110
100 - |

(7)

Chaetodon

131-140 - |
21-30 - |

(2)

Pomacentridae

61-70 - |||
60 - |||
50 - ||
40 - —
30 - |||

(15)

~~Holocanth~~

Holocentrus

111-120 - ||
110 -
100 - ||
90 - ||
80 - |
70 - |||
60 - |
50 - ||

(13)

Serranidae

261-270 - |
190 - |
140 - |
130 - |||
120 - |||
110 - ||
100 - |
90 - ||||
80 - ||||
70 - |
60 - |
50 - |||
40 - |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
30 - ||||

(96)

eels

(41)

Miscellaneous

(25)

Scarus

191-200 - |
180 - |
170 - ||
120 - |
100 - ||
90 - |

(8)

The eels with the pale edge & fins posteriorly ~~were~~ were yellowish; others had this edge greenish.

$$\underline{I} = \frac{350}{17 \times 33} = \frac{350}{561} = .623$$

221 fishes

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-114 Sta. No. _____

State or Country: Bikini atoll

County: Lagoon at ~~City~~

Locality: anchorage of Bowditch.

Drainage: _____ Date: April 25, 1946

Water: _____

Vegetation: _____

Time: 10:30 - 11:30 PM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Marine light, 2 dip nets for 1/2 hr. then 1 dip net for 1/2 hr.

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The water was rough & night and fewer fishes appeared. Two sennuletts were discarded that were 5 inches long and of same species as that size caught last night. They were used for bait trying to catch large fish lurking in modest numbers in dim-light some 20 & 50 feet away from the light.

38 fishes preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-115 Sta. No. _____

State or Country: Bikini Atoll

County: _____ City: _____

Locality: Four miles South of western end of Bikini Island.

Drainage: _____ Date: April 24, 25, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 28 fathoms Depth of water: _____

Method of capture: Dredge 18"

Collected by: Morrison and Ladd

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

37 ~~Rom~~ Aphonids
1 file fish

It is probable these were caught when dredge was on way to surface.

16 / preserved.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-116 Sta. No. _____

State or Country: Bikini Atoll

County: Bowditch Anchorage City: _____

Locality: East end of lagoon, about 1 mile ~~West~~ West off northwestern end of

Drainage: Bikini Island Date: April 26, 1946

Water: _____

Vegetation: _____

Time: 9:30 - 10:30

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Marine light at night

Collected by: L. P. Schultz & assistant

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The surface was rougher & night and this cuts down on the numbers of fishes that one can see and collect.

87 fishes preserved.
5
92
" "

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-~~118~~ 119 Sta. No. _____

State or Country: Bikini Atoll

County: Bikini Lagoon off City: _____

Locality: Western End of Aolaan d (Bikini)

Drainage: _____ Date: April 29, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Blb derris root

Collected by: Franks Cals

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Thread fin caught and a few
Stromateus

Two or 3 invertebrates

214 fishes preserved
112 " discarded
326

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-~~115~~ 120 Sta. No. _____

State or Country: Marshall Islands

County: Bikini atoll: 2~~00~~ K Mi City: 1¼ miles West of Bikini Island.

Locality: Surf station at Ocean edge of reef 75 feet by 50 feet deep.

Drainage: _____ Date: May 1, 1946

Water: _____

Vegetation: Corals, channels,

Time: 9:45 & 11 AM

Bottom: _____

Shore: _____ Current: surging

Distance from shore: _____ Tide: low

Depth of capture: ± 3 feet Depth of water: _____

Method of capture: 2 lb & 3 lb. derris root.

Collected by: L. P. Schultz and party.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef is rather solid with not many channels, the largest go back not over 50 feet from the breaking surf. The reef is level and flat without any tidal pools of any kind for as far as the eye can see.

Fishes discarded -

102 Acanthurus triostegus

10 acanthurus (blacks with purple spots base of soft dorsal and anal fins.)

The following fishes were counted, measured when wrapped for packing.

Miscellaneous (56)

Acanthuridae
121-130-1
111-120-IIII
110-IIII
100-1
90-IIII
80-III
61-70-1
40-1
5-46-120-220*

Holocentridae
101-110-1
100-11
90-
80-11
70-
60-IIII IIII

Scalelss Blennies
71-80-11
70-IIII IIII
60-IIII IIII IIII
50-IIII IIII 1
40-IIII IIII 1
30-IIII IIII IIII IIII II
20-III

Epinephelus
191-200-1
160-1
150-1
140-1
120-11
110-1
100-1
40-1

Aprogon
80-1
70-IIII

Pomacentridae
40-1
20-1

Labridae
119-120-1
100-
90-III
80-III
70-1
60-IIII
50-IIII III
40-IIII
30-11
20-III

Scarus - 220-1

Mullidae - 180-1

Index of abund = $\frac{\text{no. fish}}{\text{area sq. yds}}$ =

$\frac{326}{25 \times 13} = \frac{326}{325} = 1.00$

few invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-~~120~~ 121 Sta. No. _____

State or Country: Marshall Is.

County: Bikini Atoll City: _____

Locality: Enila Island at western end on ocean reef.

Drainage: _____ Date: May 4, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Invertebrates

2-teeth preserved

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-122 Sta. No. _____

State or Country: Marshall Is.

County: Bikini Atoll City: _____

Locality: Boro Island on leeward side in or near channel

Drainage: _____ Date: May 5 1946

Water: _____

Vegetation: _____

_____ Time: Late P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 40 fathoms Depth of water: _____

Method of capture: Hook and line

Collected by: Mr. Kohler

Preservative: Not preserved except 2 teeth. Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This shark weighed about 800 lb. I went over on the YP and made the following measurements. I identified the shark as Galeocerda Cuvieri or tiger shark. Its liver weighed somewhere around 200 lb or more. This female had numerous eggs but no embryos.

See other side of page for measurements.

Gill openings 5 5 5 5 5

female without embryos.

Very slight indication of dalls spots along upper sides.

Following figures in feet and inches
Tip of snout to: (measurements projected, not around curvature of body
middle of caudal fin 11'9"
tip of caudal fin (upper lobe) 13'10"
dorsal notch caudal peduncle 10'11"
ventral " " " 10'10½"
origin of first dorsal 4'2½"
" " second " 9'4"
" " anal fin 9'8"
insertion of pectorals 3'1"
" " pelvics 8'2"
lower edge 1st gill opening 2'5"
" " 5th " " 3'3"
Length of 1st dorsal fin from origin to tip of front edge 1'4½"
" " anal " " " " " " " " 9½"
" " second dorsal " " " " " " " " 7"
" " pectoral " " insertion " " " axles " 1'10½"
" " pelvic " " " " " " " " 10½"
" " " " " " " " " of sines " 1'2"
" " pectoral " " " " " " " " 1'3¾"
" " upper lobe caudal fin from caudal ped. notch to tip 3'½"
" " lower " " " " " " " " 1'6⅝"
from rear base 1st dorsal fin to lower tip same fin 8½"
" " " " 2nd " " " " " " " 6½"
" " " " anal " " basal " " " 5¾"
" " 1st dorsal origin to basal tip of same fin 1'10½"
" " 2nd " " " " " " " " 1'½"
" " anal " " " " " " " 11½"
Width lower lobe caudal fin at widest point 7"
" upper " " " " " " 9¼"
Length of 1st gill opening 6"
" " last " " 4½"
Distance lower edge 1st gill opening to lower edge last one 11"
Diameter eye — 1½"
Rear of eye to front of spiracle 2¾"
" " spiracle to upper edge 1st gill opening 1'6¾"
Tip of snout to rear corner of mouth 1'5½"

Invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-124 Sta. No. _____

State or Country: Bikini atoll

County: _____ City: _____

Locality: Enyu island reef on ocean side

Drainage: _____ Date: May 8, 1946

Water: _____

Vegetation: _____

Time: 11 AM - 3 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: Mod low

Depth of capture: _____ Depth of water: _____

Method of capture: Turning over coral slabs

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This collection of invertebrates was made rather high up on the reef by turning over coral slabs. The spirally white & black striped snails were laying eggs under the slabs on under side - usually there was a large one, probably female, and clinging to here were one or two smaller ones, probably males. The eggs were about 3 or 4 mm in diameter, white-grayish - soft, membrany about 2 or 3 dozen, occupying a space 2 inches in diameter. They were close together.

The Portuguese men of war were picked up on the beach sands.

about 10 fish.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-125 Sta. No. _____

State or Country: Marshall Is.

County: Bikini atoll City: _____

Locality: ocean reef at south end of Bikini Island

Drainage: _____ Date: May 10, 1946

Water: _____

Vegetation: _____

_____ Time: A M.

Bottom: _____

Shore: _____ Current: 1

Distance from shore: _____ Tide: ½ high

Depth of capture: _____ Depth of water: _____

Method of capture: Derris root

Collected by: L P Schultz & Frank Cabi

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

9 fish.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-126 Sta. No. _____

State or Country: Marshall Is.

County: Off Bikini Island City: _____

Locality: in lagoon.

_____

Drainage: _____ Date: May 11, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 15 feet Depth of water: _____

Method of capture: Sediment trap

Collected by: Kenneth Emory

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Invertebrates.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-127 Sta. No. _____

State or Country: Marshall Is.

County: Bikini Atoll City: _____

Locality: Romuk dsland reef

_____

Drainage: _____ Date: May 13-14, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Above specimens Taken at night with flashlight as reef; turning over rocks.

65 fishes discarded
192 1. preserved
257

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-128 To 152 Sta. No. _____

State or Country: Marshall Is. Bikini Atoll

County: Romuk Is. City: _____

Locality: Lagoon side at east end of Romuk Island among slabs of coral beach rock.

Drainage: _____ Date: May 14, 1946

~~Water~~: Area fished 40 by 30 yards.

Vegetation: Algae, .

Time: _____

Bottom: sandy and among rocks

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: to 2½ feet Depth of water: _____

Method of capture: Cube boat, 20 lb.

Collected by: L. P. Schultz.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

This habitat consisted of big slabs of broken up beach rock in 2½ feet of water at low tide. These rocks laid over each other, and underneath them were numerous smaller ones. Algae - mostly Halimeda grew on the rocks.

The following fishes were discarded

54 acanthuridae
2 Siganus
3 Chaetodontidae
6 Mugilidae

over.

Following fishes with color sketches or color descriptions.

S-46-128-Labrid
129-Dascyllus
130-Acanthurid
131-Pomacentrid
132-Mullet
133-Carangid
134-eel
135-Apogonid
136-Holocentrus operculare.
137-Surmullet
138-Chinchelid
139-Acanthurid

S-46-140-Holocentrus
141-Holocentrus
142-Holocentrus
143-Holocentrus
144-Myripristis
145-Siganus
146-Labrid
147-Scarus
148-Acanthurid
149-Surmullet
150-Labrid

no numbers
Lonphorid

151-Pseudochromid
152-Pseudochromid

Following fishes measured when prepared for shipment. including above on this page.

Acanthuridae
151-160-1
130-1
120-1
110-11
100-11
90-1
40-111

Holocentridae
241-250-1
240-1
160-1
150-11
140-11
120-1
110-1
100-1
90-111
80-1
70-1

Eels 23

Pomacentridae
131-140-1
70-11
60-++++ ++++ ++++ ++++
50-++++ ++++ 11
40-11
20-1

Apogonidae
>1-80-1
70-111
60-++++ ++++ 11
50-11
40-1111
30-++++
20-111

Labridae
101-110-1
100-111
90-1
80-1
70-++++
60-1111
50-++++ 1
40-1111
30-111
20-11

Scarus
180-1
160-1
140-1

Mullidae
160-11
120-1
110-1
90-11

Miscellaneous
(23)

Mugilidae
160-1
150-1
140-1

Scales
blennies
70-1
50-1
40-11
30-1

Epinephelus
180-1
140-1
80-1
70-1
40-1

$I = \frac{257}{1200} = .214$

1 sea horse? or pike fish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-153 Sta. No. _____

State or Country: Bikini Atoll

County: Middle of City: _____

Locality: Bikini Lagoon.

_____

Drainage: _____ Date: May 1, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 10 fathoms - then to surface open. Depth of water: _____

Method of capture: Plankton net, 10 Cm. diam.

Collected by: Dr. Martin Johnson

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

See also 5-46 -

fish tagged 21
35 big eyed scad
56

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

211.
160 to 172; 176 to 179; 1

Acc. No. _____ Tag No. S-46-154-157; 1 Sta. No. _____

State or Country: Eniwetok atoll

County: _____ City: _____

Locality: Eniwetok Lagoon at Bowditch
Anchorage, southeast end off Eniwetok Is.

Drainage: _____ Date: May 20 & 1946
June 6.

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hooks and line with bait.

Collected by: Welsh and Schaefer of Bowditch

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-154 - Red spotted snapper. Body reddish orange with red spots margin of pectoral with wide yellow band; posterior margins of soft dorsal and anal, caudal fins, with wide yellow band.

S-46-155 - acanthurus
S-46-156 - ~~Snapper~~ Lethrinus
S-46-157 - Snapper Lethrinus
160 - Echneis
161, 162 - Caranx - two species
163 to 169 - Siganus
170 to 172 - Lutjanus - opercle with bright orange spot, some with a black blotch in center near rear edge of orange spot, pectoral fin pale orange; caudal with wide orange band posteriorly.

over

S-46-173 - Needlefish
To this collection I have added somewhat more than 20 big-eyed scad that are not tagged but wrapped in cloth and bear collection no. S-46-154
~~S-46-176~~ - Balistes - May 27;
S-46-177 - Echeneis
S-46-178 -
S-46-179 - Chaetodipterus
S-46-211 - Balistes

8 fishes ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-158 Sta. No. _____

State or Country: Enivetok atoll

County: _____ City: _____

Locality: Light at night off Bowditch anchorage southeast end of lagoon about 1½ miles

Drainage: Of Enivetok ds. Date: May 19 1946

Water: _____

Vegetation: _____

_____ Time: 9:30 & 10:15 P.M

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Marine light 100 watts - 2 dipnets

Collected by: L. P. Schultz & assistant.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Very few fishes were seen and Crustaceans were scarce too. The water was not unusually rough

114 fishes discarded ✓ Invertebrates collected
189 " preserved ✓

303

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-159 Sta. No. _____

State or Country: Enniwetok atoll

County: _____ City: _____

Locality: Reef of Enniwetok Isl and near south west end on ocean side in surf.

~~Drainage:~~ _____ Date: May 20, 1946

~~Water:~~ area fished was about

~~Vegetation:~~ 35 by 30 yards square.

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: Low

Depth of capture: _____ Depth of water: _____

Method of capture: 20 & 30 lb. Cube root

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This ocean reef, as the result of two tankers on the rocks at the Reef Entrance, has been covered with heavy oil. The reef is a dead one, the Lithothamnium ridge is black, nothing seems to be growing except a filamentous algae. Even the big echinoid echinus are lacking. Corals are dead on upper surfaces. Life is only down deep in channels that algae and other life thrives.

Two quart jars with invertebrates.

ary

Following fishes were discarded in field.

Acanthurus dear
Triostegus (6)
161-150 - III
140 - ||||-||||-||||-||||
130 - ||||-||||-|
120 - ||||
110 - ||||
100
90

Acanthurus
with purple caudal spots
161-170 - II
160 - I
150 - ||||
140 - ||||
130 - ||||
120 - |||| |
110 - ||||-||||-||||-||||
100 - ||||-||||-||||-|
90 - III
80 - I

Scares
380-1
350-1
330-1
300-1
280-1
270-1

Following fishes measured, colors recorded for packing

Miscellaneous
(21)

Chaetodontidae
170-1
130-1
120-II
110-III
100-1
90-1
80-1

Acanthuridae
231-240 - I
160 - ||||-|
150 - ||||
140 - ||||
130 - II
120 - III
110 - ||||-||
100 - ||||-|||
90 - I
80 - I
60 - I
50 - ||||-||||-||
40 - ||||-||||-||||-||||-|||
30 - ||||-||||-|
20 - I

Pomacentrids
160 - I
150 - II
60 - II
40 - I
20 - I

Labridae
100 - II
70 - I

Eels
4

Holocentrus
60 - ||||
50 - ||||

$$I = \frac{303}{35 \times 30} = .241$$

$$\underline{I} = \frac{303}{1050}$$

Scares
320 - II
280 - I
240 - I
250 - III
410 - I
330 - I

Scaleless blennies
100 - I
90 - ||
80 - II
70 - ||||
60 - ||||
50 - ||||-||||
40 - ||||-||||-|||
30 - ||||-|
20 - I

392 fishes discarded ✓
369 " preserved ✓
761

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-~~170~~ 174 Sta. No. _____

State or Country: Marshall Is.

County: Eniwetok atoll City: _____

Locality: Tierom island on south east corner of reef of island, lagoon side

Drainage: _____ Date: May 21, 1946

~~Water:~~ Area searched about 200 by 200 feet

~~Vegetation:~~ _____

Time: 11:30 & 2 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 30 lb. Cube net

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

This was a lagoon type of reef with pools and channels. Most of the fishes were on the bottom off the edge of the coral ledge in 10 feet or more of water and were not recovered, including a large Polynemid.

There were 260 mullids (yellow striped form) counted on reef but not picked up the measurements of those recovered give an average of sample of those left. also 60 acanthurus likewise not picked up.

Coral growths low, not luxuriant, except at outer edge of reef.

orc

Following fishes measured, counted then discarded.

Mullids

231-240 II
230-III
220-III
210-III
200-IIII
190-IIIIIII
180-IIII
170-IIII
160-IIII
150-II
140-II

acanthurus

131-140-IIII
130-IIIIIIII
120-IIII
110-I
100 III
90-II
80-II
70-I

Following fish measured when wrapped for shipment.

Mullidae (yellow streaked)

240-I
230-II
220
210-I
200-IIIII
190-IIII
180-IIIIII
170-IIII
160-IIII
150-IIII
140-I
110-III
100-I

acanthuridae

220-I
180-I
170-I
160-II
150-III
130-IIIIIII
120-IIII
110-IIII
100-III
90-IIIIIII
80-IIIIIIIIIIIIIII
70-I
50-I
40-II

Pomacentridae

120-I
80-I
60-IIIIIII
50-III
40-II
30-II

Scarus

140-I
140-I
130-IIII
120-III
110-I

Epinephelus

120-I; 110-I; 90-I

Labridae

120-I
110-II
90-I
80-II
70-IIII
60-IIIIIIII
50-I
40-I

Scaleon blennies

130-I
110-I
90-III
80-I
70-III
60-IIIIIII
50-III
40-I

Apogonidae

70-III
40-I

Holocentrus

120-I
80-I
60-I

Eels (19)

Miscellaneous (153)

$I = \frac{761}{67 \times 66} = \frac{761}{4422}$

$= .170$

Invertebrates ~~only~~
1 fish - puffer

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-175 Sta. No. _____

State or Country: Eniwetok atoll

County: _____ City: _____

Locality: Figurr dsland reef.

Drainage: _____ Date: May 22, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: 2 ft.

Method of capture: Turning over rocks

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-175 Red & small brown Colored ~~fleshy mud~~ Tridacna.

The small puffer was wrapped with invertebrates -

8 fishes preserved. ✓
7 fishes discarded ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-180, 185; 190-194; 199 Sta. No. _____

State or Country: Eniwetok atoll

County: ~~Southwest~~ Passage Qty. about 4/5

Locality: mile south of Rigili Island anchored at edge of reef. 30,

Drainage: _____ Date: May 26 1946

Water: _____

Vegetation: _____

_____ Time: at night 2 A.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 30 feet Depth of water: _____

Method of capture: Hooks and line fishing

Collected by: L. P. Schultz and crew of YP 5463

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-180 ♀ Whitetip ~~Sand~~ fin sharks -
Length to caudal peduncle notch 4'
Length from tip snout to tip of tail 7' 7½"

The following Gray sharks of same species, of which Two small adults were preserved at Bikini

Length to caudal notch			Total length				Sex
inches		mm	inches			mm	
46.5	3'	10½"	1160	60	5'	1525	♀
46	3'	10"	1170	60	5'	1525	♀
44	3'	8"	1120	57.5	4' 9½"	1460	♀
40	3'	4"	1015	53	4' 5"	1345	♀
41	3'	5"	1040	54	4' 6"	1370	♀
41.5	3'	5½"	1055	60	5'	1525	♀
62.5	5'	7½"	1725	91.5	7' 7½"	2325	♀

no males were taken

over

5-46-185 - Echeneis
5-46-190 - "
5-46-19[illegible] - "
5-46-192 - Eulamia
5-46-193 - Eulamia
5-46-194 - Echeneis
5-46-199 - Caranx

1 starfish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-181 Sta. No. _____

State or Country: Eniwetok Atoll

County: Chinieero dsland ~~City~~: reef routes

Locality: side of island rather close to island but in water of depths not likely

~~Drainage~~: exposed at low tide. Date: May 25, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: Dr. W. R. Taylor

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This starfish is of a bright grayish blue or delft blue.

1 gt Crustaceans.
34 fishes

FIELD DATA RECORD ✓
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-182 Sta. No. _____

State or Country: _____

County: Eniwetok Atoll City: _____

Locality: Lagoon at Bowditch anchorage
off Eniwetok Island

Drainage: _____ Date: May 23, 1946

Water: _____

Vegetation: _____

_____ Time: 9:15 to 10:15 P.M

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 2 dipnets with light at night

Collected by: L. P. Schultz and assistant.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

There are few fishes that come to the light but Crustaceans were abundant. The big eyed scad were numerous and feeding on the fish that came to the light.

255 small fishes; 1/2 Pt. invertebrates
36 flying " Halfbeaks
1 " South
292

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-183 Sta. No. _____

State or Country: Eniwetok atoll

County: ~~Ha~~ Thwist Passage City: on leeward

~~Locality:~~ side of reef 2 miles south of Rigili Island.

Drainage: _____ Date: May 24, 1946

Water: _____

Vegetation: _____

_____ Time: 8:30 to 11:30 P.M

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Light at night - 2 dip nets

Collected by: L. P. Schultz & Frank Cali.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

2 qts of small fishes
1-8 gal. tanks of flying fishes.
I think this long beaked Halfbeaks is the same species that I saw sailing some 50 feet through the air at Bikini.

About 1/2 Pt. invertebrates

156 fishes ~~for~~ ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

South

Acc. No. _____ Tag No. S-46-184 Sta. No. _____

State or Country: Eniwetok atoll,

County: ~~Northwest~~ Passage City: 4/5 mile

Locality: south of Rigili Island on leeward edge of reef.

Drainage: _____ Date: May 25, 1946

Water: _____

Vegetation: _____

_____ Time: 9 PM & 11 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Light at night - 2 dipnets.

Collected by: L. P. Schultz & Frank Cali

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46
1
The invertebrates were placed with 183 since there were but a few.

252 fishes discarded ✓
676 fishes preserved ✓
928 also invertebrates

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-186, 200 to 204 Sta. No. _____

State or Country: Enjuetals atoll

~~County~~: Mii dsland in ~~City~~: surf of

Locality: ocean reef

~~Drainage~~: Area fished was Date: May 28, 1946

~~Water~~: about 100 yards along ruf

Vegetation: and 30 yards deep.

Time: 8-11 AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: 30 lb. Cube rot + dipnets

Collected by: L. P. Schultz & assistants

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Mii dsland reef at surf was dead or nearly so from oil from wrecked tanker — the reef was level with a few low corals at or near the dead Lithothamnium ridge. There were the usual surge channels. No pools. as the surf broke and tide came in it carried the fish back across the reef where we picked them up. for 1/4 mile when they were carried by the current

Following fishes were discarded after measuring

Sigamus
270 - 1
~~230~~ 250 - ||||
~~220~~ 240 - ||||
230 - |||| |||| |||| ||
220 - |||| |||| |||| |||
210 - |||| |||| ||||
200 - |||| |
190 - |||| ||
180 - |||
170 - 1

Mullidae
191 - 200 - 1
190 - 1
180 -
170 - |||| |
160 - |||| |||| ||||
150 - |||| |||| |||| ||||
140 - |||| |||| |||
130 - ||
120 - ||
110 - 1

mugil
360 - ||
290 - 1
230 - 1
220 - 1
180 - 1

Acanthuridae
170 - ||
160 - 1
150 - |||| ||
140 - |||| |
130 - |||| |
120 - |||| |
110 - |||| |||| |||| ||||
100 - |||| |||| |||| ||||
90 - |||| |||| ||||
80 - ||||
70 - 1

Myripristis
200 - 1
190 - |||
180 - ||
170 -
160 - 1

Epinephelus
170 - ||
160 - 1
150
140 - 1
130 - ||
120 - 1
110
100 - 1

unicorn fish (acanthurid.)
230 - 1
220 - 1

Balistes aculeatus
160 - 1
150 -
140 - 1
130 - 1

$$I = \frac{928}{100 \times 30} = \frac{928}{3000} = .309$$

see next page

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-186 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: May 26, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following fishes measured when wrapped for shipment.

Scalelers blennies

110 - 1
100 - ||||| ||||
90 - ||||| ||||| ||||| |||
80 - ||||| ||||| ||||| ||||| ||||| 1
70 - ||||| ||||| ||||| ||
60 - ||||| ||||| ||||| ||||| ||||| |||||
50 - ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
40 - ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||
30 - ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||
20 - ||||| ||||| ||||| ||||| ||||| ||||| ||

5-46-200 - Crab
5-46-201 - eel
5-46-202 - "
5-46-203 - "
5-46-204 - "

5-46-186 Echinophelus
330 mm.

miscellaneous
(156)

over

Acanthuridae

221-230-1
200-1
190-11
180-
170-1
160-1
150-11
140-1
130-1111
120-1
110-1111
100-11
90-1
80-11
70-
60-1
50-11
40-111
30-111

Epinephelus

140-11
130-111
120-
110-11
100-111
90-1111
80-11
70-1
60-1
50-11
40-1

Labridae

110-1
100-111
90-1
80-1111
70-111
60-1111 1111 11
50-1111 11
40-11

Eels

25

Scarus

280-11
200-1
160-11
120-1
110-1

Holocentridae

190-1
180-1111
170-
160-11
150-
140-11
130-11
120-
110-11
100-
90-1
60-1
50-1

Mullidae

170-1
160-11
120-11
110-11
100-1
90-11

Pomacentridae

130-1
120-1
110-1
80-11
70-111
60-111
50-1111 1111
40-11
30-1111
20-1111

Mugilidae

250-1
230-1
220-1
210-1
200-1

66 fishes discarded ✓
150 " preserved ✓
216

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-187 Sta. No. _____

State or Country: Eniwetok atoll

County: Lirissiers island City: reef in ocean

Locality: surf.

Drainage: area fished about Date: May 29, 1946

Water: 50 yards by 30 yards

Vegetation: _____

Time: 8 & 11:30 AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: 25 lb cube root + dip nets

Collected by: L. P. Schultz & assistants

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef had the usual surge channels and one large pool partially connected with two surge channels, some 10 ft deep. The corals were dead, so was the Lithothamnium ridge from oil from wrecked tankers at Deep Entrance. The dead corals were only 6 to 8 inches high even close to surf. about 5 minutes after the poison was placed - two big comers rolled in and carried the poison for back on the basement like reef - but it then ran back out about 3 surge channels, but rather diluted.

The following fishes were measured and discarded in the field

Scarus

280 - 1
270 -
260 - 1
250 -
240 - 11
230 -
220 - 1
210 -
200 - 1
190 -
180 -
170 -
160 - 1
150 - 1
140 - 1
130 - 1
120 - 1
110 - 1

acanthuridae

170 - 1
160 - 111
150 - 11
140 - 111
130 -
120 - 1
110 - ||| |||
100 - ||| ||| |||
90 - ||| ||| ||||
80 - 11
70 - 1
60 -

Epinephelus

150 - 1
140 -
120 - 1
110 - 1
100 - 1
90 - 1
80 - 1
70 - 1

The following fishes were measured when wrapped for shipment.

S-46-187-320 mm.

Epinephelus

90 - 1
80
70 - 1
60 - ||| 11
50 - ||||
20 - 11

Scaleles blennies

mullidae

180 - 1

mugilidae

200 - 1

Holocentridae

240 - 1
210 - 1
200 - 11
190 - 111
180 - ||||
170 - 1
160 - ||||
150 - 1
130 - 1
60 - 11
50 - |||

Scarus

230 - 1
210 - 11
200 - 1
170 - 1
160 - 1
150 - 11
160 - 1
110 - 1
100 - 11
81-90 - 1

acanthuridae

160 - 111
150 - ||||
140 - ||| 1
130 - 1
120 - 1
100 - 111
90 - 111
80 - 111
70 - 1
50 - 111

180 - 1
170 - 1

Labridae

140 - 1
80 - 1
70 - 1
60 - 11
50 - 11
40 -
30 - 1

miscellaneous (29)

Epinephelus

140 - 1
120 - 1
100 - 1
80 - |||
70 - 11
60 - 1

Pomacentridae

80 - ||||
70 - 1
60 - ||||
50 - 1
40 - 1
20 - 1

eels (4)

$$I = \frac{216}{50+30} = \frac{216}{1500} = .144$$

173 fishes preserved. ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-188 Sta. No. _____

State or Country: Eniwetok Atoll

County: Lirinnien island City: _____

Locality: a tidal pool, high up on the reef and reached only by highest tides

Drainage: Area about 30 yards Date: May 29, 1946

Water: by 5 yards.

Vegetation: filamentous algae.

Time: 11-11:45 A.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: to 2 feet Depth of water: _____

Method of capture: 5 lb. cubi root

Collected by: L. P. Schultz and assistants.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following fishes were measured when wrapped for shipment.

Mugilidae	Kuhlia	Chaetodontidae
170-1	130-11	160-1
160-IIII	120-IIII III	150-
150-III	110-IIII IIII	140-III
140-IIII	100-1	130-II
130-IIII	90-1	120-IIII
70-II	80-1	110-1
60-III	70-	100-III
	60-	90-1
	50-1	

Pomacentridae	Lutjanus
100-1	150-1
90-IIII IIII IIII IIII IIII IIII I	100-1
80-IIII IIII IIII IIII IIII I	
70-IIII IIII IIII IIII IIII	
60-IIII IIII IIII III	
50-1	
40-III	

$I = \frac{173}{5 \times 30} = \frac{173}{150} = 1.153$

194 fishes discarded (194) ✓
374 " preserved ✓
568

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-189; 399-400 Sta. No. _____

State or Country: Eniwetok atoll

County: Rigili island ~~City~~ reef on

Locality: lagoon side of Lagoon reef.

Drainage: _____ Date: May 30, 1946

Water: Area fished about ~~70 by 440 yards~~. 200 by 200 feet

Vegetation: _____ Time: 8 & 12 AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: 4 ft. Depth of water: 4 ft

Method of capture: 36 lb. cubi root & dip nets

Collected by: L. P. Schultz and assistants

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef in the lagoon had an abundance ~~of~~ ~~with~~ of coral growths about 3 feet high of many kinds, bottom sand with channels between. The current was swift and carried away many fishes. This reef was much like the Jotian reef at Enib & Chunyds. at Bikini
The following fishes were measured then discarded.

mullidae

230 - |||	(10 not measured)
220 - 1		
210 - |||| ||	
200 - |||| |||	
190 - |||| ||||	
180 - |||| |||| |||	
170 - ||||	
160 - ||||		
150 - 1		

Siganus

290 - 11	
310 - 1	
270 - ||||	
260 - 1	

over.

Fish discarded

Acanthuridae
110 - ||||
100 - |||| |||| |||
90 - |||| |||| |||| |||| |||| |||| ||||
80 - |||| |||| |||| |||| |||| |||| |
61-70 - 1

(10) not measured

Scarus
130 - ||
120 - |||| |
110 - |||| ||||
100 - |||| |||
81-90 - 1

Epinephelus 270 - 1

The following fishes measured when wrapped.

Labridae
130 - |||
120 -
110 - ||
100 - |||| ||||
90 - |||| ||
80 - |||| |||| |||
70 - |||| |||| |||| |||| |
60 - |||| |||| |||| |||| ||||
50 - |||| ||
40 - ||
30 - |

Holocentrus
90 - 1

eels (7)

Epinephelus
290 - 1
110 - 1
100 - 1
90 - ||||
80 - ||
70 - 1
60 -
40 - 1

Pomacentridae
80 - ||
70 - ||
60 - |||| |||| ||||
50 - |||| |||| ||||
40 - 1
30 - 1

Sigarus
270 - 1
240 - 1

Apogonidae
70 - ||
60 - 1
50 - 1

Acanthuridae
230 - 1
220 - 1
210 - 1
180 - 1
170 - 1
160 - |||
150 -
140 - 1
130 - 1
120 -
110 - 1
100 - ||
90 - |||| |||| |||| 1
80 - |||| |||| |||| ||||
70 - |||

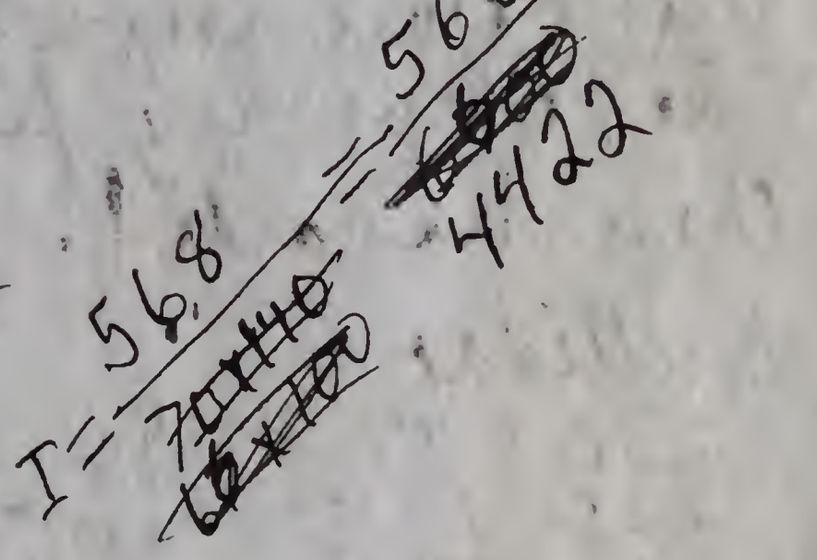
Scarus
160 - 1
150 - 1
140 - 1
130 - ||||
120 - |||| ||
110 - |||| ||||
100 - |||| |||
90 - |||| ||||
60 - |||

Mullidae
200 - 1
190 - 1
180 - 1
160 - 1
150 - 1

Miscellaneous
(77)

Mugilidae
50 - 1

Scaleless blennies
100 - |||
90 - 1
80 -
70 - ||||
60 - ||||
50 - 1



468 fishes preserved ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-195 Sta. No. _____

State or Country: Enniwetok atoll

County: Rujoru ds. City: _____

Locality: Lagoon reef, scattered coral heads of poor growth.

Drainage: _____ Date: June 2, 1946

~~Water:~~ area fished 70 by 146 yards.

~~Vegetation:~~ _____

_____ Time: _____

Bottom: Sand

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 4 or 5 ft. Depth of water: _____

Method of capture: 20 & 25 lb cube root + dip nets

Collected by: L. P. Schultz & assistants

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef was a poor one, the groups of coral heads were far separated and the bottom was shifting sand. Fishes were scarce, none were discarded.

The following fishes were measured when weighed

Labridae
160-1
140-1
130-1
90-11
80-
70-1111
60-++++ ++++ 111
50-++++ ++++ 111
40-++++ 11
30-111
20-1

Pomacentridae
91-100-111
90-11
80-1111
70-++++ 11
60-++++ ++++
50-++++ ++++ ++++ ++++ 11
40-++++ ++++ ++++ 11
30-++++ ++++ 1
20-++++ 11

Epinephelus
191-200-1
170-1
160-1
100-1
70-1
60-1

over

Continued

acanthuridae

191 - 200 - 1
190 - 1
160 - 1
150 - 11
140 - 1
130 - 111
120 - 1
110 - 11

Mullidae

210 - 11
200 - 11
190 -
180 - 11
170 - 1
160 - 1
150 - 11
140 - 11

Scares

190 - 1

Carangx

210 - 1
200 - 1

Eels

23

miscellaneous

225

apogonidae

60 - ||||
50 - 1
40 - 111
30 - |||| |||| ||||
20 - |||| |||| |||| |||| |||| |

Ostracentridae

70 - 1
60 - 1

$$I = \frac{468}{70 \times 140} = \frac{468}{9800} = .048$$

90 fishes preserved
2 globular starfish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-196 Sta. No. _____

State or Country: Eniwetok atoll

County: Rujoru island City: _____

Locality: Reef on ocean side

Drainage: _____ Date: June 2, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: Largely gravel & cobble bars.

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 5 1 ft. Depth of water: _____

Method of capture: Dip nets, 2 lb. cube root.

Collected by: Dr. J. P. E. Morrison and F. Cali

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

107 fishes discarded (=107) ✓
788 " preserved ✓
895

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

205, 206;

Acc. No. _____ Tag No. S-46-197, Sta. No. _____

State or Country: Eniwetok atoll

~~County~~: Teitleirikuccki ds City: _____

Locality: Lagoon reef with numerous but scattered coral heads

Drainage: _____ Date: June 1, 1946

~~Water~~: area fished 70 by 140 yards.

Vegetation: _____

_____ Time: _____

Bottom: Sandy

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: to 3 ft Depth of water: to 3 ft

Method of capture: 25 lb. Cube root o dynets

Collected by: L. P. Schultz and assistants.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The small stone fish had under sides of pectoral fins orange in color, with black-orange ornate spot.

The following fishes measured & then discarded

Acanthuridae
130 - II
140 - III
180 - II
170 - IIII
160 - I
150 - II
230 - I
200 - II
110 - I
100 - IIII IIII
90 - IIII
(also 10)

Pomacentridae
80 - IIII IIII
70 - IIII I
90 - III

Siganus
210 - III
200 - I
190 - IIII
180 - III
170 - II
160 - I
150 - I

Scarus
280 - I
210 - I
200 - III
120 - I
100 - I

Echinothrix
120 - IIII I
140 - I
110 - II
100 - IIII I
90 - II
80 - II

Holocentrus
210 - I
170 - I

Following fishes measured when wrapped for shipment

Pomacentridae

91-100-1111
90-𝍸 𝍸 1
80-𝍸 𝍸 𝍸 11
70-𝍸 𝍸 𝍸 𝍸 𝍸 𝍸
60-𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 111
50-𝍸 𝍸 𝍸 𝍸 1
40-𝍸 𝍸
30-𝍸 𝍸 1
20-𝍸

Scarus

240-111
230-1
220-11
210-1
200-
190-11
180-11
170-1
160-1
150-1
140-
130-1
120-
110-11
100-1111
90-
80-1111
70-11

Acanthuridae

250-1
200-111
180-1
170-1
160-11
150-1
140-11
130-1
120-
110-
100-11
90-11

Labridae

160-1
140-1
120-11
110-111
90-𝍸 1
80-𝍸 11
70-𝍸 𝍸 11
60-𝍸 𝍸 𝍸 1
50-𝍸 𝍸 𝍸 11
40-𝍸 111
30-11

Diaphelus

190-1
140-1
130-11
120
110-11
100-1111
90-𝍸 1111
80-1111
70-11
60-11
50-11

Holocentridae

180-1
170-1
140-1
100-111
90-11
80-1
50-11

Apogonidae

100-1111
90-
80-𝍸 111
70-𝍸 𝍸 𝍸 111
60-111
50-
40-𝍸 1
30-𝍸 1
20-11

Mullidae

201-210-1
180-1
170-1
160-1
130-1
120-1

Trigonus

170-1
160-1
150-1

Eels

92

Miscellaneous

337

Caranx - 220 mm. } Caranx
5-46-205 - 270 mm
5-46-206 - 300 mm

$$I = \frac{895}{70 \times 140} = \frac{895}{9800} = .091$$

158 fishes discarded ✓ 20 invertebrates, etc
406 " preserved ✓
564

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. ________ Tag No. S-46-198; 207; 208 Sta. No. ________

State or Country: Eniwetok Atoll

County: Aaraaanbiru Is City: ________

Locality: Ocean reef among coral heads of abundant growth.

Drainage: ________ Date: June 3, 1946

Water: area fished 20 yards by 100 yds.

Vegetation: ________

Time: ________

Bottom: Sandy.

Shore: ________ Current: ________

Distance from shore: ________ Tide: ________

Depth of capture: to 6 ft. Depth of water: to 10 ft.

Method of capture: 25 lb. Cube root + dipnets

Collected by: L. P. Schultz & assistants.

Preservative: ________ Temp: ________ Air: ________

List of species or kinds, with tag numbers if drawn or discussed: ________

This reef was made up where I poisoned with an abundant growth of coral heads in water 2 to 10 ft deep with narrow ~~to~~ channels.

Following fishes measured then discarded.

Acanthuridae
150-1
140-1
90-1
80-1
(15 not picked up)

Holocentridae
130-11
110-111
100-111
90-1
60-1

Mullidae - yellow streaked
260-1
210-11
180-1
170-~~||||~~ ~~||||~~ 1
160-~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ 111
150-~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ ~~||||~~ 1111
140-~~||||~~ ~~||||~~ ~~||||~~ 1
130-1111
120-11
(6 not picked up)

Scarus
220-1
~~210-1~~
190-11
180-1
160-111
140-1

Lutjanus
150-1
140-1111
130-11
120-11

Epinephelus
130-1; 100-1

over

on this reef I collected specimens of a globular seaurchin, with orange spines using an algae as a shade. Dr. Taylor identified it as ~~Procolcella~~ Pocockiella. This was a flat small algal growth, pale gray green - about 1/2 & 3/4 inches across and thin as a blotter (ink).

---

15 seaurchins of above with algal shields lost off.
1 - sea cucumber
1 - 12 rayed starfish
1 - Tridacna - brown mantle
2 - slate pencil sea urchins

$$I = \frac{564}{20 \times 100} = \frac{564}{2000} = .28$$

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-198 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: June 3, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following fishes measured, when wrapped for shipment

Holocentridae
190-1
150-1
140-𝍸 𝍸 11
130-𝍸 𝍸 11
120-𝍸 𝍸 𝍸
110-𝍸 𝍸 1111
100-𝍸 𝍸 𝍸 11
90-𝍸
80-1111
70-111
51-60-111

Acanthuridae
160-1
150-
140-11
130-11
120-
110-111
100-11
90-111
80-11
70-𝍸 1
60-1
50-1
40-
21-30-1

Serranidae
300-1
210-11
150-11
140-
130-1
120-
110-1
100-
90-1
80-11
70-1
60-
50-
40-1

Eels (10)

Lutjanus
~~140-1~~
~~130-1~~
150-11
140-𝍸
130-𝍸
120-1

Miscellaneous
(94)

over

Pomacentridae
70- III
60- |||| |||| ||||
50- |||| ||||
40- II

Mullidae
170- I
160- IIII
150- I
100- I
90- I

Scarus
200- I
160- I
140- II
130- I
120- III
90- III

Labridae
120- II
110- I
100- II
90- III
80- IIII
70- |||| I
60- III
50- IIII
40- I
30-
20- I

Scaleless blennies
130- I
110-
100- II
90-
80-
70- I
60- |||| II
50- |||| I
40- |||| |||| I
30- III
20- I

Apogonidae
100- |||| IIII
90- |||| |||| |||| |||| III
80- ||||
70- |||| ||| I
60- ||||
~~50- ||||~~
40- III
30- I

1 - globular starfish orange spined

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-209 Sta. No. _____

State or Country: Eniwetok Atoll

County: Rumit ds - reef ax City: _____

Locality: ocean side

_____

Drainage: _____ Date: June 7, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: 2 ft Depth of water: _____

Method of capture: Face mask

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Saw a large Manta ray - about 8 feet across just 100 ft off shore in 10 ft of water but near surface.

The starfish was yellow orange spined.

4-10.00
150
560.00

Now [illegible]

C R O S S R O A D S   J U N I O R

TU 1.8.5

June 7 46

Page one

- -

- BOWDITCH CHIEF LANDS RECORD-BREAKING (?) BARACUDA -

(Exclusive by Special Correspondent to AGS-4)

Eniwetok: James H. Norton, CMoMM of the USS BOWDITCH, using a live Spanish Mackarel as bait, landed a 61 inch Baracuda Wednesday, June 5. The weight of the fish was estimated at approximately 65 pounds. The world's record according to the World Almanac is listed at 60½ inches.

Chief Norton states that the fish took at least 300 feet of line in an effort to free itself. After a 25 minute fight the Chief finally succeeded in bringing it alongside and it was gaffed at the gangway. He also states that he isn't satisfied and hopes to land"a bigger one someday in the near future".

Dr. Schultz of the National Museum, Washington, D.C., took motion pictures of the fish.

- -

London: Britain's war-time prime minister Winston Churchill had some caustic things to say about Russia in the House of Commons today. Churchill says that if seeds of World War III are being sown anywhere they are being sown in eastern Europe. Prime Minister Attlee speaking much more moderately said only that he hopes what he called "our Russian friends" could be led to a better understanding of ways of democracies.

Churchill's remarks brought angry replies from Communist members of Parliament. One of them shouted, "The almighty dollar is deciding Britain's foreign policy. If there is a menace to world peace today it is not coming from the east but the west."

Chicago: In one of the worst tragedies of its kind 58 persons died last night when fire swept the 22 story Masse Hotel in downtown Chicago. Some of the victims leaped to their deaths in panic from the upper floor rooms.

Washington: President Truman stepped into the Maritime dis-

1 barracuda

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-210 Sta. No. _____

State or Country: Eniwetok atoll

County: At Berwditch anchorage of

Locality: Eniwetok ~~atoll~~ off island

Drainage: _____ Date: June 6, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 10ft. Depth of water: _____

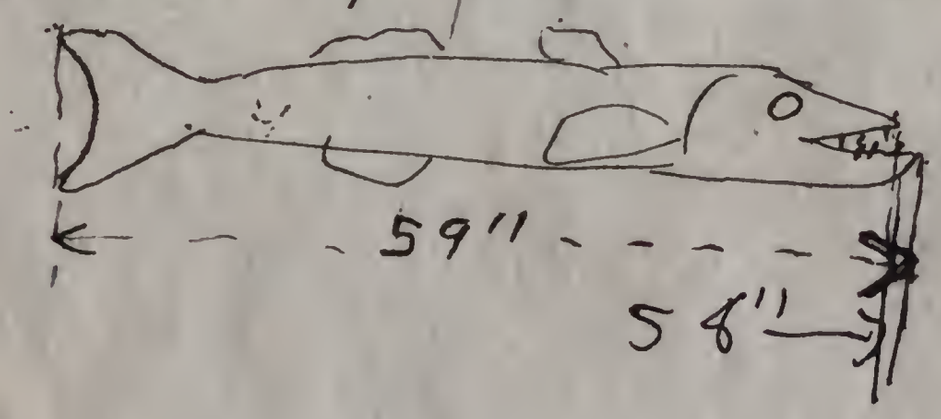
Method of capture: Line with bait on rod and reel.

Collected by: James H. Norton - C MoMM. USN.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This barracuda measured 59" total length, and 58" tip of snout to end of tail



~~Still~~ pictures taken on film ## 4 black & white.

1-pelagic ~~fish~~ seahorse

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-212 Sta. No. _____

State or Country: Bikini Atoll

County: Bikini Lagoon 5 miles, north, west

Locality: of Eniyu Is.

Drainage: _____ Date: May 3, 1946

Water: _____

Vegetation: _____

Time: 2 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 1 fathom Depth of water: _____

Method of capture: Plankton net

Collected by: Dr. Martin Johnson.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

172 fishes preserved ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

few invertebrates

Acc. No. _____ Tag No. S-46-213 Sta. No. _____

State or Country: Rongelap Atoll

County: Arbor dls. City: _____

Locality: ocean reef at western end

Drainage: _____ Date: June 16, 1946

Water: _____

Vegetation: area fished about 50 feet by 100 among poor growth of coral Alme: _____

Bottom: Coral rock, sand,

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: to 4 ft. Depth of water: _____

Method of capture: 20 lb. Cube root.

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The reef was composed of low coral growths and a few large shallow pools with sandy bottom. Because the currents carried the cloud of poisons out to sea so rapidly & consicles the days work a poor one.

Three skulls, the domed ones, Pteroscyes, were found and turned over to Dr. Morrison.

The following fishes were measured, then wrapped for shipment.

Eels (36)	Scales blennies 101-110-1	
miscellaneous (75)	mullidae 160-1 120-1	Holocentrus 70-1

Acanthuridae
111-120-1
~~109~~
110-HH 11
100-HH HH HH 1111
90-HH HH HH HH HH
80-HH HH HH HH 11
70-
60-1
50-
40-1

(76)

Apogonidae
80-1
70-11
20-11

(5)

Scarus
160-1
140-1
130-1
120-1
110-11
100-1
80-1

(8)

Labridae
110-11
100-11
90-1111
80-HH 1
70-1111
60-1111
40-1111
30-HH 111
20-11

(36)

Pomacentridae
80-1111
70-111
60-11
50-HH 1
40-1
30-1111
20-1

(21)

Serranidae
130-1
120-11
110-1
100-111
90-1
80-1
70-1
40-1

(11)

$$I = \frac{272}{16 \times 33} = .507$$

(528)

126 fishes preserved. ✓

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-214 Sta. No. _____

State or Country: Marshall Rongelap Atoll

County: Arbor dsland City: _____

Locality: high tide pool on ocean side on rock beach

Drainage: _____ Date: June 16, 1946

Water: _____

Vegetation: Area fishes 5 by 40 feet.

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 8 inches Depth of water: 8 inches

Method of capture: 3 lb. Cube root

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Some big waves may have washed a small percentage of the blennies out of the two pools poisoned.

One labrid fish had its head with numerous black spots, extending back to anterior part of dorsal fin and on base of pectoral fin; body pale pinkish to white with two large orange blotches along back, the first one near middle of length of body, 2nd near last third of dorsal fin length; above each orange spot mostly on dorsal fin an ocellate blueish-black spot encircled with whitish blue line; pectoral pale pink; caudal distally beyond basal black bar, pale pinkish

Head and one fin cut for identification.

Fish measured then wrapped for shipment. —

Labridae	Pomacentridae	Mugilidae
50 - III	50 - I	50 - |||| |||| |||| III
40 - I (9)	40 - I	40 - |||| |||| |||| |||| |||| |||| ||| III (51)
30 - III	30 - I (5)	
20 - II	20 - II	

Kyphosidae	Scalelessblennies
40 - |||| III	60 - IIII
30 - |||| III	50 - |||| IIII
20 - |||| (21)	40 - |||| ||||
	30 - |||| |||| IIII (49)
	20 - |||| |||| II

$$I = \frac{126}{22.2} = 5.68$$

497 fish preserved. few invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-215; 229, 230 Sta. No. _____

State or Country: ~~Ent~~ Rongelap atoll

County: Eniaetok dls. City: _____

Locality: Lagoon reef at north end.

Drainage: _____ Date: June 17, 1946

Water: _____

Vegetation: Coral and algae in moderate abundance. Time: 9 to 12:30

Bottom: Area fished and searched about

Shore: 100 feet by 300 feet urrient: _____

Distance from shore: _____ Tide: low

Depth of capture: to 7 feet Depth of water: to 7 feet

Method of capture: 20 ~~25~~ lb. Cube mat

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Some Mollusks were turned over to Dr. Morrison.

S-46-229 - Variola louti - 360 mm.
S-46-230 - Tylosurus - eaten off near middle of length by a shark.

The following fishes were measured when wrapped for shipment.

Holocentrus	Miscellaneous	Apogon
131 - 140 - 1	(154)	80 - 1
130 - 1		70 - ⧻ ⧻ 1
120 - ~~⧻~~ (41)	Eels 53	60 - ⧻ 11
110 - 1111		50 - 111 (35)
100 - ⧻ 11		40 - ⧻ 1
90 - ⧻ 111		30 - 1111
80 - ⧻ ⧻ 111		20 - 111
70 - ⧻ 1		
51 - 60 - 11		
~~50~~		

Acanthuridae

150-1
140-1
130-1
120-1
110-11 (63)
100-11
90-1111
80-𝍸 𝍸 𝍸 11
70-𝍸 𝍸 𝍸
60-𝍸 1111
50-𝍸 11
40-111

Scarus

260-1
230-1
220-11
180-1
160-1
120-1
100-1
90-11
80-11
60-1 (14)
40-1

Pomacentridae

80-𝍸 𝍸 1111
70-𝍸 𝍸 𝍸 1
60-1111
50-111 (34)
40-11
30-111
20-1

Lethrinidae

130-11 170-1
120-111 (7)
110-1

Labridae

140-1
130-1
120-11
110-111
100-111
90-𝍸
80-𝍸 1
70-𝍸 𝍸
60-𝍸 11
50-𝍸
40-111
30-11 (49)
180-1

Echinocheilus

130-11
120-
110-1111
100-1111
90-1
80-1 (17)
70-111
40-11

Mullidae

220-1
210-1
190-11
180-11
170-1111
160-11
140-1 (24)
120-1111
110-111
100-1111

$$I = \frac{497}{3300} = .150$$

1 - discarded
787 fishes preserved,
788 total

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-216 Sta. No. _____

State or Country: Rongelap atoll

County: Eniburbar island City: _____

Locality: northeast end next to Eniburbar Channel; ocean reef and high tidal channels.

~~Drainage:~~ Area fished about Date: June 18, 1946

~~Water:~~ 50 by 300 feet.

Vegetation: _____

Time: 10 to 1 P.M

Bottom: _____

Shore: _____ Current: moderate

Distance from shore: _____ Tide: low

Depth of capture: to 3 ft Depth of water: to 3 ft

Method of capture: 20 lb. cube net

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef consisted of a series of shallow solution channels and moats, or pot holes with a growth of coral about 1 ft high 25 feet out and beyond. This coral was luxuriant but very short. The surf broke into these channels and surged back and forth.

The following fishes were measured, then wrapped for shipment.

Holocentridae
81-90-111
100-11
120-1

Echinothelas (41)
40-1
50-1
70-IIII 1
80-11
90-IIII
100-IIII IIII 11
110-IIII 1
120-1111
130-11
210-1
260-1

Miscellaneous (85)

Eels (34)

Apogonidae
70-1

Scaleless blennies

11-20 - ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||
30 - 163
40 - 100
50 - ~~46~~ 75
60 - 28
70 - ||||| ||||| ||||
80 - ||||| ||||| |||||
90 - ||||| |||||
100 - ||||| ||||| |
110 - ||||| |||||

464

Acanthuridae

50 - |||
60 - ||||| |||
70 - ||||| |||||
80 - ||||| |||
90 - ||||| |
150 - |

36

Scarus

140 - ||
120 - |

Kyphosidae

20 - ||
30 - ||||| ||||| |
40 - |||||
50 - |||

21

Mugilidae

50 - |||
40 - ||

60 -

Labridae

20 - ||
30 - ||||
40 - |||||
50 - ||||| ||||
60 - ||||| ||||| ||||| ||||| |||||
70 - ||||| ||||| ||||| |
80 - ||||
90 - ||
100 - |
110 -
120 - |
160 - |

70

Pomacentridae

20 - ~~20~~ ||
30 - ||||
40 - |||||
50 - |||
60 - ||||
70 - ||

120 - |
140 - |

21

$$I = \frac{788}{17100} = \frac{788}{1700} = .464$$

175 discarded (fishes) ✓
~~344~~ 344 fishes preserved ✓ few invertebrates
419
594

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-217, 218, 219 Sta. No. _____

State or Country: Rongelap Atoll

County: Eniybarbar Is City: _____

Locality: Shallow pond like isolated tidal pool at southern end of Eniybarbar Is.

Drainage: _____ Date: June 18, 1946

~~Water~~: area fished 100 by 100 feet.

Vegetation: _____

Time: 10AM & 1 P.M

Bottom: _____

Shore: _____ Current: None

Distance from shore: _____ Tide: low

Depth of capture: to 12 inches Depth of water: to 12"

Method of capture: 5 lb. cube root

Collected by: L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This high tidal pond was shallow and isolated with about 15 feet of its edges supplied with ~~coral rock~~ & beach rock fragments from small rubble to slabs 4 feet in diameter; piled not over a foot deep. The center of the pond was solid and pavement-like.

The following fishes were counted but not preserved and not measured.

Blue colored damsel fish - Turning gray in formalin - 100

Brown-orange tinged grouper - 50

Labrid with large black spot dorsally on Caudal Peduncle 25.

S-46-218 & 219 spiny lobsters 3 ♂ 0 ♀.

Following fishes measured when wrapped

Echinephelus
240-1
230-1
210-1
170-1
160-1
150-1
140-1
130-11
120-111
110-HH 1111
100-11
90-HH
80-11
70-1
60-1
50-11
40-111
(37)

Holocentrus
160-111
140-1
110-1
90-1
(6)

8 carus
130-1
120-1

Mugilidae
150-1
100-1
90-1

Lutjanus
190-1
130-1
120-1

Labridae
120-HH
110-1111
100-HH 111
90-HH HH HH 11
80 HH HH
70-HH HH HH 111
60-HH 11
50-1
(70)

mullidae
110-111
100-HH
90-HH 1
(18)
?80-1111

Apogon
70-1
60-1
50=
40=
30-111
20-111
(8)

Scaleless blennies
130-1
120-HH 111
110-1111
100-HH
90-HH HH HH 1
80-HH HH HH
70-111
60-1
50=
40-1
30=
(34)

acanthuridae
60-1
50-11
40-111
(6)

Eels 21

miscellaneous
(54)

Pomacentridae
140-1
130-111
120-1
70-1
60-HH HH HH HH HH HH HH HH HH HH HH HH HH HH HH 111
50-HH HH HH HH HH HH HH HH HH HH HH HH HH HH HH
40-HH HH HH 1111
30-HH 111
20-1
(137)

$$I = \frac{594}{33 \text{ by } 33} = \frac{594}{1089} = .545$$

635 fishes preserved

FIELD DATA RECORD a few invertebrates
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-220 Sta. No. _____

State or Country: Rongelap atoll

County: Mellu dsland City: _____

Locality: Lagoon reef near center of lagoon shore

Drainage: _____ Date: June 19, 1946

Water: _____

Vegetation: Area fished 100 by 300 feet

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Cube root 20 lb.

Collected by: L. P. Schultz and Earl S. Herald

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef was composed of scattered coral heads, not very abundant, channels between them were sand bottom.

—The little labrid with double blue lines bordered by blackish line, has green color between these blue streaks; ventrally the color is blue on abdomen; cheek red; pectoral fin pink, base of pectoral red; basal half of dorsal fin orange, distal half colorless, eye pink (iris); distal half of caudal pale bluish translucent, then a reddish bar, ~~[illegible]~~ with a purple tint, base of caudal blue-green;

The similar labrid with a black spot on upper side of caudal peduncle has a green caudal fin & may be another species? Bright

The following fishes were measured, then wrapped.

Labridae

30-1
40-𝍸 1111
50-𝍸 𝍸 11
60-𝍸 𝍸 1
70-𝍸 𝍸 𝍸 𝍸
80-𝍸 1111
90-𝍸 1
100-11
110-11
120-1
130-11

(15)

Scarus

70-𝍸
80-111
90-11
100-1
130-1
160-1

(13)

Pomacentridae

30-𝍸 1
40-1111
50-𝍸 𝍸 𝍸 1
60-𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 111
70-𝍸 111
80-

(92)

Scaleless blennies

50-1
60-
70-11
60-1

(4)

Mullidae

70-11
80-11
90-𝍸 1
100-11
110-1
120-
130-1
140-1

(15)

Holocentrus

60-1
100-1111

(5)

Eels

(76)

Miscellaneous

(207)

Apogonidae

30-111
40-11
50-1
60-𝍸 1
70-𝍸

(17)

Acanthuridae

50-11
60-111
70-𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 1111
80-𝍸 1111
90-1

(49)

Serranidae

50-1111
60-1
70-𝍸 1
80-𝍸 𝍸 𝍸 𝍸 𝍸 111
90-𝍸 𝍸 𝍸 𝍸 𝍸
100-𝍸 1111
110-𝍸 111
120-1

(82)

$$I = \frac{635}{3300} = .192$$

20 fish

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

area sling or swivel gun
nudibranch

Acc. No. _____ Tag No. 5-46-221 Sta. No. _____

State or Country: Rongelap atoll

County: Lagoon off Rongelap Island

Locality: _____

_____

Drainage: _____ Date: June 20, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Picked up on coral head

Collected by: LT. ~~Hay~~ G. ~~Kayl~~ Kaley USN

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Color when alive deep purple with white ringlike markings.

11 fishes

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-222-228; 233 to 236; Sta. No. _____

State or Country: Rongelap atoll

County: Mile off Rongelap City: ~~C~~ Island

Locality: at Bowditch anchorage in lagoon

Drainage: _____ Date: June 16-28, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hook and line off Bowditch

Collected by: Crew of Bowditch, Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

3 sharks - Eulamia melanopterus &
1 - Holocentrus Carcharinus
3 - Snappers.
2 snappers
1 Caranx
1 Stromateid

339 fishes preserved

FIELD DATA RECORD

Division of Fishes

U. S. National Museum

Acc. No. _____ Tag No. S-46-231 Sta. No. _____

State or Country: Rongelap atoll

County: Kabelle Is. Lat City: _____

Locality: North end: Lagoon reef

Drainage: Area fished 50 by 100 ft Date: June 20, 1946

Water: _____

Vegetation: Coral Heads rather abundant

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: to 6 ft. Depth of water: to 6 ft

Method of capture: 10 lb. Cube

Collected by: L. P. Schultz and Earl S. Herald

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef was very narrow, next to a channel of deep water between the two islands. The coral growth ~~was~~ abundant but short. The channel was 10 to 15 feet deep

Tag S-46-231 was floted with a small fish that had a white snout; a wide vertical bright orange band from nape past eye and rear of head to isthmus and breast; an ocellate black spot in distal part of dorsal fin anteriorly, bordered by yellow-orange. The orange bar at rear of head was bordered posteriorly by a narrow black band dorsally, also the orbit was black bordered posteriorly.

over

Following fishes measured when wrapped.

Apogonidae (3)
30 - II
60 - I

Acanthurus (4)
130 - I
90 - I
80 - I
50 - I

Serranidae (14)
130 -
120 - I
110 -
100 - III
90 - III
80 - III
70 - II
60 -
50 - I
40 - I

Pomacentridae (70)
90 - ## II
80 - ## I
70 - ## I
60 - ##
50 - ## IIII
40 - ## ## I
30 - ## ## ## III
20 - ## III

eels (50)

Miscellaneous (35)

Mugil (3)
140 - II
130 - I

Mullidae (4)
100 - I 150 - I
60 - I
50 - I

Holocentrus (5)
~~110 - II~~
~~130 - I~~
110 - I
100 - I
80 - II
60 - I

Labridae (80)
100 - III
90 - II
80 - IIII
70 - ## ## III
60 - IIII
50 - ## ## ## II
40 - ## ## ## ## II
30 - ## ## IIII
20 - I

Scarus (71)
80 - ## IIII
70 - IIII
60 - ## IIII
50 - ## ##
40 - ## ## ## I
30 - ## ## ## ## I
20 - III

$$I = \frac{339}{17 \text{ by } 33} = \frac{339}{561} = .604$$

5 fishes

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-232 Sta. No. _____

State or Country: Rongelap atoll

County: _____ City: _____

Locality: 2 miles west of Bush Island. in lagoon

Drainage: _____ Date: June 21, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 20 fathoms Depth of water: _____

Method of capture: 18" dredge

Collected by: Dr. W. R. Taylor

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

752 fishes preserved
219 " discarded
971 total

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-237, 243, 244 Sta. No. _____

State or Country: Rongerik Atoll

County: Bock dsland City: _____

Locality: Ocean reef near middle of sandspit
Area fished 100 by 300 feet.

Drainage: _____ Date: June 27, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: to 8 feet Depth of water: _____

Method of capture: 20 lb. cube root

Collected by: L. P. Schultz and E. S. Herald

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Bock dsland ocean reef consisted of a ledge of beach rock, inside of which were pools connecting with ocean side of reef. These pools at low tide 6 feet deep, then on outside of beach rock were deeper pools down to 10 to 15 feet deep. Coral growths not very abundant, but the rocks were well crevices sandy bottom in deeper parts of pools.

A large Caranx, with 3 or 4 yellow spots, on side, 410 mm std. length, was not saved.

Other fishes discarded were measured as follows. Siganus 260-1 (4)
160-1
150-1
140-1 over

Mullidae - yellowline one

151-160 - |
150 -
140 - |||
130 - |
120 - |||
110 - 𝍸 𝍸 𝍸
100 - 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 |
90 - 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 ||
80 - ||

(circled: 123)

Acanthuridae

110 - ||
100 - 𝍸 |
90 - 𝍸 𝍸 𝍸 𝍸
80 - 𝍸 𝍸
70 - ||||
60 - ||
50 - |

(circled: 45)

Scarus

290 - |
210 - |
130 - |||
110 - |

(circled: 6)

Epinephelus

360 - |
290 - |
270 - |
150 - |
120 - |
100 - |
70 - |
60 - ||
50 - ||
40 - |

(circled: 12)

Lutjanid with yellow spot base soft dorsal on back.

160 - |||
150 - 𝍸
140 - 𝍸 ||
130 - 𝍸 ||||
120 - |||
110 - |

(circled: 28)

The following fishes were measured when packed for shipment.

Scarus

71-80 - |
90
100 - ||
110 - |||
120 - |
130 - ||
140 -
150 - |||
160 - ||||
170
180 - |
190 - |
210 - |
250 - |

(circled: 20)

Epinephelus & Serranidae

230 - |
220 - |
190 - |
170 - |
140 - |
120 - ||
110 - ||
100 - |
90 - ||
80 - ||||
70 - |
60 - ||
50 - 𝍸 𝍸 𝍸 𝍸 |
40 - ||||

(circled: 44)

Mullidae

180 - |
150 - |
120 - |||
110 - 𝍸 𝍸 |
100 - 𝍸 𝍸 𝍸
90 - 𝍸 𝍸 𝍸 𝍸 𝍸 ||
80 - ||
70 - |||
60 - |
50 - |

(circled: 65)

Mullidae

20 - 𝍸 |
30 - 𝍸 𝍸
40 - 𝍸 |
50 - ||
60 - |

(circled: 25)

Holocentridae

280 - |
200 - |
170 - |
160 - |
150 - |
140 - |
100 - ||
90 - ||
80 - |
70
60 - |

(circled: 12)

Siganus

160 - |
140 - |||

(circled: 4)

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-237 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Miscellaneous (6) (287)

Scaleless blennies
11-20-1
30-~~||||~~ ~~||||~~
40-||||
50-||
60-||
70-|||
80-||
100-||
110-||
120-|
(29)

Acanthuridae
50-~~||||~~ ||
60-||||
70-~~||||~~ |||
80-~~||||~~ ~~||||~~ ~~||||~~ |
90-~~||||~~ ~~||||~~
100-||
110-|
120-|
130-||
140-|
150-|
(53)

Labridae
20-|||
30-|||
40-~~||||~~ ||
50-~~||||~~ ~~||||~~ |||
60-~~||||~~
70-~~||||~~ ~~||||~~
80-~~||||~~ |||
90-~~||||~~ ||
100-~~||||~~ ||||
110-||
120-||
(69)

Eels 78

Pomacentridae
90-||
80-|
70-|
60-|
50-||
40-||
30-||
(11)

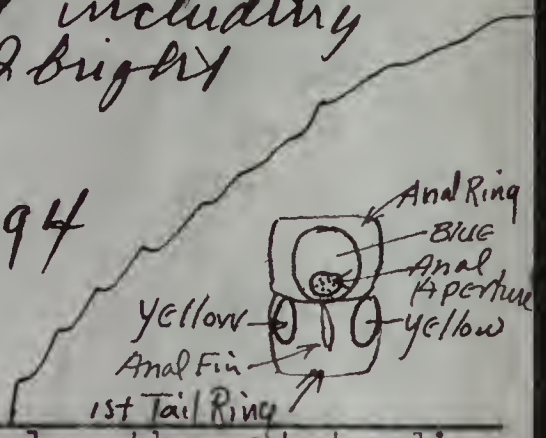
Apogonidae
20-~~||||~~ ||||
30-~~||||~~ ~~||||~~ |
40-~~||||~~ ~~||||~~ |
50-||||
60-||||
70-~~||||~~ |
80-|
(46)

over

tin tags tied as
S-46-237 - Variola louti - 420 mm.
S-46-243 - Epinephelus? 320 mm
S-46-244 - Carenx

Corythoichthys fasciatus-color notes by Herald - area around and including anus bright purple with 2 bright orange spots.

$$f = \frac{971}{33 \times 100} = \frac{971}{3300} = .294$$



Corythoichthys fasciatus male and female: the outstanding character of both of these specimens is the round brillian blue spot which covers only the ventral surface of the anal ring, and not extending upon trunk or tail rings; equally interesting is the presence immediately posterior to this blue area, of two bright yellow small spots which are on the first tail ring and with one on each side of the anal fin. In both specimens the small area immediately surrounding the anal aperture is darker blue than the rest of the blue ~~dif~~ area. Both male and female had pigmented dorsals, the pigment being light red andnearly identical to that covering the dorsal part of the snout.

Blue-Cheek Striped ~~Clinus~~ Elacinid (sand-hole inhabiting form often observed on the lagoon beach area of Rongelap Island).

(1) The cheek stripe is a brilliant, possibly irridescent blue with a narrow black border.

(2) A brilliant yellow diffuse area beneath eye, on cheek, mandible under jaw and on chin.

(3) The two lateral oblique stripes in the tail are rose ~~yellow~~ orange.

(4) This color scheme should be checked against fresh material, as the series available for these notes had been preserved for about 4 days and some of the color had faded. ESH

393 fishes preserved
143 fishes discarded
536 total

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Isopods, etc.
2 octopus, etc.

Acc. No. _____ Tag No. S-46-238 Sta. No. _____

State or Country: Rongerik Atoll

County: Latoback ds. City: _____

Locality: Area fished in lagoon reef 100 by 200 feet.

Drainage: _____ Date: June 28, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: to 10 feet Depth of water: _____

Method of capture: 20 lb. cube root

Collected by: L.P. Schultz & E. S. Herald

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This reef had an abundant growth of corals, and at its outer edge dropped off into 10 feet of water with sand bottom. Practically no channels in corals except a few wide ones causing a break in the reef.

Following fishes discarded when measured.

Acanthurus	Pomacentridae	Epinephelus
70-II	40-I	260-I
80-~~IIII~~ III	50-III	160-I
90-~~IIII~~ I	60-~~IIII~~ IIII	140-I
150-I	70-~~IIII~~ ~~IIII~~ ~~IIII~~ IIII	120-I
	80-~~IIII~~ ~~IIII~~ ~~IIII~~ III	110-I
	90-I	100-II
		90-I
		80-I
		40-I

(17) (51) (10)

Holocentrus	Scarus
100-II	170-II
90-I	
80-I	

(4) (2)

Discarded fishes

Neomyxus chaptalii
150 - 1
160 - 1
170 - 1
180 - IIII
190 - II
200 - IIII
210 - 1
220 - II
230 - III
240 - III 1
(27)

Mullidae
110 - 1
90 - 1
(2)

On the mouths of Neomyxus chaptalii were on a few specimens 3/4 in. long isopods.

4 of these preserved, others fishes preserved with isopods still in their mouths.

about 30 Pomacentrids seen but not recovered.

The following fishes measured when packed.

Holocentridae
61-70 - III II
80 - III
90 - IIII
100 - II
110 - III
(21)

Apogonidae
20 - III
30 - III III III
40 - III III II
(30)

eels (44)

Pomacentridae
40 - III
50 - III 1
60 - III III III III 1
70 - III III III III III III III
80 - III III III
90 - III
(81)

Acanthuridae
40 - 1
50 - 1
60
70 - III
80 - III 1
90 - 1
100
110 - 1
120 - IIII
130 - II
140 - III
(22)

Scarus
50 - 1
90 - 1
100 - 1
150 - 1
170 - 1
(5)

Miscellaneous (101)

Mugilidae
140 - 1
170 - 1
190 - II
200 - III
210 - II
220 - 1
230 - 1
(13)

Mullidae
60 - IIII
70 - 1
80 - 1
90 - III
100 - III
110 - 1
140 - 1
150 - 1
(17)

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-238 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Serranidae

31-40 - IIII
80 - III
90 - III
100 - III
110 - I
120 - II
130 - I
150 - I
210 - I

(19)

Labridae

40 - I
50 - II
60 - ||||/ I
70 - ||||/ ||||/ III
80 - ||||/ I
90 - III
100 - I
110 - I
120 - I
130 - I
140 - I

(31)

Scaleless blennies

50 - I
60 - II
70 - III
80 - I
90 - I
100 - I

(9)

$$I = \frac{536}{33 \times 67} = \frac{536}{2211} = .243$$

2 fish preserved
1 discarded

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-239; 240 Sta. No. _____

State or Country: Rongerik Atoll

County: off Latoback ch. City: _____

Locality: Two feet off in 60 feet water.

_____

Drainage: _____ Date: June 28, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hooks and line, fish bait

Collected by: Crew of YMS 463

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-239 - Carangx or Stromateid
S-46-240 - Carangx " "

The following gray shark - Eulamia was discarded - a ♀ no embryos
snout tip to caudal notch 113.5 Cms.
" " " tip of tail 141.0 Cms.

591 fishes discarded
505 " preserved.
1096

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-241 Sta. No. _____

State or Country: Rongerik Atoll

County: Eniwetak Is. City: _____

Locality: Ocean reef in surf area fished 300 by 100 feet.

Drainage: _____ Date: June 29, 1946

Water: _____ and on reef

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: Schultz & Herald

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Lithothamnium ridge poisoned the poison drifting back to loose rocks near shore. This ridge was beautifully developed but surge channels were short with do deep pools at their inner ends; Corals on pavement part of reef about 6 inches high and rather scarce.

361 goatfishes with yellowish lateral band were counted on the beach but not picked up. other fishes discarded and measured were.

Epinephelus

280-1
130-1
120-11
110-1111 1

(17)

100-1
90-111
80-11
70-1

Scarus

210-1
180-1
170-11
160-1
150-

(10)

140-
130-1
120-1111

over

Fishes measured and discarded (continued)

Mullidae
(yellow lateral band

100 - ||
110 - 𝍸 𝍸 |
120 - 𝍸 ||||
130 - 𝍸 |||
140 - 𝍸
150 - 𝍸 𝍸 |||
160 - 𝍸 ||
170 - 𝍸 𝍸 |||
180 - 𝍸
190 - 𝍸 |||
200 - 𝍸 ||||
210 - ||||
220
230 - |
240 - |
250 - |

(97)

Acanthurus

60 - |
70 - 𝍸 𝍸 𝍸 𝍸 |
80 - 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸
90 - 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 ||||
100 - 𝍸
110 - |
~~140~~
~~170 - ||~~
120 - ||
140 - ||

(106)

The following fishes were measured when packed for shipment.

Acanthuridae

30 - |
50 - ||||
60 - |
70 - 𝍸 ||
80 - 𝍸 𝍸 |
90 - 𝍸 𝍸 |
120 - |||
130 - |
140 - |
150 - |
170 - |

(42)

Labridae

30 - ||||
40 - 𝍸 𝍸 𝍸 𝍸 𝍸
50 - 𝍸 𝍸 |||
60 - 𝍸 𝍸 𝍸 ||
70 - 𝍸 𝍸 𝍸 𝍸 |||
80 - 𝍸 𝍸 𝍸
90 - 𝍸 𝍸 ||||
100 - 𝍸 |
110 - |||
120 - |
130 - |
210 - |

(123)

Scarus

100 - |
110 - ||
120 - |
140 - |
150 - |||
160 - |
180 - |

(10)

eels (19)

miscellaneous
(72) (30)

Holocentridae

50 - ||
60 - ||||
70 - ||||
80 - 𝍸 |
90 - ||
140 - |
180 - |

(20)

Serranidae

40 - |||
50 - ||
60 - |
70
80 - ||||
90 - ||||
100 - ||||
110 - |
120 - ||||
130 - |
140 - ||
190 - |
220 - |

(28)

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-241 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Mugilidae

40 - 𝍸 𝍸 𝍸 𝍸 1111
50 - 𝍸 1111
220 - 1

(34)

Mullidae

100 - 1111
110 - 11
120
130 - 1
140 - 1
190 - 1
200 - 1

(10)

Pomacentridae

20 - 1
30 - 111
40 - 𝍸 𝍸 1
50 - 1111
60 - 111

(22)

Labridae

20 - 1
30 - 1

(2)

8 Caleben blennies

20 - 11
30 - 𝍸 𝍸 11
40 - 𝍸 𝍸 𝍸 𝍸 𝍸 1
50 - 𝍸 𝍸 𝍸 1111
60 - 𝍸 1
70 - 𝍸 𝍸 1111
80 - 𝍸 1
90 - 𝍸 1
100 - 1
110 - 1

(93)

$$I = \frac{1096}{100 \times 33} = \frac{1096}{3300} = .332$$

3057 fishes few invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-242 Sta. No. _____

State or Country: Rongerik atoll

County: Off Eniwetak ds. ~~City:~~ 200 yards

Locality: _____

_____

Drainage: _____ Date: June 28, 1946

Water: _____

Vegetation: _____

_____ Time: 2 hours 8-10 P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: Surface Depth of water: _____

Method of capture: Marine light at night. 2 dipnets

Collected by: Schultz and Herald

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This large number was taken because a small school of compactly swimming tiny fishes came along and swam right into one of the dipnets. Similar schools were seen off Lato-back ds. too.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Enlisted Personnel Functioning with Reef Fish Investigations (only a partial list)

Novak, Emil, S2c (3156972)
Stanley, Vernon John S2c (5675964)
Rutherford, Leslie Clendemon S2C (3156174)
Selzer, Arthur Jay S2c (7910941)
Dreyer, Lowrence Morton, S1C (5811719)
Tarzwell, Guy Leroy S2C (3155260)
Swisher, Richard Thomas 2cS (3156363)
Steele, Donald Lee, F2C (3726039)

FFNMH: 8.75

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-245 Sta. No. _____

State or Country: Boku Pass, Bikini Atoll

County: Marshall Islands City: _____

Locality: In 7 fathoms at dropoff to deeper part of channel

Drainage: _____ Date: 8 July 1946

Water: clear to bottom (sharks easily visible at bottom)

Vegetation: occasional corals

Time: 1900-2100

Bottom: _____

Shore: _____ Current: Very strong

Distance from shore: 300 yards Tide: _____

Depth of capture: Surface light Depth of water: _____

Method of capture: Dipnets

Collected by: ESHerald and Seaman

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

8 Polydactylus sexfilis (Val)
1 Goatfish
1 Spratuloides delacatulus (with eggs?)
22 Atherinids (small)
2 Carangids (small: 5 mm)

35 Fishes Total (4 net-man hours)

8 3/4 fishes per hour average;

Needlefish were fairly common in the area of the light, but did not succeed in capturing any specimens. One school of mullet came through the light, but again no success. At 2100 the sea was becoming quite rough, so a watch was maintained until 2200 As only one or two fishes had appeared during that time, the light was taken in.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

SPEAR

Acc. No. _____ Tag No. S-46-246 Sta. No. _____

State or Country: Bikini Atoll; coral reef in lagoon,

County: ½ mile directly south of ~~City~~: Amen Island

Locality: This was an isolated coral area surrounded by much deeper water

Drainage: _____ Date: 10 July 1946

Water: Very clear for at least 7 fathoms

Vegetation: Large coral clumps separated by sandy areas

_____ Time: 1130-1500

Bottom: _____

Shore: _____ Current: 1 mph

Distance from shore: _____ Tide: _____

Depth of capture: 42-48 feet Depth of water: same

Method of capture: Breaking of coral for sorting in boat

Collected by: V.E.Brock; E.S.Herald; T. Kohler

Preservative: Formalin 10% Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 Pseudochromid
3 Dascyllus sp. (two stripe)
50 Dascyllus aruanus (three stripe)
18 Gobiodon
4 Gobies (very black, 10 mm)
6 Gerrids (blue, 10 mm)
1 Caracanthus

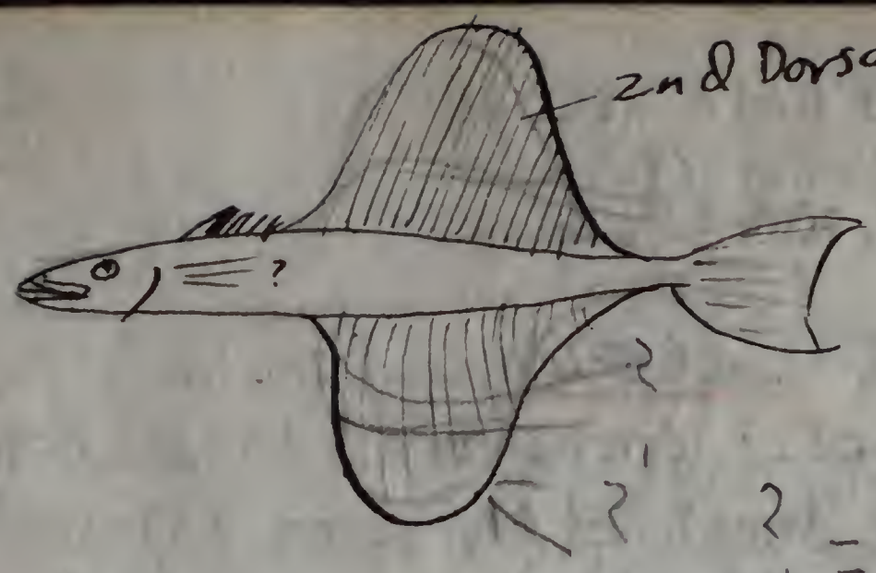
SPEARED

1 Ctenochaetus strigosus (150 mm?)

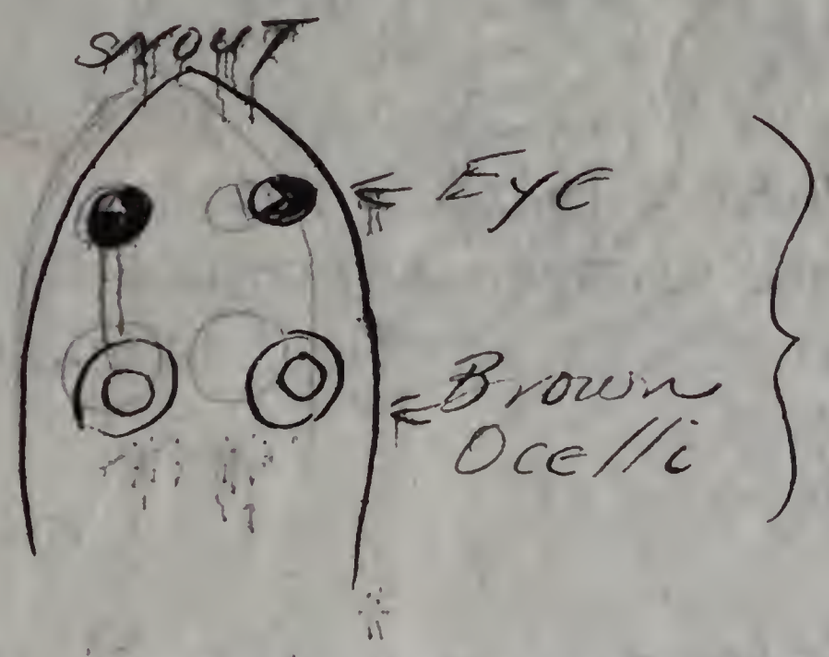
1 Large Tridacna (3 feet across shell) brought up and cleaned; it contained a commensal crab with eggs which was preserved (Correction: not a crab but a shrimp).

ESH observed and followed an unidentified pipefish for about 10 minutes; it appeared to be a sand inhabiting form, andits movements were strongly suggestive of an eel. It was characterized in morphology by gray body color and fine black reticulatio ns---and it was a very long-snouted species, the snout being nearly as long proportionally as that of Syngnathus louisianae.

Diving Equipment: Lambertson and Browne Units together with shallow water line unit



Family — ?
Genus — ?
Species — ?
? = Electridae E.?



? = Specimen of Plesiotrie

The above are very rough diagramatic sketches of two fishes which were observed; the top individual was most peculiar because of the location of the dorsal and anal exactly opposite of each other---and one being the duplicate of the other; the relative length of the two fins is not exagerated in this sketch although the tail is probably longer than indicated. The total length of the fish was no greater than 6-8 inches, and he lived in a hole about 4 inches in entrance diameter in a sandy area. When alarmed by the slightest movement, he would instantly dive for the hole, only to return whenever the disturbance was removed.

The second sketch represents a Parapercid which is possibly a deep water relative of the common species so often taken in the shallow reef areas. It was noticeable because of the large brown ocelli on the top of the head and behind the eyes---as indicated.

FIELD DATA RECORD — SPEAR

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-247-248 Sta. No. 247

State or Country: Bikini Atoll; submerged coral head 9500 yds at 260° from S. end of Bikini Island
County: _____ City: _____

Locality: 11° 35' 50" North Latitude
165° 28' 40" East Longitude

Drainage: _____ Date: 11 July 1946

Water: Clear to 7 fms

Vegetation: Dense Coral growths, specially fan corals

Time: 0900-1300

Bottom: _____

Shore: _____ Current: Little at Bottom

Distance from shore: 9500 yards Tide: _____

Depth of capture: 45-60 feet Depth of water: same

Method of capture: Sling Spear; Breaking up of coral

Collected by: V.E.Brock; E.S.Herald; T. Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

I. FISHES SPEARED:
1 Parrot Fish, Green 265 mm
1 Parrot Fish, Bottom Half = Black — 220 mm
1 Heniochus 170 mm
2 Sheephead-like Labrids (210 & 215 Mm)
1 Lo vulpinus (150 mm)
1 Siganid, blue spotted (160 mm)
2 Acanthurus (sp.) (yellow at bases of dorsal and anal) (145 & 150 mm).
(a) SPECIAL TAG (Metal)
1 ~~Labrid~~ Parrot Fish (brilliant blue-green) No. 248 (380mm)

II. FISHES COLLECTED FROM BROKEN CORAL
3 Dascyllus
1 Eviota
5 Gobiodon
1 Caracanthus
3 Gerrids

III. TOTAL FISHES COLLECTED: 10 (speared) plus 13 (from coral) equals total of 23

Giant Tridacnas extremely abundant; one specimen 3'4" in width collected; Rainbow runners, shite-tipped and grey sharks observed; Siganus common

Diving Equipment: Lambertson and Browne Self-contained Units together with Reg Navy Shallow water unit with lines.

EPNMH: 6

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-249 _____ Sta. No. _____

State or Country: Bikini Lagoon, aboard USS BOWDITCH;

County: Anchorage 230 About 3 miles NW of Enyu Id. City:

Locality: Exact Locality: 3 miles bearing 322 degrees from the north tip of Enyu Island.

Drainage: _____ Date: 11 July 1946

Water: _____

Vegetation: Unknown

_____ Time: 2100-2115

Bottom: Unknown

Shore: _____ Current: _____

Distance from shore: 2 miles Tide: _____

Depth of capture: Surface light Depth of water: _____

Method of capture: Hand Net

Collected by: ESHerald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Light used only for about 15 minutes at the end of which time it burned out a fuse and the bulb filled up; 2 men on dip nets---yielded

3 fishes

FRUMH: 7.5

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-250 Sta. No. _____

State or Country: Anchorage at Yurochi Island (Code

County: Name: Yuro) Bikini Atoll City: _____

Locality: _____

_____

_____

Drainage: _____ Date: 12 July 1946

Water: Clear

Vegetation: Small growth of fine filamentous seaweed between isolated coral heads Time: 1900-2100

Bottom: Mostly sandy

Shore: _____ Current: Strong

Distance from shore: 300 yards Tide: _____

Depth of capture: Surface light Depth of water: 30-40 feet

Method of capture: Dipnets under search lights

Collected by: ES Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

3 Needlefishes
27 Atherinids

30 Fishes
4 Net Manths
1½ fish/hr Avg.

Two large Fistularia (or Aulostomus?) came swimming through the beam of light; they could not be caught in the dip mets.

Inasmuch asthe submarine light had been broken as it was being loaded upon the YMS 463, theonly light available was the searchlight of the ship---these, one on each side, were focusued as much as possible, and directed along the side of the ship. Seaman Rutherford developed a falling technique for catching the fishes listed above--- with feet on the outer rail and another man holding him by the belt---he would fall fowrard with the net over his head---at a 45° angle from the ship he would bring the net crashing down on top of some unfortunate future USNM specimen. All in all, the technique was quite effective.

The reason for the poor yield in the number of fishes coming to the light was not apparent until the next morning when ESH swam ashore---for then with face mask the barren natureof the bottom was quite evident.

The three needlefishes were between 340 and 360 mm in length; the stomachs were opened, and one specimen was found to contain 3 crustaceans, probably ~~isopods~~ Gonodactylus, a Squillid; another contained two of the small atherinids of the same type as the other 27 specimens collected at this station; and the third contained some decomposed material which looked as though it might originally have been the bodies of the same Atherinids mentioned above.

According to Dr. Martin Johnson, the above mentioned Gonodactylus is a bottom inhabiting form, and is not known to come to the surface---and to his knowledge it has not been taken in plankton hauls---consequently, the needlefish must have gone to the bottom to pick up this Squillid. This is of interest in connection with the ____ mm parapercid found in the stomach of a ____ mm needlefish at station _____, for parapercids are considered to be almost entirely bottom forms---and the local forms have not been observed at any time to be more than a few inches above the substratum.

yards
Area Poisoned: 20 x 100 FIELD DATA RECORD POISON
Lbs Cube: 15 lbs Division of Fishes
Index: 391/2000 = .198 U. S. National Museum
Personnel: ESH plus 4.

Acc. No. ---------- Tag No. S-46-251 Sta. No. ----------

State or Country: Bikini Atoll

County: Ocean reef City: ----------

Locality: Outside reef of Yurochi (Code Name, Yuro) Island--near Center of Island; the Lithothamnium ridge is about 1 mile out, so the station was run near the island in one of the deeper areas

Drainage: ---------- Date: ----------

Water: ----------

Vegetation: Isolated coral heads with sandy channels between moderately abundant 13 July 1946

Time: 0830-1200

Bottom: Small to 10 ft coral heads sep by sandy areas.

Shore: ---------- Current: 1 mph

Distance from shore: adjacent Tide: ----------

Depth of capture: pizon Depth of water: 1-15 feet

Method of capture: pizon and dip nets

Collected by: E.S.Herald and 4 Seamen

Preservative: Formalin Temp: ---------- Air: ----

List of species or kinds, with tag numbers if drawn or discussed: ----------

Upon swimming into the beach on this morning, it was very evident that the area was not suitable for running a station---so began to check the outside area and foundthat most of it was also without coral---the only section have any at all was near the center outside portion of the island---hence this area was chosen.

The following are considered pertinent regarding this station: (a) eels were notable for their absence---for the Apodal forms were only 9 in number as compared with 391 fishes collected. Could it be possible that eels are particularly susceptable to radioactivity---this point should be carefully checked at future stations. (b) Needlefish and halfbeaks were very abundant, but very few were collected as a result of the pizon; (c)the Acanthurid with the orange bar extending back from the opercle was in the area, but it is not believed that any were in the collection.

The following fishes were collected:

6 Zanclus coronutus
1 Platycephalid
11 Synodontids
3 Siganids
99 Acanthurids as follows:
94 Acanthurus 2-spot & C. strigosus
2 " triostegus
1 " white-tipped tail
1 Naso unicornis
1 " sp.
1 Pleuronectid
1 Porgy, common (Monotaxis grandoculis)
2 Needlefish
6 Halfbeaks
24 Dascyllus 3-stripe
5 Mullet
25 Blue Gerrids (?)
1 Scorpaenid
1 Brotulid
1 Pseudocanthid
27 Holocentrids (3 species)
8 Chaetodonts (3 species)
9 Parapercids (2 species)
25 Serranids (4 species)
17 goatfishes(5 species)
105 Pomacentrids (5 species)
17 Parrot fishes (3 species)
3 Scaleless blennies (2 species)
9 eels (3 species)
16 Apogon (3 species)
70 Labrids (11 species incl exc Gomphosus series)
4 fishes, spec unknown (2 species)

---

397 Total Specimens

65 Total Number of Species

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

SPEAR

Acc. No. _____ Tag No. S-46-252 Sta. No. _____

State or Country: Bikini Atoll

County: _____ City: _____

Locality: Coral Head within the Atoll at the following position: 11° 33' 13" N. Lat.; 165° 28' 39" E. Long.

Drainage: _____ Date: 13 July 1946

Water: Clear

Vegetation: Coral Head

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 30-45 feet Depth of water: 30-45 feet

Method of capture: Spear and sling

Collected by: Vernon Brock ACCOmpanied by Emory & Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

1 Nazo without snout, 350 mm hexacanthus ?)
1 Nazo with snout, ~~350~~ 259(?) mm 170 mm
1 Zanclus, 140 mm
1 Epibulus insidiator, about 200 mm
1 Serranid, 250 mm
1 Emmelichthyid, 205 mm.

---

6 fishes, Total

Area: 50 x 100 yards FIELD DATA RECORD POISON
Poison: 20 lbs Cube Division of Fishes
Index: 559/5000 = .110 U. S. National Museum
Personell: ESH plus 4 EM

Acc. No. _____ Tag No. S-46-253-254-255 Sta. No. 256-257-258

State or Country: Bikini Atoll

County: ocean reef, deep sandy pools City: Bikini

Locality: Center of outer reef at center of island (directly out from seabee fence).

Drainage: _____ Date: 16 July 1946

Water: Not too clear; containing much suspended Mat.

Vegetation: Occasional deeper areas---ie 4-6 feet at low tide; most of reef is rock Time: 1000-1300

Bottom: Collection was made ½ way between shore and

Shore: the Lithothamnion ridge Current: 2mph

Distance from shore: _____ Tide: _____

Depth of capture: 1-6 feet Depth of water: same

Method of capture: Poison and dipnets

Collected by: ESHerald and 4 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Tin Tag #254 970 mm male Fistularia
255 950 mm female " } another large Specimen with these without tag —
256 660 mm female Belonid
257 690 mm female "
258 650 mm female "

FOOD HABITS:

No. 254: contained 1 goatfish, 110 mm and another fish 90 mm disintegrated beyond recognition No eggs visible or ovary, so considered to be a male, Fistularia

No. 255: Backbone and tail of a fish in the gut--- meat on fish entirely lacking---measured 80 mm to caudla peduncle; fin rays of ttail30 mm in length; this female contained lotza eggs. The eggs were about 1 mm in diameter and were contained in an ovary 23 x 15 x 330 mm (TL of fish 950 mm) Fistularia

No. 256: In the gut was a 105 mm Parapercid of the common species collected at most reef stations; this is interesting in that this fish is rarely observed more than a few inches above the bottom, and the needlefish is normally a surface inhabitant. This 660 mm female had eggs in the ovary which were 2-2½ mm in diameter.

Total Collections:

1. Parrot Fishes, 66 specimens (discard 53) 45 specimens
2. Eels (4 spec) 22 (4 species)
3. Halfbeaks 54 (1 species)
4. Acanthurids 132 (7 species) (discard 58)
5. Siganids 20 (1 species) (discard 10)
6. Pomacentrids 60 (3 species)
7. Snapper (YelStr 1
8. Common Porgy 21
9. Paracirrhitus arcatus 6
10. Centropyge flavissimus 6
11. Labrids 70 (15 species as follows: 21,7,10, 11, 2, 5, 3, 4, 1,1,1,1,1,1,1
12. Holocentrids 31 (4 different species)
13 Needle fishes 5

(continued from front side of this page)

No. 257: 690 mm female had eggs in the ovary, but the gut was entirely empty.
No. 258: 650 mm female had eggs in the ovary also, but again the gut was empty.

In connection with food habits, several of the Siganids were opened, and the stomach and gut contents examined carefully. Of those examined, all were found crammed full of a single item---a member of the Chlorophyceae---of the family Caulerpaceae, exact name Caulerpa freycinettii; commonename _____ (idenitification by WmRandolph Taylor). Dr. Taylor calls attention to the fact that this is the first time that this is the first time that this species of plant has been known to be used by an foraginganimal.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Page 2

Acc. No. _____ Tag No. _____ Sta. No. S-46-253

State or Country: Bikini Atoll; outer reef of Bikini Id.

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: 16 July 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Fishes collected: continued from backside page 1

14. Epinephalus (common br spotted).....12
15. " (horizontally striped) 1
16. Goatfishes (2 species:)..... 9
17. Zanclus coronutus..... 1
18. Platycephalid..... 1
19. Aulostomid (no filamenton tail)..... 1
20. Apogon (3 species: 4, 9, 5).....18
21. Scaleless Blenny..... 1
22. Pseudochromids (opercular spot)..... 2
23. Chaetodon (3 species)..... 4
24. Puffers..... 4
25. Trunk fish..... 1
26. File Fish.(actually.trigger.fish)..... 1
27. Parapercids..... 5
28. Lizard fishes..... 2
29. Eleotrids, blue cheek stripe..... 2
30. Miscellaneious****3 octopods0)

Total Fishes Collected.....559

Total fishes discarded.....121

Total fishes remaining in collection.....438

Total Species of fishes in collection.... 65

Acanthurid breakdown (of those not discarded):

60 Acanthurus 2-spot
7 Ctenochaetus strigosus
1 Acanthurus guttatus
1 " triosetegus
3 " yellow tail
1 " white oper spot
1 Naso lituratus

Total: 74

Breakdown of Parrot fishes retained in collection:

6 Blue parrots
6 Brown parrots with caudal peduncle spot
1 Parrot, species unknown
3 small parrots, speciesunknown

Total 16

Breakdown of Pomacentrids retained in collection:

29 Black with blue spots
22 Black without blue spots
9 Yellow bellied with dorsal fin ocellus

Total 60

Measurements of discarded parrot fishes (total 53)

80 mm--1
90 1
100 3
110 0
120 6
130 12
140 7
150 7
160 5
170 0
180 2
190 0
200 5
210 4

Measurements of discarded surg fishes (total 58)

60 mm--1
70 5
80 13
90 19
100 15
110 3
120 2

Discarded Siganids (total 10)

280 mm-2
270 -1
260 -3
230 -1
210 -2
200 -1

Discarded Epinephalus

220 mm-1
170 mm-2
130 mm-1
70 mm-1

FPH: 33

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-259 Sta. No. _____

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: ½ mile from Rongelap Island in Lagoon

Drainage: _____ Date: 17 July 1946

Water: _____

Vegetation: _____

_____ Time: 2100-2200

Bottom: _____

Shore: ½ mile Current: 2 mph

Distance from shore: _____ Tide: _____

Depth of capture: surface light Depth of water: _____

Method of capture: ESHerald; dipnets

Collected by: _____

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Tried for the first time---a 100 watt light in heavy side reflector---decided that it was not sufficient light---so will try to obtain higher wattage for future work; the shade on the sides of the lamp also does not allow the laterl dispersion of light as on other types of lights.

Will attempt to have light run everynight as possible---the majority of the work to be accomplished by the seamen assigned to this section---supervision remaining with ichthyologist in chg.

The above collection yielded the following specimens, 66 in number---33 of which may be Dussumerids---the other 33 including some juvenile Synodonts, and others.

2 man net hours and 66 fish or an average of 33 fish per net per hour.

Seamen weilding nets: _____

FPH: 34.5

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-259-A Sta. No. _____

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: ½ Mile from Rongelap Island in Lagoon

Drainage: _____ Date: 19 July 1946

Water: _____

Vegetation: _____

_____ Time: 2100-2200

Bottom: _____

Shore: _____ Current: _____

Distance from shore: 1/2 mile Tide: _____

Depth of capture: Surface Depth of water: 20 fathoms

Method of capture: Light and dipnet

Collected by: ESHerald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen doing collecting: Selzer and Stanley

100 watt submarine light with shade

69 fishes collected: 34 Dussumerids; 6 Pempheris
17 larval and 12 small blue fishes, 15 mm andless.

Average per hour: 34.5 fishes per mnh

FPH: 39½

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-259-B Sta. No. _____

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: ½ mile from Rongelap Island in Lagoon

Drainage: _____ Date: 20 July 1946

Water: _____

Vegetation: _____

_____ Time: 2215-2315

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: surface Depth of water: 20 fathoms

Method of capture: by net at surface light

Collected by: ESHerald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen wieldingnets: Rutherford and Aborno

79 fishes collected during the one hour period; this is an average of 39½ fishes per hour. 4 sharks were around the light at various times, feeding upon the fishes attaracted to thelight.

100 watt light.

FPH: 87.5

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. _____ Sta. No. S-46-259C

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: ½ mile from Rongelap Island in Lagoon

Drainage: _____ Date: Sun 21 July 1946

Water: Very calm

Vegetation: _____

Time: 2100-2200

Bottom: _____

Shore: _____ Current: slight

Distance from shore: ½ mile Tide: _____

Depth of capture: Surface Depth of water: 20 fathoms

Method of capture: Dipnet at lightat surface

Collected by: ESHerald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen wielding nets: Rutherford and Drayer

Used same 100 watt light with shade---but turned light on its side so that it threw the beam laterally along the sideof the gangway---this was a much more satisfactory arrangement, for it brought to the surfacemany of the fishes which had previously been just beyond the reach of the net. However there are still many fishes which are down 5-10 feet below the light---which would be available if a fine-netted bait net of about 12 ft diameter were available immediately beneath the light---so shall see if such a net cannot be constructed.

Fishes collected: 175 or an average of 87.5 per man net per hour

The increase in the number of fishes was due to change in position of the reflector light---for now it is used with the light beam directed parralel to the surface ---this bring up the large numbers of small fishes which had previously been just out of reach.

FPNMH: 18

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. _____ Sta. No. S-46-259-E

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: ½ mile from Rongelap Island in Lagoon

_____

Drainage: _____ Date: Monday 22 July 1946

Water: _____

Vegetation: _____

_____ Time: 1000-1100

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: surface light Depth of water: 20 fathoms

Method of capture: net

Collected by: E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Light blew out at the end of ½ hour, at the end of which time 18 fishes had been collected, for an average of 18 fishes per man net hour.

Personnel difficulties probably accounted for the low catch.

Seamen weilding nets: Swisher and Tinsey

Most interesting was the occurance of a small labrid in the catch of the type most commonly encountered whenever a poison station is run.

For Station S-46-259-D - see S-46-280+281

FPNMH: 21

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. _____ Sta. No. S-46-259-F

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: ½ mile from Rongelap Island in Lagoon

Drainage: _____ Date: Tues 23 July 1946

Water: _____

Vegetation: _____

Time: 2100-2200

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: surface light Depth of water: 20 fathoms

Method of capture: hand nets and 4 ft drop net

Collected by: E. S. Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen weilding nets: Rutherford and Selzer with new man, Novak, observing.

Four foot hoop with 3 foot bag was used for the first time---it wasplaced at a depth of about 7 feet and whenever larger fishes which could not be collected with the hand nets--came into the area, the large net was drawn up.

Fishes collected: 42 or an average of 21 fishes per net man hour.

100 watt search lamp used; beam turned horizontal with the surface.

The following fishes were collected:

1 Common Labrid---67 mm
1 Burrowing EEl---92 mm
1 Syngnathus (long snout) 83 mm
1 Gerrid---20 mm
30 Aterhinids---20-50 mm
8 Dussumerids---20-50 mm
42 fishes Toatal

FRMH: 207½ LIGHT

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. S-46-259-G

State or Country: ROngelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: In lagoon ½ mile from Rongelap Island

_____

Drainage: _____ Date: Thurs 25 July 1946

Water: _____

Vegetation: _____

_____ Time: 2115-2216

Bottom: _____

Shore: ½ mile Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: Light--dipnets Depth of water: 20 fms

Method of capture: Surface; 4 ft net and dipnets

Collected by: E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen Wielding nets: Novak and Tarzwell

Total fishes collected: ~~415~~ averace per man net hour ~~207½~~ 5

100 watt beam lamp horizontal to surface.

The following fishes were collected:

404 small Atherinids
7 larger atherinids (approximately 40 mm)
1 juv Scombriform fish (30 mm)
2 Blennies (25 and 12 mm)
2 med sized dussumerids
416 total fishes

FPNMH: 7

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. _____ Sta. No. S-46-259-H

State or Country: Rongelap Atoll at Bowditch Anchorage

County: _____ City: _____

Locality: In Lagoon ½ mile fron Rongelap Island

Drainage: _____ Date: Fri 26 July 1946

Water: _____

Vegetation: _____

_____ Time: 2130-2230

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: surface light Depth of water: 20 fathoms

Method of capture: nets at surface

Collected by: E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

Seamen Wieldingnets: Swisher and Stanley.

Total fishes collected: 18

Fishes per net man hour: 9

FPMNH: 16

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT
HOOK and LINE

Acc. No. _____ Tag No. S-46-296-297-298-299 Sta. No. S-46-259-I

State or Country: _____

County: _____ City: _____

Locality: Rongelap Atoll at Rongelap Island---½ mile from the island in the lagoon---Bowditch Anchorage

Drainage: _____ Date: 27 July 1946 Sat

Water: _____

Vegetation: _____

_____ Time: 2030-2130

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile _____ Tide: _____

Depth of capture: surface _____ Depth of water: 20 fathoms

Method of capture: light---nets

Collected by: E.S.Herald

Preservative: formalin _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen wielding nets: Rutherford and Aborno

Total fishes collected: 32 (which included one juv Caranx and 1 Lepto-cephalus larvae

Fishes per net man hour: 16

The following were collected on hook and line from the Bowditch anchorage as given above:

S-46-296: Brown spotted Serranid 375 mm

S-46-297: Brown blotch Serranid, 330 mm

S-46-298: Caranx sp. 180 mm

S-46-299: Red Snapper, 450 mm → DISCARD

Area: 15 x 150 yards
Cube: 20 lbs
INDEX: .054 (2250 s yds)

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON and SPEAR

Acc. No. _____ Tag No. S-46-260-261-262 Sta. No. _____

State or Country: 263, 264, 265, 266

County: ocean reef City: _____

Locality: Outer reef at the center of Tufa Island, ~~Rongelap Atoll (with 4 specimens from inside lagoon)~~

Drainage: _____ Date: 18 July 1946

Water: clear to subclear in surf.

Vegetation: _____

Time: 1100-1500

Bottom: Corals highly colored; small Ulitho. ridge.

Shore: _____ Current: Strong

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: pizon and dipnets

Collected by: E. S. Herald and V. Brock plus 4 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The outer side of the island looked good, but the reef current prooved to be too stong, diluting the cube to such an extent that it was not wholly effective; V. Brock reported some of the fishes effected on the outer deep reef area---but of types not sufficiently important to warrent their collection. All fishes under S-46-260 were taken on the outer reef of Tufa, except for the following which V. Brock speared on the inside bay:

1 Holocentrus with red D., 265 mm
1 Trunk Fish, 250 mm
1 Puffer, 170 mm
1 Chaetodon auriga (?) 170 mm

Where possible, all fishes to be photographed, will be tin-tagged; those photographed on this date were as follows:

S-46-261:	360 mm	Parrot Fish,	Photo AA-CR-139-1030-1
262:	460 mm	" " " "	" 2 "
263:	290	Epinethalus " " "	" 3 "
264:	175 mm	Goatfish (yellow stripe)	" 5
265:	155 mm	Kuhlid	" 6
266:	90 mm	Blenny " " "	" 7
---	3 ft	~~Cephalopholis argus~~	" 7

Pseudochromes leopardus

1030-2

This is to be included from Rongelap Atoll studies

V.E.Brock speared fishes S-46-261 and 262 as well as those previously listed from the inside of the island. The large Cephalopholis was not preserved.

Total fishes collected at Tufa Island was as follows:

71	Blennies, Scaleless
16	Labrids
12	Acanthurids (10 of 2-spot; 2 of A. tristegus)
5	Corids
4	Kuhlids
5	Mullids (all Yellow-striped species)
3	Serranids (2 Epinephalus and 1 Cephalopholis)
4	fishes speared by VEB in inner lagoon.
3	Miscellaneous
123	TOTAL

STandard Lengths of Fishes Measured (10 mm intervals)

1. Scaleless Blennies: 12 of 20 mm; 50 of 30 mm and 5 of 40 mm and 3 of 50 mm.
2. Labrids: 2 of 40 mm; 4 of 50 mm; 7 of 60 mm and 3 of 70 mm; also one of
3. Goatfishes: one each of the following lengths: 140, 160, 170, 180 and 210.
4. Parrotfishes: one of each of the following: 90, 100, 130, 360 and 460 mm.
5. Acanthurids: one of 60 mm, one of 70mm, 4 of 90 mm, 3 of 100 mm and 3 of 110 mm.

Although the collection was quite poor, it should not be considered that Tufa was devoid of ichthyological interest, for the deep water--10-30 feet just beyond the surge channels were populated with large numbers offishes of many different species. The following was noted:

1. Nazo was feeding in sallow water on the rocks of no more than 2-3 feet depth (first time such sallow feeding observed by ESH).
2. Sharks were quite abundant after spearing began---mostly gray sharks in the deeper water---and black tipps in the shallow water---some of the latter up to 4-5 feet. White tipped absent. VEB saw a shark new to him: it was unique in that the snoz seemed to have been composed of two elongated nasal tubes; the length of the specimen was about 3½ feet; VEB also saw another specimen of the fish with elongated dorsal and anal fin described on backside of S-46-246.

Chaetodon ephippium abundant-VEB

Seamen Aiding: Rutherford; Selzer; Stanley; Drayer.

Area: 60 x 125 yards
Poison: 20 lbs Cube
Index: 477/7500 = .063

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-267, 268, Sta. No. S-46-267
State or Country: 269, 270, 271, 272, 273, 274, 275
County: _____ City: _____
Locality: North End of Eniaetok Island at Pass between Eniaetok and Erapuotsu Island; Rongelap Atoll
Drainage: _____ Date: 20 July 1946
Water: Lagoon reef
Vegetation: Coral Heads moderately abundant
_____ Time: 1200-1500
Bottom: Sandy bottom with corals _____ Negligible at low
Shore: Sandy _____ Current: tide to swift
Distance from shore: _____ Tide: _____
Depth of capture: 1-10 feet _____ Depth of water: same
Method of capture: perzon and dipnets
Collected by: E. S. Herald and V. E. Brock plus 5 EM
Preservative: Formalin _____ Temp: _____ Air: _____
List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-215 = 53 eels in 4977 fishes = 1% = 106 per cent; = 10%

This station is almost identical with No. S-46-215 which was run on _____. The only difference is that on this occasion the poison was put into the water nearer the Eniaetok Id shore whereas previously it had been put in over the area nearer to Erapuotsu Island. On the way to this station---all locaities between the north tip of Rongelap and these islands were checked carefully as it was planned to run a station somewhere in that area---but none suitable wereavailable---hece it a station was run---it was necessary to duplicate No. S-46-215. Seaman Selzer informed us that the previousl collection had been extremely strong in eels---such was not the case for this station on 20 July for only 27 eels were collected which .056 percent of the toal catch (477 fishes total) It is suggested from this data that perhaps Yurochi and the outer reef of Bikini (S-46-251 and 253) might have been poisoned, either by Donaldson's bunch or by this group---and that such might explain the poor collection of eels at these two stations. Is is possible that eels are much more susceptable to derris than areother species, and that it takes individuals residing in adjacentareas longer to migrate into a fewshly poisoned area than it does other species of fishes?

The following specimens were photographed: 1031-8 = Blank

S-46-268;	Acanthurus achilles 120 mm;	AA-CR-139-1030-9		
269;	Naso lituratus, 118 mm;	"		10, 11
270;	Acanthurus triostegus 135;	"	1030-12	~~10, 11~~
271;	Eleotris (?) 100 mm	1031-1 "	~~12~~	
272;	Chaetodon ~~pelewensis~~ 63 mm;	1031-2,3 "	1031-4,	2
274;	Monocanthus spilosoma 65;	1031-6 "	~~17~~	5
275;	Holocentrus 83 mm;	1031-7 "	~~18~~	6
273;	Centropyge flavissimus 70mm;	1031-~~4~~,5 "	~~15, 16~~	3 4

FOOD HABITS:

The stomachs of 3 narrow-nosed lizard fish were opened and the following contents revealed:

130 mm specimen contained a 110 mm halfbeak---the latter was bent upon itself as otherwise it would not have fitted into the stomach.

115 mm specimen contained a 60 mm labrid---the common species of labrid which is very common in the collections.

115 mm specimen---contain a 40 mm labrid---same specie as above.

The following fishes were collected:

18 Halfbeaks
3 Monotaxus grandicolis
2 Platycephalids
6 Siganids (small)
12 Chromis ceourlus
3 Parcirrhites arcatus
22 Apogon (all 5 stripers)
56 Acanthurids (10-43-1-2)
9 Dascyllus 3-stripe
6 Pylogytes flavissimus
2 Pseudochromids
1 Amphiprion
5 Plesiops nigricans
1 Mullet (Blk Pectoral)
2 Fistuolaria
3 Scropionids
18 Dussumerids
1 Caracanthid
1 Brotulid
1 Fish sp.
11 Gobies (2 species: 8-3)
4 Blennies (4 species)
27 Eels (8 species)
37 Epinephalus (2-35: 2 species)
43 Goatfishes (3 species: 1-2-40)
25 Synodonitids (2 species: 20-5)
34 Parapercids (2 species:)
2 Chaetodontids (2 species)
51 Labrids (12 species: 27-4-5-1-3-1-1-2-1-1-1-7)
8 Parrot Fishes (2 species)
17 Ho[illegible]rids (3 spec[illegible])

7 File fishes (2 sp)
13 Puffers (2 species)
15 Pomacentrids (3 sp)
8 Photographed

477 Total Fishes Collected

69 Total Species of Fishes

Also 6 octopusuls

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Hook & Line

Acc. No. _____ Tag No. S-46-276-277 + 279 Sta. No. _____

State or Country: 278 and 279

County: _____ City: _____

Locality: Bock Pass, Rongerik Atoll

_____

Drainage: _____ Date: 20 July 1946

Water: _____

Vegetation: _____

_____ Time: 1900 - 2205

Bottom: _____

Shore: _____ Current: _____

Distance from shore: 1 mile _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hook and line

Collected by: F. Thomas Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-276: Sea Bass, 420 mm (Standard Length)

S-46-277: Sphryaena obtusata, 520 mm

S-46-278: Naso eoumg, 345 mm (tangled in line by tail spines).

S-46-279: Eulamia melanoptera, 350 mm male

Total 4 specimens

Local Name - Shark #1. Barracuda #2 Tuna #3

5th Shark Could have weighed

FIELD DATA RECORD Hook & Line

Division of Fishes

U. S. National Museum

Acc. No. _____ Tag No. S-46-280,281 Sta. No. [redacted]

State or Country: Rongelap Atoll at YMS 354 Anchorage

County: _____ City: _____

Locality: ½ mile from Rongelap Island in Lagoon

Drainage: _____ Date: Sun 21 July 1946

Water: _____

Vegetation: _____

_____ Time: 2100

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: 7 fathoms

Method of capture: Hook and Line (bait - shrimp)

Collected by: Thomas Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-280: Priacanthus cruentatus, 220 mm

S-46-281: " " 230 mm.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

SPEAR

Acc. No. _____ Tag No. S-46-282, 283 Sta. No. 282

State or Country: and 284

County: _____ City: _____

Locality: Southwest End of Rongelap Island, Rongelap Atoll

Drainage: _____ Date: 23 July 1946 (Tues

Water: _____

Vegetation: _____

_____ Time: 1200-1500

Bottom: Coral head from 2 fathoms sloping to 133 fms

Shore: 100 yards Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 10-60 feet Depth of water: 2-133 fms

Method of capture: Spear and sling

Collected by: V.E.Brock; E.S.Herald and T. F. Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-283: Caranx stellatus, 440 female with eggs

S-46-284: Naso ~~vlamingi~~ 370 mm

OTHER SPECIMENS:

1 Epibolus insidiator, 220 mm
1 Epinephalus sp, 260 mm (blue spots on dark brown background)
1 Acanthurus n. sp? (white tail and Manhattan Indian Snozz) 120 mm
1 Ostracion _____ (sp prob sebae?) 115 mm
1 Cirritid, 145 mm

Total Number of Specimens: 7

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

DEEP POISON and SPEAR

Acc. No. _____ Tag No. S-46-285 Sta. No. _____

State or Country: Rongelap Atoll at North End of

County: Kieshiechi Island Lagoon Side

Locality: A single coral head approximatly 10 ft in diameter and 8 feet high (depth 20 feet)

Drainage: _____ Date: 24 July 1946

Water: clear but with some suspended matter

Vegetation: _____

_____ Time: 1300-1600

Bottom: sandy with occasional coral heads

Shore: 75 yards Current: Slight

Distance from shore: _____ Tide: _____

Depth of capture: 20 feet Depth of water: 20 feet

Method of capture: 5 lbs Cube root in water bag; hand nets (diving rigs

Collected by: V. E. Brock and E. S. Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 Dunkerocampus dactylophorus (57 mm) this specimen was picked up back in under the base of the coral head.
1 Syngnathus (grey, long snout) 100 mm? This is the same species previously observed and noted under station S-46-246.
1 Cynoglossus (40 mm)
1 Pleuronectid (63 mm)
6 Cephalopholis leopardus (30-90 mm) orange colored with sadle over caudle peduncle top.
3 Epinephalis chlorostigma (common spotted species)
1 Chorististium sp. n.(?) 45 mm
6 Dascyllus auruanus (3-stripe)
2 " sp. (2-stripe)
27 Apogon sp. (25-63 mm) black bar on caudal peduncle
1 Apogon(5-stripe) --yellow caudal peduncle spot
54 Apogon (eyeline and caudal peduncle spot) there is a possibility that the 5 larger specimens contained in this series are different because of their greater depth.
2 Balistids (triggers)75 and 110 mm; orange base of clear dorsal and basal; white border around tail
2 Parapercids, 2-spot
2 Synodids (125, 95 mm) blue lateral stripe
1 Synodont (110 mm) body with distinct reddish tinge.

4 Pseudocheilinus hexataenia (Labrid) (30-50 mm)(WHF:341)
2 Wetmorella philippina (WHF vol 7 p 211) (USNM has only 4 other specimens of this species)
6 Blue Gerrids or Pomacentrids
1 " " " (black line along outer margins of tail---ie dorsal and ventral only)
5 Abedebduf (with black pectoral base)
5 Pseudochromids (brown body color with blk oper spot)
1 Parrot fish
2 yellow labrids (common) 50-75 mm
1 Scropaenid (27 mm)
1 Yellow brotulid
2 Labrids (20 mm)
1 fish Unknown with opercular spot (18 mm
1 Gobiodon
5 eels of 4 different species
5 gobies of 3 or 4 new species(45, 26, 20 17 and 14 mm)

153 Total Number of Fishes

37 Total Number of Species

The habitat of the Apogon was quite interesting--for they were almost entirely confined to a small pocket at the base of the coral head which extended back into the coral for about 1 ft and extended around for about $\frac{1}{2}$ of the circumference of coral head.

DEEP POISON

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-286-287- Sta. No. 286
State or Country: -288-289-290-291-292-293-294
County: _____ City: _____
Locality: Near NW End of Rongelap Id., Lagoon side; single coral head in 18 ft water; (size of coral head---30' x 30' x 14 ft high)
Drainage: _____ Date: Thurs 25 July '46
Water: Clear
Vegetation: _____
Time: _____
Bottom: Sandy with widely separated coral heads
Shore: _____ Current: negligible
Distance from shore: 100 yards Tide: _____
Depth of capture: 4-18 ft (15 lbs) Depth of water: 18 ft
Method of capture: 3 water bags Cube; diving rigs; nets
Collected by: V.E. Brock; E.S.Herald and T. Kohler
Preservative: Formalin Temp: _____ Air: _____
List of species or kinds, with tag numbers if drawn or discussed: _____

PHOTOGRAPHED FISHES:

S-46-287:	Platycephalid (145mm)	: AA-CR-139-1031-	~~7~~ 9
" 288:	Monotaxis grandoculis (150mm)	: "	~~8~~ 10
" 289:	Apogon sp (7-stripe) (130 mm	: "	~~9~~ 11
" 290:	Monotaxis grandoculis (150mm)	"	~~10~~ 12
" 291:	Ctenochaetus strigosus (")	"	1032-~~1~~, 2 ~~11~~, ~~12~~
" 292:	Holocentrus ~~diadema~~ (?)	130mm) spinifer "	1032-~~1~~ 3
" 293:	Myripristis sp	(117mm) "	" ~~2~~ 4
" 294:	Epinephalus leopardus	(100mm) "	" ~~3~~ 5

The following fishes were collected:
12 Platycephalids (50-160 mm)
10 Synodontids with pointed snouts (95-175 mm
17 Ctenochaetus strigosus (105-165 mm)
6 Acanthurus 2-spot (45-95 mm)
1 Siganus (110 mm)
15 Myripristis (around 150 mm)
2 Holotrachys (95 and 110 mm)
3 Holocentrus diadema (90, 90, 115 mm)
3 Holocentrus sammara (140, 140, and 160 mm) striped with red bltoch in dorsal
14 Holocentrus sp. clear dorsal and 1 spot on each scale (90-125 mm)
3 Holocentrus sp., no lines, red above and white below with dorsal read (65-250 mm)

7 Monotaxis grandoculis (105-120 mm)
15 Mullids (yellow lined-goat fishes) (95-140 mm)
28 Dussumerids (about 1 hour after poisoning, the cube finally diffused towards the surface and caught one of the large schools of this fish swimming in the area).
3 Centropyge flavissimus
1 Dascillus trimaculatus (speared)
11 Pomacentrids (black dorsal spot with yellow caudal peduncle and tail)(30-40 mm)
3 Pomacentrids (black dorsal fin ocellus circled with blue; top ofhead yellow with blue stripes).
5 Pomacentrids (black dorsal fin ocellus circled with blue; breast yellow; blue spot on each scale)45-60mm
4 Pomacentrids (Black all over ith a few sparesely distributed blue spots & blk oper base (35-80 mm)
5 Pomacentrids (Black all over with no blue spots but with a black pectoral base) (35-70 mm)
1 Gomphosus tricolor
1 Parrot fish, blue, 290 mm
1 " " , orange head and spot in dorsal (45 mm)
2 " " , 4-striped (40,50 mm)
2 " " , purple brown all over, no tail spot(60-90mm
14 " " , bluish, semi-vertically striped (15-45mm)
12 Serranus urodelops (?) (30-115 mm) one may be differen
1 Serranid, grey (330 mm)
1 Yellow Snapper with black ~~spot~~ monolignus center lat line, 330 mm
1 Grey Snapper, (?) 2 white spots on top back (115 mm
15 Apogon (7 stripe, yellow tail spot (25-60 mm)
2 " (9 stripe) (70, 75 mm)
28 " (eyeline---tail spot)
2 " (3 stripe (heavy black stripes)
1 Micrognathus sp. (Both pipefishes picked up at base
1 Doryrhamphus melanopleura of coral head)
13 eels of 5 different species
128 misc. fishes of 28 different species.

---

392 Total Fishes

70 Total Species

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

SPEAR

Acc. No. _____ Tag No. S-46-295 Sta. No. _____

State or Country: Rongelap Atoll at Rongelap Island

County: _____ City: _____

Locality: at Able Buoy ½ mile north of the west end of Rongelap Island

Drainage: _____ Date: 26 July 1946

Water: Naturally

Vegetation: _____

_____ Time: 1100

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: 15 ft at top of coral head Depth of water: 15-115 ft

Method of capture: Spear

Collected by: V.E.Brock

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 Naso veliferum (165 mm)
1 Acanthurus (270 mm)
1 Zanclus coronutus (140 mm)
1 Siganid (140 mm)
1 Serranid (Brown with orange spots (300 mm)
1 Labrid (160 mm)

Cheilinus fasciatus

[Ves tag nos 296-299 2 ea
station 5-46-296 01
5-46-059 I

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

DEEP POISON
and
SPEAR

Acc. No. _____ Tag No. S-46-300 Sta. No. _____

State or Country: Rongelap Atoll at Tufa Island.

County: _____ City: _____

Locality: Coral heads in lagoon side of siland in 28 feet of water.

Drainage: _____ Date: Sun 28 July 1946

Water: not clear---much suspended sediment

Vegetation: _____

Time: 1100-1400

Bottom: Sandy with occasional corals, lg and sm

Shore: 50 yards Current: ½ mile per hour

Distance from shore: _____ Tide: _____

Depth of capture: 28 feet Depth of water: 28 feet

Method of capture: 15 lbs cube root and spear

Collected by: V. E. Brock and E. S. Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

The following fishes were collected:

1 Holocanthus imperator (240 mm) speared
45 Dascyllus aruanus (3 stripe)
1 Chaetodon auriga (150 mm) speared
3 trunk fishes, (180, 185 and 190 mm) speared
4 Chaetodon sp.
2 Centropyge flavissimus
1 Fistularid
87 Dyscillus or Pomacentrids(?) Bright blue)
3 Ctenochaetus strigosus
1 Acanthurus n. sp. (post edge of pectoral with bright yeloow stripe and post endge of caudal with white band; otherwise overally black;
1 Lethrinid, yellow, 108 mm
18 Apogon (5-stripe, yellow tail spot)
10 " (7-stripe, yellow tail spot)
45 " (eyestripe and tail spot)
29 " (with tail bar around caud ped and lg eye)
3 " (yellow with white horizontal stripes)
1 Carapid (80 mm)
5 Common Spotted Epinephalus
1 Grey spotted " (200 mm)
2 Emmylichthyids
1 Flatfish
3 Pseudochromids
1 Gomphosus

5 goat fishes of 3 different species
10 lizard fishes of 2 different species
3 squirrel fishes of 3 different species
33 labrids of 12 different species
21 Parrot fishes of 2 different species
3 Pomacentrids of 2 different species
6 eels of 3 different species
57 Gobies and Eleotrids of 6 different species
(including 13 specimens of the new dorsal spot goby

---

406 Total Fishes

56 Total Species

Among the species observed was what was considered might possibly be a new Acanthurid---it was entirely yellow---and of the four specimens observed---the largest was no greater than 5 inches in total length---extending from the opercle backwards on the body in the same position as the bar found on A. olivaceus was a ~~bixx~~ bright ~~b~~ed bar. Can this possibly be a color phase or the juv of A. olivaceus?

The long-nozed Synognathus was again observed---apparently it is quite common on sandy bottoms below the 10 ft depth.

S-46-398 Chaetodont.

FPNMH: ~~813~~ 1219

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-301 Sta. No. _____

State or Country: Rongelap Atoll at Naen Island (Rongelap)

County: _____ City: _____

Locality: Lagoon Side of Island

Drainage: _____ Date: 29 July 1946

Water: _____

Vegetation: _____

Time: 1930-2200

Bottom: _____

Shore: ½ mile Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: surface Depth of water: 13 fathoms

Method of capture: nets

Collected by: E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen wielding nets: Selzer and Aborno with Novac aiding (in removing fish from nets)

Fishes collected:

20	large Atherinids
150	small "
165	" "
400	" white, undet
5000	" " " estimated
341	Dussummerids
15	Labrids (gray body color with orange spot above pect base; two blue spots in center of caud pedunc
1	" (lg blk spot cen caud pedunc)
2	Octopods
1	larval lizard fish
1	small fish, spiny and with Polynemid-like jaw
1	Remora (taken from grey shark caught during evening)

6097 Total fishes

~~813~~ 1219 Fishes per net man hour

Area: 100 x 100 yds
Poison: 30 lbs cube
Index: 820/10,000: .082

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-302 Sta. No. 302

State or Country: Rongelap Atoll at Naen Island

County: _____ City: _____

Locality: West Side of Naen Island

Drainage: Lagoon reef

Date: 30 July 1946

Water: _____

Vegetation: _____

Time: 1000-1400

Bottom: Many corals---few open spaces which were sandy

Shore: _____ Current: 3mph at high tide
0mph at low tide

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: 1-10 feet

Method of capture: 30 lbs cube root

Collected by: E.S. Herald aided by 5 EM

Preservative: formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

3 Platycephalids
17 Centropyge flavissimus
2 Paracirrhites arcatus
19 Ctenochaetus strigosus
82 Acanthurus 2-spot
1 Naso veliferum (Zebrasoma)
1 Acanthurus triostegus
5 Naso lituratus
116 Epinephalus (common Bbown spotted)
1 " leopardus (?) small
3 Serranids (large: 2 species)
5 Halfbeaks
12 Atherinids
3 Dussumerids
47 Chromis Coeuruleus
27 Pseudochromids
1 Caranx (small)
3 Scorpionids
5 Brotulids
1 Doryrhamphus melanopleura
1 File fish Pervagor
1 Plesiops nigricans
9 Puffers
1 Fish sp.
6 Dascyllus 3-stripe
1 Monotasux grandicollis

ALSO

1 Starfish (Linkia?
1 Octopusal

OVER

Fishes Collected (continued from front side):

8	Gobies (4 species)
100	Labrids (12 species)
43	Apogonids (4 species)
52	Pomacanthids (3 species: 27-17-8)
6	Blennies (4 species)
3	Snappers (2 species)
18	Parrot Fishes (3 species)
35	Holocentrids (6 species)
3	Flatfish (2 species)
9	Chaetodonts (6 species: 1-2-2-2-1-1)
39	Eels (5 species)
20	Parapercids (2 species: 6-14)
33	Synodontids (2 species: 5-28)
78	Goatfishes: (3 species: 3-9-66)

---

820 Total Fishes Collected

85 Total Species in Collection

FPNMH: ~~289 129 2/3~~

LIGHT

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-303 Sta. No. _____

State or Country: Rongelap Atoll at Yugui Island

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: 30 July 1946

Water: _____

Vegetation: _____

_____ Time: 1930-2100

Bottom: _____

Shore: 1/2 mile Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface Depth of water: 13 fathoms

Method of capture: dipnets

Collected by: E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

EM wielding nets: Stanley and Novac

The following fishes were collected:

354 Dussumerids (small)
418 small juv fishes, species undet in field
1 goatfish (barbels very short)
~~2~~ 1 needlefishes
1 Snake eel
1 Brotulid (pectorals under chin and verylong)
1 Octopus
1 Halfbeak

778 Total fishes

~~129 2/3~~ 289 fishes per net man hour

Area: 125 x 60 yds (7500)
Poison: 20 lbs Cube
Index: 876/7500: .116

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-304 Sta. No. _____

State or Country: Rongelap Atoll at Yugui Island

County: _____ City: _____

Locality: West side of island ocean reef

Drainage: _____ Date: Thurs 31 July 1946

Water: very clear (next to small boat passage)

Vegetation: _____

Time: 1100-1500

Bottom: many corals with narrow sandy channels between

Shore: _____ Current: ~~strong at high~~ tinde-but none at low tide

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: 0-15 feet

Method of capture: perzon--20 lbs cube

Collected by: E.S.Heraldn and 5 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

6 Chaetodon citrinellus
1 " quadrimaculatus
2 " ~~monomaculatus~~ unimaculatus
19 Paracirrhites arcatus
52 Common Brown Serranids
2 Naso veliferum
1 Acanthurus achilles
109 Acanthurus 2-spot
3 Ctenochaetus strigosus
1 Naso sp (juv)
1 Trunkfish
1 Platucephalid
16 Lizard Fish
17 Centropyge flavissimus
3 Yellow Goatfish
4 Barred Goatfish
2 Parrot fishes
4 Corythoichthys fasciatus
1 Doryrhamphus melanopleura
40 Pseudochromids
8 Brotulids
6 Plesiops nigricans
12 Scaleled Blennies
8 Scaleless Blennies (7 species)
56 Gobies (3 species: 19-20-17)
11 Caracanthids (2 species: 6,5)
23 Apogonids (4 species: 14-6--2-1)

Specimens collected (continued from front side)

6 Miscellaneious fishes (1 species)
2 Serranids (2 species)
19 Holocentrids (4 species)
16 Scorpionids (3 species)
141 Labrids (16 species: 10-14-4-1-3-4-15-22-9-1-3-39-1-4-3-8)
6 Flatfishes (2 species)
113 Damsel Fishes (6 species: 76-15-10-2-2-8)
119 Eels (6 species)
6 Trigger-file fishes (3 species)
4 Puffers (2 species)
38 Parapercids (2 species)

Alos 4 Octopusuls
1 Squid

---

879 TOTAL FISHES COLLECTED

86 TOTAL FISH SPECIES COLLECTED

FPNH: 66 1/3

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-305 Sta. No. _____

State or Country: Rongelap Atoll at Lomuilal Island

County: Lagoon Side City: _____

Locality: _____

_____

Drainage: _____ Date: 31 July 1946

Water: _____

Vegetation: _____

_____ Time: 1930-2100

Bottom: _____

Shore: _____ Current: slight

Distance from shore: ½ mile Tide: _____

Depth of capture: surface light Depth of water: 13 fathoms

Method of capture: dinnets at surface

Collected by: E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Seamen wielding nets: Swisher and Selzer

Specimens collected:

11 Half-beaks
13 Atherinids
175 Small (dussumerids?)

199 Total fishes

66 1/3 fishes per net man hour

One net lost: although Swisher denies knowing anything about it---he was observed to accidentally kick it from the overside stage.

Area: 25 x 75 yards
Poison: 10 lbs Cube
INDEX: 482/1875=257

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-306 Sta. No. _____

State or Country: Rongelap Atoll a t Lomuilal Island

County: _____ City: _____

Locality: West Side of Lomuilal Island
Lagoon Reef

Drainage: _____ Date: Friday 1 August '46

Water: very clear

Vegetation: _____

_____ Time: 1100-1330

Bottom: Scattered corals

Shore: _____ Current: strong at high but absent at low tide

Distance from shore: _____ Tide: _____

Depth of capture: 0-10 feet Depth of water: 0-10 feet

Method of capture: pizon and dipnets

Collected by: E.S.merald and 5 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

1 Platycephalid
16 Centropyge flavissimus
1 Chaetodon unimaculatus
24 Dascyllus 3-stripe
28 Ctenochaetus strigosus
59 Acanthurus 2-spot
1 Naso sp (juv)
40 Epinephalus (common brown spotted species,
2 Paracirrhitus arcatus
1 Aulostomid
3 Chromis coerulus
4 Puffers
3 fishes, species unknown
15 Pseudochromids
1 Brotulid
1 Plesiops nigricans (very small)
5 Gobies (2 species: 4-1)
4 Scrorpion fishes (2 species: 1-3)
2 File fishes (2 species)
27 Apogonids (6 species: 4-7-4-3-8-1)
31 Eels (3 species)
5 Parapercids (2 species)
13 Synodontids (2 species)
20 Goatfishes (2 species: 18-2)
20 Holocentrids (4 species: 16-2-1-1)
68 Pomacentrids (4 species: 21-26-10-11)

Also
1 Octopusul

OVER

Species Tally continued from from side:

27 Parrot fishes (3 species: 6-20-1) -1)
60 Labrids (16 species: 12-12-5-3-5-7-4-2-1-3-1-1-1-1-1

---

482 Total Fishes Collected

64 Total Species represented in collection

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

DEEP POISON

S-46-307

Acc. No. _____ Tag No. [redacted] Sta. No. _____

State or Country: Bikini Atoll at Amen Island

County: _____ City: _____

Locality: Station located ¼ mile from shore in 30 feet of water (lagoon)

Drainage: _____ Date: 4 Aug. 1946(Sun)

Water: _____

Vegetation: _____

_____ Time: 1300-1500

Bottom: sandy, moss common with occas. coral heads

Shore: _____ Current: very slight

Distance from shore: 440 yards Tide: _____

Depth of capture: 0-30 feet Depth of water: 30 feet

Method of capture: 15 lbs of cube root (3 water bags)

Collected by: V.E.Brock, E.S.Herald and T. Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Donaldson, Bradner and ~~Pottski~~ Awashi along on trip to act as monitors---corals, herbivorous fishes and algae all hot with approximately 8 hour tolerance. Formaldehyde absorbs the radioactivity so that all pickle solutions will be changed several times as an SOP.

The following specimens were collected:

16 Apogon (7 line)
10 " (5 line)
13 " (eye-line and tail spot)
90 " (orange yellow with tail bar)
1 " (yellow overall with white stripes)
1 " (with tail bar more on dorsal side of caudal peduncle and not extending completely down to ventral surface).
10 goatfisses (common yellowOstripe)
12 Chromids (blue overall with yellow tail and black opercular spot)
22 Chromids (overall blue)
45 Porgys (common species with white spot on back at the end of the dorsal fin; 44 small specimens and 1 large)
5 Ctenochaetus strigosus
2 Platycephalids, small
7 Gomphosus varius

10 Myripristis sp.
2 Parapercids (broad-headed--narrow mouthed species)
4 Lizard fishes
1 Priacanthids
8 Pomacentrids (small blue spots thereon---HOTERNHELL)
3 Pomacentrids (yellow belly with black ocellus in dorsal with blue border)
1 " (yellow top of head and back; breast black, and with same ocellus)
1 Abudefduf (orange with two vertical stripes)
1 Chaetodon citrinellus
1 " lunula
1 Microgmathus (many dermal papillae)
1 Pseudochromid (brown with dark operc spot)
2 Blennies (scalled)
1 Petroscirtes (blue striped commensal form)
3 Scorpaenids
1 Paracirrhites arcatus (common eye-line species)
3 Epinephalus leopardus
1 " (grey spoted with peduncle saddle)
1 Seriola lauta
3 Siganus (spotted species)
1 Snapper (red opercular spot)
1 " (reddish) Also 1 of Adonella philippina
2 " (2 back spots of white)
3 Cheilinus (2 species)
13 Labrids (8 different species)
2 Parrot fishes (2 species)
5 Holocentrus (4 species)
21 eels (7 different species)
6 gobies (2 different species)
4 Emmylichthids (2 different species)

---

341 Total Specimens

63 Total Species

25 lbs derris
4 canvas bags of
5 gals each

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

DEEP POISON
and
SPEAR

Acc. No. _____ Tag No. S-46-308 Sta. No. 308

State or Country: Also Tags Nos 309 through S-46-324 (total 17)

County: _____ City: _____

Locality: Isolated Coral ~~Head~~ Area 100 yds offshore of Airukiiji (Arji) Island; Bikini Atoll Lagoon Side

Drainage: _____ Date: Wed 7 August 1946

Water: Some suspended sand particles

Vegetation: _____

Time: 1100-1500

Bottom: Very sandy with occas. coral heads

Shore: _____ Current: 1 mph

Distance from shore: _____ Tide: _____

Depth of capture: surface to 40 feet Depth of water: 20-40 feet

Method of capture: pizon and dp nets also Donaldson Welander, Potski and Bradner.

Collected by: V.E.Brock and E.S.Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following fishes were photographed:

S-46-309: Acanthurus ~~sp.~~ leucosternon (110 MM)... ABCR 139-1035-7
" 310: Blue Parrot Fish (150 mm)... ABCR 139-1035-8
" 311: Holocentrus (red dorsal; no stripes)(280 mm) Cephalopholis ... ABCR 139-1035-5
" 312: ~~Epinephalus~~ (orange with blue spots; long jaw (225 mm)..... ABCR 139-1035-6
" 313: Balistid (185mm; bit VEB).... ABCR 139-1035-9
" 314: Epinephalus (brown overall with orange spots; 220 mm)..... ABCR 139-1035-10
" 315: Heniochus ~~acuminatus~~ permitatus (110 mm) ABCR-139-1035-11,12
" 316: Forcipiger longirostris (100mm) ABCR-139-1033-1
" 317: Chaetodon trifasciatus (80 mm) ABCR-139-1033-2,3,4
" 318: Holotrachys lima (68 mm).... ABCR-139-1033-5,6
" 319: Pylogytes diacanthus (65mm). ABCR-139-1033-7,8
" 320: Brotulid (orange)(80 mm).... ABCR-139-1033-9,10
" 321: Labrid (65 mm)..... ABCR-139-1033-9,10
" 322: Apogonid (50 mm)
" 323: Holocanthus imperator(265mm) ABCR-139-1033-11,12
" 324: Dunckerocampus dactylophorus (125 mm)..... ABCR-139-1036-1,2

2 pictures TOTAL

The following fishes werecollected:

2 Platycephalids
1 Antennaried
37 Dascyllus 3-stripe
6 " 2-stripe
2 Chaetodon trifasciatus
14 Centropyge flavissimus (?) (these may be different)
1 " bispinosus
3 Pseudochromids (ear spot type)
1 Pleuronectid (very small---ie 10 mm or therabouts)
50 Apogon 7-stripe
96 " 5-stripe
214 " (three different species)
4 Acanthurus n. sp.(same as that photographed)
21 Ctenochaetus strigosus
5 Acanthurus 2-spot
2 Zebrasoma flavesscens (dark color phase)
9 Corythoichthys fasciatus (males with eggs)
3 " conspicillatus " ")
3 Dunckerocampus dactylophorus
1 Caracanthid
8 Monotaxus grandoculis (small)
6 Brotulids (orange)
1 Pseudochromid sp.
8 Scaleless Blennies
1 Eleotrid with black second dorsal and anal as illustrated on backside of S-46-246; a large school in the area, but this was the only one collected)
24 Chromis coeurlea
3 " similar to coerulea but with blk band along dorsal and ventral surfaces of tail fin.
37 Eels (5 or more species)
48 Serranids (7 different species)
15 lizard fishes (2 species)
4 file fishes (2 species)
17 goat fishes (5 species)
2 Parapercids (2 species)
2 Scorpaenids (2 species)
59 Holocentrids: (6 species)
19,6,1,1 Holocentrus
3 Holotrachys
29 Myripristis
37 Labrids (14 species including 6 specimens of Wetmorella)
38 Gobies (including a specimen of the Skunk Fish) (6 species)
13 Parrot Fishes (3 different species)
45 Pomacentrids (7 different species)
3 Paracirrhites arcuatus

860 TOTAL SPECIMENS COLLECTED (including those photograph

96 TOTAL SPECIES

This station was important in that for the first time a boat functioned on the surface at the time of the poisoning---250 fishes collected in that manner

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

FISH TRAP

Acc. No. _____ Tag No. S-46-325 & Sta. No. _____

State or Country: 326, 327, 328, 329, and 330

County: _____ City: _____

Locality: Fish trap in 18 feet of water, coral area, 100 yards south of south tip of Enyu Id., Bikini Atol

Drainage: (Channel) Date: 6 August 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: corals and sandy

Shore: _____ Current: _____

Distance from shore: 100 yards Tide: _____

Depth of capture: 18 feet Depth of water: 18 feet

Method of capture: fish trap

Collected by: V.E.Brock and T. Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-325: Bup-headed Parrot fish (420 mm)
S-46-326: Hump backed snapper with lobbed caudal (310 mm)
S-46-327: Holocentrus (305 mm) spinifer
S-46-328: Brown Epinephalus (300 mm)
S-46-329: Porcupine fish (295 mm) this was not in the trap but was floating within ½ mile of the trap---along inside of Enyu Id.
S-46-330: Brown Epinephalus (200 mm) overall light brown in color with darker brown spots and each spot circled with a band of orange. N. Sp?

(150)

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Hook and Line

Acc. No. _____ Tag No. S-46-~~331~~ _____ Sta. No. _____

State or Country: Rongelap Atoll

County: _____ City: _____

Locality: In the lagoon, almost directly off the village on Rongelap Island

Drainage: _____ Date: 25 July 1946

Water: _____

Vegetation: _____

_____ Time: 1000--2400

Bottom: _____

Shore: _____ Current: _____

Distance from shore: ½ mile Tide: _____

Depth of capture: Bottom (10 fmas) Depth of water: 10 fathoms

Method of capture: Hook and Line (hand line)

Collected by: T. Kohler

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

3 Priacanthids(200 mm)

5 Blue-lined yellow snappers (180 mm) probably
Lutianus ~~viridis~~ basmira

~~Get the data on the above specimens from V. Brock or T. Kohler.~~ Data OK as above. (ESH)

Area: 50 yds x 150 yds
Cube: 25 lbs
INDEX: 960/7500:: .128

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-332 Sta. No. _____

State or Country: Bikini Atoll at NW Section of Reef Id.

County: _____ City: _____

Locality: Lagoon Reef

Drainage: _____ Date: Mon 12 Aug 1946

Water: _____

Vegetation: _____

_____ Time: 0900-1300

Bottom: _____

Shore: _____ Current: 1 mph

Distance from shore: _____ Tide: low tide station

Depth of capture: surface to 10 ft Depth of water: _____

Method of capture: pizon (25 lbs) and dipnets

Collected by: E.S.Herald, V.E.Brock and 4 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

Inasmuch as the shore was very rocky with some tide pools, one man was assigned to poison these ponds, hence blenny count is higher than ordinarilly.
The following fishes were collected:

3 Chaetodon citrinellus
5 Centropyge flavissimus
16 Paracirrhites arcatus
2 Flatfish
7 Balistes rectangularis
1 Doryrhamphus melanopleura
2 Platycephalids
1 Synodontid
2 Chromis coeruleus
5 Dussumerids
7 Kuhlids
7 Atherinids
1 Halfbeak
21 Brotulids
18 Siganids (juv)
5 Acanthurus achilles
2 " vel fin base
53 " triostegus
91 " 2-spot
11 Ctenochaetus strigosus
1 Naso unicornis
9 Parrot Fishes
15 Abedebduf abdominalis

Also

5 Octopusals

OVER

3 Dascyllus 3-stripe
2 Fish unknown
17 Pseudochromids
2 Caracanthids
7 Scorpionids (2 species)
33 Gobies (3 species)
243 Blennies (5 or more species)
13 Cheek Stripe Blennies
34 Goatfishes (4 species: 16-16-1-1)
61 Serranids (6 species: 5-4-47-1-3-1)
17 Holocentrids (4 species: 8-6-2-1)
4 puffers (2 species)
5 File Fishes (2 species)
4 Parapercids (2 species)
14 Apogonids (2 species)
57 Labrids (9 species)
26 Mullet (2 species: 25-1)
67 Eels (15 species including an Echidna zebra)
66 Pomacentrids (5 species)

---

91 Total Species Collected

960 Total Number of Specimens in Collection

Area: 50 x 150 yds
Cube: 25 lbs
INDEX: 932/7510 = .110

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-333 Also Sta. No. _____

State or Country: Nos 334 through 348 (1 plus 15 nos)

County: _____ City: _____

Locality: Bikini Atoll; SE End of Enyu Id; outer reef

Drainage: _____ Date: Tues 13 Aug 1946

Water: _____

Vegetation: _____

_____ Time: 0900-1300

Bottom: _____

Shore: _____ Current: _____

Distance from shore: reef narrow--50 yds Tide: _____

Depth of capture: _____ Depth of water: 18" maximum

Method of capture: poison (25 lbs) and dipnets)

Collected by: E.S.Herald, Monitor and 5 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This prooved to be one of the most interesting stations yet run---average depth of the water along the 300 yards of reefline poisoned was 6 inches with very shallow coral growths sporadically distributed---the maximum depth was 18 inches. When first checked, the area did not seem to have too prolific of a fish population, but we really hit the jackpot as a result of the use of the cube. We only picked up fishes for two hours, and inside of ½ hour after beginning with the nets, we had the 16 gallon container filled. We threw away 88 goatfish (common yellow-stripe) and 82 Surgeon fishes (mostly A. 2-spot but with some Ctenochaetus strigosus mixed in.

Went in over the reef with the wherry---and nearly capsized---the boat finally comingto rest, right side up on top of a high Lithothamnion ridge. Put two men in the boat with the equipment---and the others swam in to the reef from the sound boat--- nearly lost one man---Abarno---who was hit with a wave and knocked against a coral head---and then lost his head---screaming for HELP, and all that sort of rot---finally pulled him but---scratched up quite a bit.

OVER

The following fishes were photographed: films nn ? 1065

S-46-334: Acanthurus guttatus (165 mm)
" 335: Parrot fish with caudal peduncle spot (150 mm)
.....
" 336: Balistes rectangularis (160 mm)
.....
" 337: Balistes aculeatus (150 mm).
" 338: Labrid (205 mm).....
" 339: Enchelynassa canina (ca 720 mm)
" 340: Chaetodon lunula (?) (110 mm) sammara
" 341: Holocentrus (blk spot dorsal; 160 mm)
.....
" 342: Labrid, brown (175 mm).....
" 343: Pleuronectid (200 mm).....
" 344: Chaetodon quadrimaculatus.(105 mm)
.....
" 345: Chaetodon reticulatus (115 mm)
.....sordidus.....
" 346: Abudebduf ~~abdominalis~~ (115 mm)
.....
" 347: Gymnothorax picta (ca 650 mm)
" 348: Naso unicornis (?)(135 mm)..
(ituratus

The above fishes were lost from the string on which they had been placed in order, so that the above order does not necessarilly follow that of the photos.

The follwoing fishes were collected: (in addition to those photographed)

18 Parapercids
14 Balistes rectangularis
4 Balistes aculeatus
4 Chaetodonts (3 unimac & 1 reticulatus)
10 Holocentrids (2 species: 9-1)
6 Pleuronectids
6 Eels (5 species)
4 puffers (2 species: 1-3)
2 Common Siganids (large)
53 Chromids (yellow tails)
2 Apogonids (5 stripe)
1 Cirrhitid (species uncommon)
2 Caracanthids
10 Pomacentrids (4 species)
1 Abedebduf abdominalis
41 Chromids-like (bluish-grey)
175 Labrids (6 or more species)
97 Acanthurus 2-spot
5 Acanthurus achilles
1 Naso unicornis
60 Acanthurus triostegus
19 Parrot fishes (2 species: 16-3)
100 Blennies (3 species)
1 Scorpionid
37 Goatfishes (2 species: 3-34)
74 Serranids (3sp: 6-2-66)
15 fishes photographed (4 addit. species)

---

731 Total Preserved Fishes
201 ~~170~~ Total Discarded
932 Total Collection
51 Total Species in Collection

The collection is not well preserved due to the necessity of carry the fish for 2 miles in hot sun - minus preservative.

ESH believes that there were many more fishes present in the area - but the opportunity to work with photographs of living & work with the high number of habits is worth the photographs.

Area: 50 x 50 yds
Poison: 25 lbs cube
INDEX: 561/2500:: .224

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-349 AND 350+360 Sta. No. 349

State or Country: S-46-350 through S-46-360 (1 plus 11)

County: _____ City: _____

Locality: Outer reef near NW tip of Bikini ID., Bikini Atoll (directly out from CB sand-covered hut)

Drainage: _____ Date: Wed 14 Aug 1946

Water: A pool encircled by coral, size 50 x 50 yds and 5 feet deep

Vegetation: _____

Time: 1030-1330

Bottom: Sand

Shore: ½ mile out on reef Current: none at low tide

Distance from shore: _____ Tide: _____

Depth of capture: 25 lbs Cube Depth of water: 5 feet

Method of capture: perzon and dipnets

Collected by: E.S.Herald, monitor and 5 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

By contrast with the station run yesterday which was the same type habitat as found over most of the outer Bikini reef---very few fishes were observed on the outer Bikini reef. Walked from a point roughly ½ mile east of station S-46-253, east along the Lithothamnion ridge and found absolutely nothing in areas which shallow water and much abundant coral that should have been teeming with small fishes---checked the outer reef beyond the surge channels and found it to be fairly normall. During the course of the above reconnaissance, 3/4 mile of shoreline was covered---and only one pool was observed that was at all comparable with the same habitat of yesterday at Enyu (S-46-333). At this point came towards the shore from the L. ridge and about 1/3 mile from the ridge towards the shore, discovered many sandy areas about 6 feet deep and shallower, some of which had fishes, but not in great abundance---the one exception in numbers of fishes in this area was the enclosed-by-coral sandy area in which this station was run---and it was simply lousy with fishes---most interesting was the fact that there was a large school of several hundred Fistularia in the pool---and in contrast with the the few needlefish which were swimming at the surface---they were all at the bottom---and were very sluggish---reminding one of the Florida Gars in the Springs of that state.

OVER

The following fishes were photographed: (total 11)

S-46-350: Common Blue Parrot (250mm); ABCR139-1066-1,2
" 351: Monotaxus grandicollis(220mm) " " " -3,4
" 352: Holocentrus sp. opercular (210 mm); " " " -5,6
" 353: Parrotfish, orange head(170mm) " " " -7
" 354: Labrid, ½ & ½ (175 mm) " " " -8
" 355: Chaetodon ephippium (130 mm) " " " -9
" 356: Chaetodon auriga (140 mm) " " " -10
" 357: Synodid, blue lined (130 mm) " " " -11,12
" 358: Labrid (Hippofish)(90mm): " 1067-1 " -2
" 359: Puffer (83 mm) " " " -3,4,5
" 360: Naso velifferum (70 mm)..... "..." " -6

Discarded fishes: 136 Monotaxus grandicolis
13 Fistularia

The following fishes were collected:

67 Fistularia (13 discarded-- many more stuck in coral)
11 Goatfishes (2 species: 10-1)
78 Holocentrids (6 species)
20 Apogonids (3 or 4 species)
6 Orange Peels (Centropyge)
2 Puffers
7 Eels (4 species)
3 Lizard fishes
20 Pomacentrids (2 species: 11-9)
2 Pseudochromids
2 Aulostomids
14 Chaetodonts (5 sp: 2-2-3-3-4)
4 Dasyllus 3-stripe
21 Chromis coerulus
1 Heniochus acuminatus
1 Scropionid
2 Zebrasoma flavessecens
1 Naso lituratus
1 Naso (no tail spine)
7 Ctenochaetus strigosus
29 Acanthusus 2-spot
2 Acanthurus achilles
3 Acanthurus triostegus
5 Zanclus coronutus
22 Labrids (13 species: 4-2-5-2-1-1-1-1-1-1-1-1-1)
10 ~~Monotaxus grandicolis~~ (136 discarded) Goatfishes
8 Epinephalus (common type)
52 Parrot fishes (possibly 3 species)
11 Photographed --tin tagged as above

412 Total Fishes preserved (including 11 Photographed)
149 Total Fishes discarded
561 Total Specimens
59 Total Species in Collection

Note the low eel count---only 7 specimens---and the previous collection (S-46-253) in this area was equally low---only 4 specimens. Check on Schultz collections for this area (S-46-15 & 120)

This is another station where Parrotfish entered the trap & the 3 pounds of fish collected was not collected that day — it is believed that previous hauls to work on the photographs with the fish tagged & counted & released

Also note Enyu eels S-46-333 = 8 eels

Area: 75 x 100 yds
Cube; 25 lbs
INDEX: 194/7500 = .025

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-361 and Sta. No. 361

State or Country: S-46-362 through S-46-381 (1 plus 20 nos

County: _____ City: _____

Locality: Bikini Atoll; Outer reef of Chieerete Id (conde: Cherry) approx bet stas. S-46-98 and 99

Drainage: _____ Date: Thurs 15 Aug 1946

Water: _____

Vegetation: many coral heads; low broken Lithothamnion ridge Time: 1100-1500

Bottom: _____

Shore: _____ Current: strong;much surge

Distance from shore: _____ Tide: just turned as pois on was being distribut

Depth of capture: surface to 10 ft. Depth of water: _____

Method of capture: perzon and dipnets

Collected by: E.S.Herald plus monitor plus 6 EM

Preservative: formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The rod was put into the water at a depth of 6 feet (ie bottom of 6 feet) and was from there carried into the shore---many fishes were killed but the breakers were a bit rough, and as ESH had to work with the photographer---no amount of persuasion could get the EM out into the area where the fishes were---consequently the catch is not particularly rich in the number of species of specimens collected---howeverthe series of pictures taken during the day may be sufficient to redeem this station.

The monitor's Geiger counter gave readings of .2 and .3 of a MR (milliroentgen) for the fishes and some of the coral and such in the area---however this is much below tolerence.

The following fishes were photographed:

S-46-362:	Siganid (245 mm).....	ABCR	139-1067	-7
" 363:	Parapercid (105 mm).....	"	"	-8,9
" 364:	Parapercid (110 mm).....	"	"	-
" 365:	Mullid (140 mm).....	"	"	-10
366:	Cheilinus (?)(120 mm).....	"	"	-11
367:	Labrid (100 mm).....	"	"	-12
" 368:	Zanclus coronutus (115 mm)....	"	1068	-1,2
" 369:	Chaetodon ephippium (125 mm)..	"	"	-3,4
" 370:	Naso lituratus (135 mm).....	"	"	-5,6
" 371:	Acanthurus achilles (115 mm)..	"	"	-7,8
" 372:	Acanthurus yel tail bar (95mm)	"	"	-9.10

OVER

This station was originally planned for Rukoji Id., (Code: Ruji) but it was found that the current was too strong along the SW end of the island to run a poison station, consequently, the possibilities of Cherry were investigated.

S-46-373: Centropyge flavissimus (67mm). ABCR139-1068-11,12
" 374: " " (55mm) & 1069-1,2
" 375: Yellow Goat Fish (90 mm)..... ABCR139-1069-3,4
" 376: Platycephalid (125 mm)..... " " -5,6
" 377: Gomphosus various (120 mm)... " " -7,8
" 378: Blenny, very fat (90 mm)..... " " -9
" 379: Pomacentrus (com-blk;85mm)... " " -10
" 380: Scorpionid (65 mm)..... " " -11
" 381: Labrid (97 mm) Macrochirus. porDalis " " -12

Total of 20 fishes and 30 photos

The following fishes were collected:

7 Ctenochaetus strigosus
56 Acanthurus 2-spot
2 Holocentrus
1 Synodid
1 Epinephalus
1 Serranid, small striped
4 Chromis coeurulus
3 Apogon
5 Centropyge flavissimus
1 Eel
1 Brotulid
10 Labrids (5 species)
42 Blennies (3 species)
23 Parrot Fishes (2 species: 1-22)
9*Pomacentrids (2 species)
3 Goatfishes (2 species)
5 Chaetodonts (2 species: 4-1)
20 Specimens photographed (8 species not listed herein)

194 Total Specimens Collected

35 Total Species in Collection

It should again be emphazised that this collection definitely does not constitute an adequate sample of the fish population in the area---for from observation, fishes were fairly abundant.

Area: 75 x 75 yds
Cube: 25 lbs
Index: 857/5525:: .155

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-382 Sta. No. 382

State or Country: Bikini Atoll

County: _____ City: _____

Locality: Ourukaen Island (Code Name: Oruk) Outside reef
(reef on SW side of island)

Drainage: _____ Date: Fri 16 August 1946

Water: clear

Vegetation: numerous coral heads with paths between

Time: 1100-1430

Bottom: _____

Shore: _____ Current: surging breakers

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: pizon and dipnets

Collected by: E.S.Herald, Monitor and 5 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Went around South end of island to the SW side onthe outer reef where the station was run. The sou th end of the island was covered with oil andheavy gummy tar which gave a reading on the Geiger counter which was as high as the instrument would read--- ie on the 20 scale---ie the reading was .16 roentgen units per 24 hours (highest reading possible on meter wich is over tolerence (tolerence being given as .1 (or 1/10) roentgen Units per 24 hours). Conseq- uently this area on the south side of the island was avoided and some 1/3 of a mile to the west of this contaminated area was found another area which was typical flat outside reef with low growing coral --- it gave a reading of .2 MR (milleroentgen units) per 24 hours, which was below tolerence---so this area was worked. It should be noted that the read- ings on the fishes varied from .1 MR to .5 MR---this latter reading being obtained when the counter was put down inside of the 16 gal tank and within two inches of the formalin solution. It was found that with the same species of fish, the reading would be different, ie higher, if his gut was cut open and the radio-active algae within the guts exposed to closer proximity of the counter. The question is raised as to whether these fishes have received enought radioactivity, either through food or through their presence adjacent to a contaminated area so that they willsuccumb within the next few months.

Discarded specimens: 76 of Acanthurus 2-spot and
31 of Acanthurus triostegus

The following fishes were collected:

4	Flatfish	Also
7	Balistes rectangularis	
10	File fish	4 Octopusals
8	Siganids (small)	
12	Chaetodonts (5 species: 5-1-3-1-2)	
4	goatfishes (2 species: 3-1)	
50	Serranids (3 species: 48-1-1)	
6	Parapercids	
1	Platycephalid	
116	Blennies (probably 4 species)	
240	Labrids (5 species: 23-11-1-199-6)	
14	Parrot fishes (2 species: 4-10)	
45	Acanthurus triostegus (note discard above)	
7	Naso lituratus	
7	Acanthurus achilles	
3	Acanthurus olivaceus NOTE	
1	Acanthurus guttatus	
64	Acanthurus 2-spot (note discard above)	
3	Ctenochaetus strigosus	
39	Pomacentrids (probably 3 species)	
39	Eels (4 species)	
5	Paracirrhites arcatus	
20	Caracanthids(may be wrong)	
5	Gobies (this may not be correct	
3	Plesiops nigricans	
1	Fistularid	
3	Halfbeaks	
26	Scorpionids (3 species)	
7	misc fishes (4 species)	

750 Total Fishes Preserved

107 Total Fishes Discarded

857 Total Fishes Collected

54 Total Species Represented in Collection

Area: 75 x 100 yds
Cube: 25 lbs
INDEX: 981/7500 = .130

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

POISON

Acc. No. _____ Tag No. S-46-383 Sta. No. _____

State or Country: Outside reef of North End of Bokobyaadaa

County: Island (Code: Boby) City: Bikini Atoll

Locality: This sta was located next to the island on the north side just before the sand spit curves out leading to Bokonejien Island to the north.

Drainage: _____ Date: Sat 17 Aug 1946

Water: _____

Vegetation: _____

_____ Time: 1100-1445

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____ mostly under

Depth of capture: surface to 8 feet Depth of water: 5 feet

Method of capture: pizon and dip nets

Collected by: E.S.Herald, monitor and 5 EM

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

No sign of oil contamination along outer reef, although there was much along the inner reef---no indication from the Geiger meter of contamination along outside up tothe time it stopped working due to its being ungently dropped.

The following fishes were collected:

35 Eels (8 species: 10-1-1-4-1-6-2-10)
92 Blennies (4 species)
29 Acanthurus triostegus (incl 11 very small indiv.)
9 Chaetodonts (5 species)
3 Zanclus coronutus
18 Lizard Fishes
2 Parapercids (2 species)
4 Lemon peels (Centropyge)
3 Pleuronectids
63 Dascyllus 3-stripe
16 Chromis coeruleus
3 Puffers (2 species)
11 Holocentrids (4 species: 4-4-2-1)
36 Pmoacentrids (5 species)
48 Parrot Fishes (4 species)
31 Goatfishes (3 species: 1-5-25) discarded 85 Yel St
Observed 115 more

OVER

NOTE: On the day following this collection, themonitor, Lt Comdr. Jack Emmett returned to Boby Island with another meter (with Dr. Morrison) and found that some readings were as high as 5 MR, but in general most of the area was quite cold.

Collection List (continued from front side)

6	Pseudochromids	
4	Chromids	
48	Mullet	ALSO
48	Apogon (3 species)	
3	Monotaxus grandicolis	Two Octopusals
5	Amphiprion	
6	Ctenochaetus strigosus	
4	Naso lituratus	
7	Acanthurus 2-spot	
1	Zebrasoma flavessens	
2	Scorpionids	
140	Labrids (12 species: 19-93-4-1-5-1-6-6-2-2-1-2)	
1	Trigger fishe	
1	Trunk Fish	
13	Kuhlids (2 species: 3-10)	
1	Aulostomid	
11	Gobies (3 species)	
1	ANTENNARID (10 mm)	
2	Caracanthids	
64	Epinephalus (2 species: 63-1)	

---

771 Total Fishes Preserved

95 Total Fishes Discarded

115 Total Dead Fishes Observed but not Collected

981 Total Available Collection

19 Total Species Represented

HOOK and Line

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-384 Sta. No. _____

State or Country: Boku Pass about 200 yards off Oruk Id.,

County: _____ City: _____

Locality: Bikini Atoll

Drainage: _____ Date: 12 August 1946

Water: _____

Vegetation: _____

_____ Time: 1200

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 9-10 fathoms Depth of water: 11 fathoms

Method of capture: Hook and Line

Collected by: Yeoman 1/C McChesney

Preservative: formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

S-46-384: Naso eoume, 400 mm Stand Length

This specimen was one of four which were caught on hook and line, using bacon (?)---The fish were said to have hit the line with great force. The other three specimens spoiled before they could be preserved.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

HOOK & LINE

Acc. No. _____ Tag No. S-46-385-6-7-8 Sta. No. _____

State or Country: Bikini Atoll

County: _____ City: _____

Locality: 3/4 mile due east of Rochikarai Island (code: Rokar), Bikini Atoll (Bowditch Anchorage)

Drainage: _____ Date: Wed 21 Aug 1946

Water: _____

Vegetation: _____

_____ Time: 1600-1700

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: CWM-Norton

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Bait used was boloney, known colloquially to the EM as Horsephallus.

S-46-385: Caranx (400 mm)

S-46-386: Caranx (450 mm)

S-46-387: Caranx (390 mm)

S-46-388: Caranx (390 mm)

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

SPEAR

Acc. No. _____ Tag No. S-46-389 Sta. No. _____

State or Country: Rongelap Atoll

County: _____ City: _____

Locality: Lagoon Side of Raongelap Island, Rongelap Atoll.

Drainage: _____ Date: 21 July 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: mostly sand with a few coral heads

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: 10-20 ft

Method of capture: Sling Spear

Collected by: V.E.Brock

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

1 Trunk Fish (190 mm)

1 Trigger Fish (185 mm)

25 lbs cube
5 canvas bags

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

DEEP POISON
and
SPEAR

Acc. No. _____ Tag No. S-46-~~331~~ 390 Sta. No. _____

State or Country: Bikini Atoll

County: _____ City: _____

Locality: One mile southeast of Namu Island in 30-45 feet of water

Drainage: Ocean like lagoon reef Date: 9 Aug 1946 Fri.

Water: very clear

Vegetation: _____

Time: _____

Bottom: large coral area---irregular

Shore: ½ mile south of reef Current: _____

Distance from shore: 1 mile to Namu Tide: _____

Depth of capture: 30-45 feet Depth of water: same

Method of capture: pizon, dipnets and spear

Collected by: V. E. Brock and E. S. Herald

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 Caudal Ped Blotch Brown Grouper
1 Brown Grouper same a s abov e, but without caud ped blothch.
1 Chaetodon monomaculatus
2 Priacanthids
1 Holocentris
11 Myripristis
1 Yellow-belly, dorsal ocellus Pomacentris
1 Bump headed labrid (speared; this is possible the first time that this specieshas been taken)

---

19 Total Specimens

This areas was one of the best that VEB andESH had observed---specially for larger fishes, but it was also abundant in shark population---5 large individuals were observed at one time circling about VEB (white tipped and black-tipped grey---ie caudal and 2nd dorsal black on the outer margins, but the first dorsal grey) The sharks were so numerous that all of the cube could not be distributed---ie only 3 bags put out, and the last much later than the others. ESH had the pump go haywire, so had to throw off belt and mask and swim for surface (46 feet). Belt buckle and canvas bag lost. Line was fouled so that ESH could not be pulled in. Later in the afternoon---the pump stopped twice more,

but on each of these occasions, ESH was pulled in without difficulty.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-391 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: Off Rongerik Island in the lagoon, Rongerik Atoll; under light at night

Drainage: _____ Date: 26 April 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface _____ Depth of water: _____

Method of capture: dipnet

Collected by: John C. Marr

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

7 Halfbeaks (165--310 mm)

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

LIGHT

Acc. No. _____ Tag No. S-46-392 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: Rongerik Lagoon in Rongerik Atoll
under light at night

Drainage: _____ Date: 23 April 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface light Depth of water: _____

Method of capture: dipnets

Collected by: John C. Marr

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

6 Halfbeaks (280-300 mm)

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

TROLLING

Acc. No. _____ Tag No. S-46-393 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: Off Rongerik Atoll

_____

Drainage: _____ Date: 25 April 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: trolling

Collected by: John C. Marr

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

One Acanthurus sp. (probably a 2-spot) coughed up by a Gymnosarda (species spelling is not clear but looks like under

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

?

Acc. No. _____ Tag No. S-46-394 _____ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Three flying fishes thought to have been brought to the Bowditche by Thomas Kohler just before he left---check with V.E.Brock on data for these specimens---these three specimens (unwrapped) were brought over at the same time as S-46-391-392 and 393 were brought over---the latter of which were wrapped with data.

Lengths of flying fishes: 260, 270 and 280 mm

Jack Marr informs us that these specimens were taken by the commercial fisherman known as "Kris" or Chris — and that the specimens are probably from the Bikini or Rongelap areas.

---

note Labels found in body cavities written by marr show that the 2 larger specimens (

Petersen

came from Bock Pass, Rongerik, 27 April and the smaller one from off South side of Bikini Atoll April 16

Apr 8, 1947 LP Woods

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

PLANKTON NET

Acc. No. _____ Tag No. S-36-395 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: 40 CM Net towed from USS LAFFEY at 09° 00' North Lat; 168° 00' East Long.

Drainage: _____ Date: Not given

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 4 ft below surface Depth of water: _____

Method of capture: 40 Cm plankton net

Collected by: HHW (?)

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 30 mm pompano-like fish

It is believed that this specimen came from Dr. Martin Johnson

Orig. Station No: C-39-4476

FIELD DATA RECORD HOOK and LINE
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-396 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: Bikini Atoll at Bowditch Anchorage: 3/4 mile due east ofRochikarai Id.

Drainage: _____ Date: Tues 27 August 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: surface Depth of water: _____

Method of capture: hook and Line

Collected by: Chief Machinist's Mate Norton

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

One ~~330~~ 490 mm Baracuda

Area: 100 yds x 75 yds
Poison: 30 lbs Cube
INDEX:

534 fishes POISON

FIELD DATA RECORD

Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-397 Sta. No. _____

State or Country: _____

County: Lagoon reef City: _____

Locality: Kwajalein Atoll at Lagoon reef located near Southern end of Enjylabegan I.D.

Drainage: Lagoon Reef Date: Sunday 1 Sept 1946

Water: _____

Vegetation: _____

Time: 1200-1500

Bottom: Much dead coral - living & dead highly colored

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: 1-10 ft

Method of capture: Poison + dipnets

Collected by: E. S. Herald plus 7 assistants

Preservative: Formalin Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This station was very interesting in that although the yield was poor — there were species abundantly represented which at Bikini & Rongelap Rongerik were fairly uncommon. Of interest in this respect was the Blue Creek limit of Astrid (?) Pomacentrus melanochir & Cirrhitichthys falco which were both collected by F. S. Herald but were apparently missed in getting out of the net. Pomacentrus were 2 specimens of which I took the largest of the previous localities.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

FP 16 June 2009

401

Acc. No. _____ Tag No. 5-46-~~401~~ Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: Off South side of Bikini Atoll, flew on board ship at night

Drainage: _____ Date: April 16, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: J. C. Marr

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 flying fish. S.L. 258 mm

Cypselurus spilonotopterus Blkr

25 preserved
25 discarded
50

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-402 Sta. No. 5-46-402

State or Country: Bikini Atoll

County: _____ City: _____

Locality: Chilton anchorage about half mile off Bikini Island

Drainage: _____ Date: July 13, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: night

Method of capture: flashlight and ships lights at

Collected by: Myers and Schultz & Smith

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

There was a notable absence of mullidae and Pomacentridae.

Atherinidae, gobies, snake eel, halfbeaks and a pike fish came to the light.

2 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-403 a Sta. No. S-46-403

State or Country: Bikini atoll

County: _____ City: _____

Locality: Eman dsland, lagoon

Drainage: _____ Date: July 16, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: spear

Collected by: Vernon Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

S-46-403 File fish. dorsal, anal and caudal fins brownish yellow; eye yellow; body pale brown, with a yellowish tinge; caudal ~~fins yellow~~.

S-46-403a. The pearl fish came out of the ~~sea to~~ globular starfish, Culcita novaguinea, about 8 inches in diameter

invertebrates

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-404 Sta. No. _____

State or Country: Bikini atoll

County: Eman Island City: _____

Locality: _____

_____

Drainage: _____ Date: July 16-16, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: Schultz, Morrison, and Bayer

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Material in this collection mostly from the land area of Eman Island.

Discarded 201
Preserved 309
Total 510

FIELD DATA RECORD Index ab, ~~111~~, 164
Division of Fishes
U. S. National Museum 16 fish photographed

Acc. No. _____ Tag No. S-46-405-420 Sta. No. S-46-405

State or Country: Bikini Atoll

County: Enman Island City: _____

Locality: Western end next to channel reef with only moderate growth of corals and algae

Drainage: _____ Date: July 17, 1946

~~Water~~: area fished about ~~50 by 100~~ 100 yd 12 yd

~~Vegetation~~: yards ~~or 10,000 sq. feet~~ = 3100 sq. yds.

Bottom: 50 yd

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: to 10 fat

Method of capture: Poisone 50 lb.

Collected by: Schultz, Brock, ~~and~~ Myers, and

Preservative: ~~Hist~~ _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The current was too swift to recover more than a small portion of dead fish - also sharks of 3 kinds came in and fed on the fish. Perhaps the recovery was less than 50%.

The following fishes were photographed in color and tagged:

S-46-405 - yellow streaked surmullet.
406 - green parrot fish.
407 - pink striped cirrhitid.
408 - sand sole.
409 - green parrot fish.
410 - brown parrot fish.
411 - yellow puffer.
412 - orange streaked butterflyfish.
413 - Wrasse.

? 6? 54? 55.?

#6254

5-46-414 - Blue striped wrasse (Stethojules albovittata)
5-46-415 - green chromis
-416 - Heniochus
6255 -417 - orange striped wrasse
-418 - Brown mottled eel
-419 - Elibulus
5-46-420 - Cephalopholis

Discarded fishes in circle without "+" marks

Name

Yellow striped Surmullet

mm	
101-110	+1
111-120	32
121-130	
131-140	
141-150	(1111
151-160	(1111
161-170	(1111
171-180	(1111
181-190	
191-200	
211-220	(1)

Grey Parrotfish

mm	
21-30	
31-40	
41-50	+5
51-60	39
61-70	
71-80	
81-90	-1111
91-100	
101-110	-111
111-120	-11
121-130	-11
131-140	(1111
141-150	(1111
151-160	(1111
161-170	-11
171-180	-11

Blue belly stripes orange band
Scarus dubius

140	+1
170-11	5
180-11	
210-1	

(1) Mantapis grandis.
370 mm - (mola faith)

Acanthurus triostegus

100-	
110	+1
120-11	8
130-1111	
140-1	
150	

Etmochaetus striatus

100-111	
170-1	
120	
130-1	
140-1	
150-1111	
160-1111	

Epinephelus bicaudatus

120-11	80-1111
160-1	220-11
170-1	70-11
100-111	40-1
90-1111	60-1
80-1	34 +1
110-1111	

Acanthurus elongatus

70-111	
90-1111 1111 1111	46 +1
80-1111 1111 1111 111	
100-1111 111	
40-11	

Blackbarred surmullet

mm	
100-11	
120-11	9 +7
130-1	
150-1	
180-11	
170-1	

Epinephelus = brown spotted

110-1	90-1
80-111	7 +2
60-11	

Continued

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. _____ Sta. No. S-46-405

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: July 17, 1946

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

green spotted dorsal
Parrot fish
210-1 (1) +1

Acanthurus Achilles
80-111
120-1 (4) +2

Epinephelus morio
Purple spotted
250-1 (1)

Acanthurus alials
bass dorsal & anal
130-11
120-1
110-11 (5) +3

Unidentified Pomacentrids
cap - all
out -
unidentified pomacentrids
(9) sp.

over

The abundance index ~~of 05~~ is low because the current came in strong and carried much away, thus sharks fed on many dozens of fishes - This station should not be given much weight.

No specimens of :— were kept
Monotaxis grandoculis 370 mms std. l.
Cephalopholis argus 250 mms.

Color of Amblyeirrhites hemistictus when alive.
Midlateral streaks rosy; ventral side of body below lateral streaks with 6 or 7 yellow streaks on each side; upper half of body between black spots olive green; Caudal fin lemon yellow; pinkish blotch on opercle and forward around snout between eyes and lips; lower lip rose colored; each side of black streaks underside of lower jaws, rosy.

Index of abundance
.164+
3100 ⟌ 510

1 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-421 Sta. No. S-46-421

State or Country: Bikini atoll

County: Enman dsland City: _____

Locality: _____

_____

Drainage: _____ Date: July 17, 1946

Water: _____

Vegetation: Taeniura brocki new species

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: Speared at Depth of water: _____

Method of capture: 20 feet depth.

Collected by: V. E. Brock and Robert Hiatt

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Vernon Brocks made the remarkable capture of a large stingray by spearing it when diving from a boat in about 20 feet of water. This fish weighed 75 to 100 lb (estimated) was about a yard across the disks. How he got it to the surface was a marvel. It was too large to go into a 16 gal. tank so I had to dissect a lot of it away to get the creature into a tank.

Photographed by flash light. Vernon Brocks has the sting as a souvenir.

Discarded - 1158
Preserved - 930
Total - 2088

FIELD DATA RECORD ~~index 209~~ 19 fish photographed
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-422-440 Sta. No. S-46-422

State or Country: Bikini atoll

County: Shallow pond between

Locality Eman and Reer islands area about 50 by [redacted] yards 75

Drainage: ~~10,000~~ sq. yds. Date: July 18, 1947

Water: second pond 15 by 100 yds.

Vegetation: No living corals, broken up beach rocks, gravel, etc.

Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 25 lb Cubi

Collected by: Brock, Hiatt, Schultz and Myers

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

Discarded fishes

[redacted] sp. ~~#~~ 338 ~~septemfasciatus~~

Brown spotted Serranid E. hexagonatus ~~#~~ 121

Black tipped black 3 - Eulamia melanopterus

Gymnothorax pictus - 2

Serranid sp (small spots 2 -

Balistapus aculeatus - 23

Wrasse black dorsal caudal spot 77 H. trimaculatus

Weke 161 yellow striped surmullet

Gnathodentex aurolineatus 4. [none saved]

~~Lutjanus monostigmus~~ 2

~~Abudefduf~~ glaucus → 392

~~Chaetodon~~ Black and spot ~~#~~ 14

Green parrot fish ~~#~~ 14

Holocentrus (red ~~spot~~ Rocks 39
in dorsal) Sammara

Following photographed

5-46-422 Gramistes.
423: Surmullet.
424: 6 banded damsel fish abudefduf saptem fasciatus
425 Trigger fish.
426 Lizzard fish.
427 Cephalopholis argus: purple spots.
428 Sole.
429 Trigger fish.
430 Lutjanus monostigma.
431 worm eel.
432 Plesiops.
433 Blacks tip sherks.
434 3 snake eels.
435 Echelid eel.
436 green backed mullet.
437 moray eel.
438 Brown spotted H. summana sordidus
439 abudefduf - blacks caudal spot.
440 Echidna Nebulosa.

---

no specimen of Gnathodentex aurolineatus was kept.

641 preserved
483 discarded
1124

FIELD DATA RECORD I = 1150
Division of Fishes
U. S. National Museum

462-468;

Acc. No. _____ Tag No. S-46-441; Sta. No. S-46-441

State or Country: Bikini Atoll

County: Eman elaland City: _____

Locality: Ocean surf at eastern end.
15 yds by 50 yards.

Drainage: _____ Date: July 19, 1947

Water: 750 sq. yds.

Vegetation: _____

Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 35 lb - Cube

Collected by: Schultz, Brock, Myers & Hiatt

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

green parrot fish ~~10~~ 38
Acanthurus triostegus ~~113~~ 278
mullet ~~24~~ 56 - neomyxus
Weke - 8 - yellowstreaked sermullet.
Siganus rostratus ~~2~~ 21
Naso literatus - 2
Chaetodon hexagonatus 28
Acanthurus gutattus 5
abudefduf sp.? 1
Balistes aculeatus 5 - orange streak on head
Acanthurus elongatus 37
Acanthurus achilles 3
Grey parrot fish - 2
~~Small grey parrot fish~~ only

5-46-461 - Eulamia melanoptera
5-46-462 — grey hound fish
5-46-463 — grey " "
5-46-464 — brown " "
5-46-465 — green " "
5-46-466 - " " "
5-46-467 - monacanthid —
dorsal and anal ~~white~~ yellow
5-46-468 - Chaetodon

The Pempheris have hinds caudal, pectoral and dorsal fins.

The three specimens of Girella are barred with 5 brown vertical blotches; cheeks with 3 orange yellow streaks; lips lemon yellow, burnt orange spots on body, pectorals pinks; dorsal red splotted filaments on tips of shiny dorsal yellow.

Discarded 145
Preserved 603
748

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Index 149
16 fish photographed
5-57

Acc. No. _____ Tag No. S-46-442 Sta. No. S-46-442

State or Country: Bikini Atoll

County: Lagoon side of ~~City~~: halfway

Locality: between Bikini and Amen islands.

Drainage: _____ Date: July 21, 1947

Water: area fished ~~300~~ 50 by ~~100~~ 25 yards

Vegetation: _____

5000 ~~+ 875~~ sq. yds. Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 5 to 10 ft Depth of water: _____

Method of capture: Poisons 40 lb.

Collected by: Brock, Hiatt, and Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

Following fishes photographed in color

CR6258
5-46-442-Holotrachy
5-46- 43-Chaetodon hexagonatus
- 44-myripristes
- 45-yellow tailed wrasse
- 46-Holocentrus (red)
- 47-Sea bass
- 48-file fish
- 49-cardinal fish
- 50-moray eel
- 51-Gratilodenter
- 52-Scorpion fish Scorpaena porphyrias ~~obtusissima~~?
- 53-Pempheris
CR6260 - 54-Brotulid
CR6259 5-46- 55-Antennarius } double exposure
- 56-Acanthurus }
- 57-Puffer fish over exposed

Discarded fishes in field

Siganus striatus (59)
Yellow striated surmullet (~~22~~) 29
Gnathodentex - (19)
Acanthurus elongatus (11)
~~Chaeto~~ Cteriochaetus striatus (14)
Green parrot fish (2)
Epinephelus - brown spots - (6)
Grey parrot fish - (2)
Myripristis (3)
~~Apogon~~ (3)
~~Epibulus insidiator 1~~
~~Atherina temminckii - 8~~
~~Sygnodus variegatus - 1~~
~~Platycephalus 4~~
~~Amblyceirrhitus 1~~
~~Dinematichthys 4~~
~~Casacentrus 1~~
~~Scorpaenodes 1~~
~~Chaetodon reticulatus 1~~
~~Centropyge flavissimus 2~~
~~Acanthurus dussumieri 1~~
Hyporhamphus 1
atherina temminicki 8
Dinematichthys 6
Gymnothorax 1
apogon 4
abudefduf 2
Synodus 1
Pseudochromids 2
Blennids 2
~~Spratelloides 29~~

8 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-458 to 461, 469-472 Sta. No. S-46-458

State or Country: Bikini Atoll

County: Lagoon Is. City: _____

Locality: Bikini Island at Chilton Anchorage

Drainage: _____ Date: July 20 - aug 10, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hook and Line

Collected by: Crew of Chilton; ~~and~~ Schultz

Preservative: _____ Temp: _____ Air

List of species or kinds, with tag numbers if drawn or discussed:

S-46-~~462~~ 460 - Balistes viridescens - black streaks, spots, with the intervening areas on fins yellowish.

S-46-458 - Echeneis collected by Herbert Silverman U.S.N. Yeoman 2/c

(will runs freely on)

S-46-459 Ablennies hians Collected by Osgood Smith & U.S. Fish W. Service

S-46-461 - Caranx

(other specimens not preserved)

S-46-469 Lethrinus
Red ofercular spot; maxillary red at rictus; reticulated color halos & brownish green blotches; dorsal, caudal, & pectoral finks.

5-46-470 Siganus vulpinus, profusely spotted with golden green spots.

5-46-471 - route tips shark
5-46-472 - Lethrinus

8 preserved
9

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-473 Sta. No. S-46-473

State or Country: Bikini atoll

County: Channels and off City: _____

Locality: reef edge of leeward side of Bikini atoll in Aran Pass

Drainage: _____ Date: July 22, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Trolling

Collected by: J. Marr and Osgood Smith

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Circular tag numbers of U.S.F.W.
This barracuda is plain silvery on the sides, darker dorsally, silvery ventrally.
No. of tags 131-132; 135-139; 143.
This is the little barracuda.
Backs dark bronze, sides lighter; black spot in axill of pectoral; pectoral fins yellow; no bars on sides as found in the larger species of barracuda..

Juvenics in March 1948 as well as pectorals still show traces of yellowish

1 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

1 photographed

Acc. No. _____ Tag No. S-46-474 Sta. No. S-46-474

State or Country: Bikini Atoll

County: Enyu channel City: _____

Locality: _____

_____

Drainage: 140962 Date: July 27, 1947

Water: _____

Vegetation: _____

_____ Time: P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Harpoon

Collected by: Lt. Cox and Larry Marquez

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

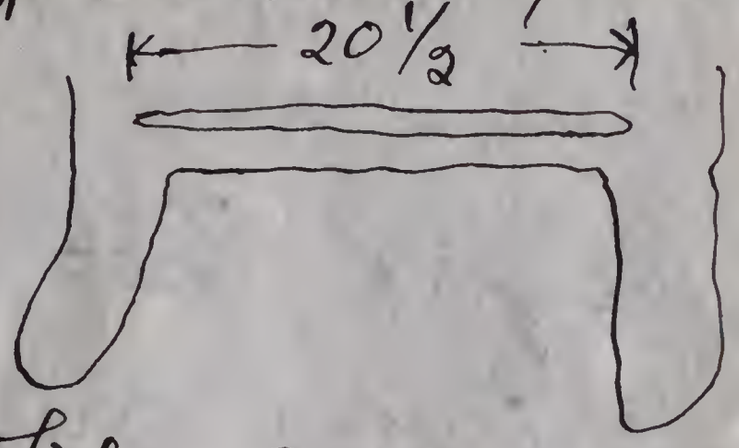
Manta. ♀ measured in inches

Length from middle of snout to tip of tail 86"

~~Tail~~ Width across wings 116

From pectoral tip to middle of snout 68

Width mouth 20½



Rictus to tip of cephalic lobe 16½"

Rictus to first gill opening (inner edge) 9"

" " 2nd " " 12

" " 3rd " " 15½

" " 4th " " 19½

" " 5th " " 23½

Width of gill openings

1st - 13" 2nd - 14 Third - 12½

fourth - 11 and 5th 8¾

~~Body length~~

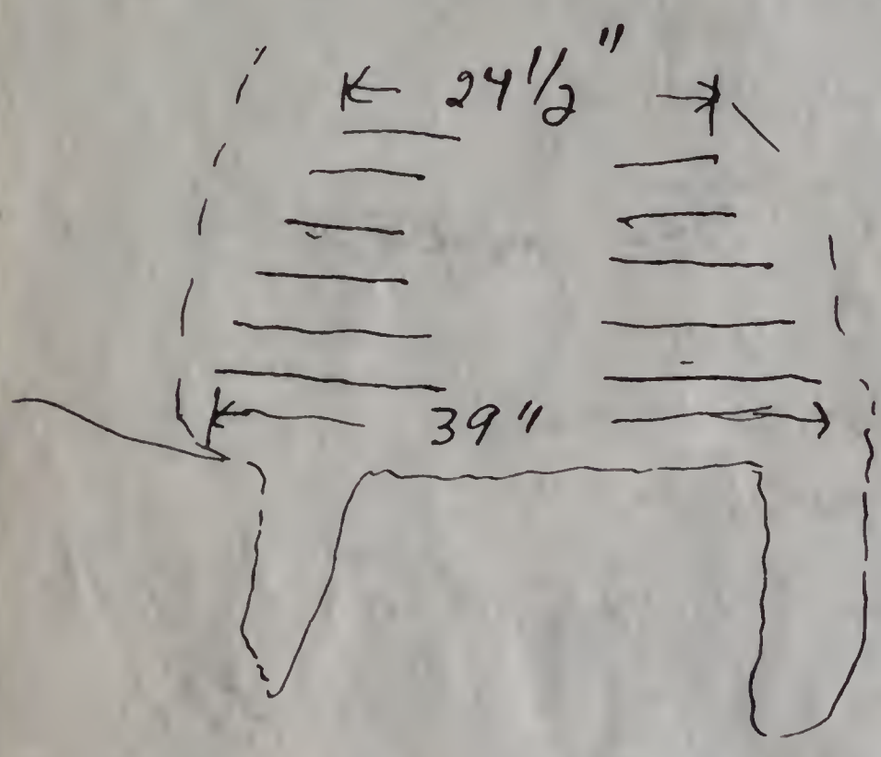
Length from midline snout to mouth ~~to~~ 7/8
anus 49"

Middle of snout to rear edge of disk 59"

a line between pectoral tips cross ~~mid~~ lengthwise axis of body 37" ~~from~~ behind middle of snout or mouth.

~~add~~

~~Middle of snout to outher edge of~~



width from gill (outer edges) opening to gill opening.

The stomach was filled with Crustaceans, a sample was saved.

Estimated weight ~~800~~ 700 lb.

Each day last year the mantas were seen cruising in Eagle channel. Two harpoons were brought by me. One was loaned to Larry Marquiss & Lt. Cox. Three mantas were speared, all got away, breaking harpoon. The other harpoon was loaned. This captured one! I could only save half of it because of the large size even after working most of the night.

10 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-475 Sta. No. S-46-475

State or Country: Bikini atoll

County: Outer or ocean reef off Bikini

Locality: Loland

Drainage: _____ Date: July 27, 1947

Water: _____

Vegetation: _____

_____ Time: P.M.

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: 2 feet _____ Depth of water: _____

Method of capture: breaking up Coral Heads

Collected by: L. P. Schultz and Ted Bayer F.M.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Ted Bayer showed me some eggs of a fish found by him in a coral head. We investigated to day. The pair of fish, Gobiodon, appear to live in the coral on a permanent basis, so that the coral responds by growing a cup to form a slight depression on a stem, purple pinks, or greenish in color, about an inch long; the nest is between and at base of one the stems, usually in the center or nearly so of the branching coral. We found these eggs, larvae, in two kinds of coral —

always we found one pair of fish but no more in the same coral head, and these measured about 8 to 16 inches across. Associated with the coral heads were Dascyllus and a pair of Caracanthus in one.

1 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-476 Sta. No. 476

State or Country: Bikini atoll

County: Lagoon 1½ miles off City: Eman-Eriab

Locality: Channel on coral head at depth of 30 feet.

Drainage: _____ Date: July 28, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Skin diving

Collected by: V. E. Brock.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Fierasfer taken from the globular starfish – Culcita novaguinea

Color in glass jar with water when alive – generally transparent; circulatory system red; tail with red spots; sides of abdomen iridescent; small pigment spots on back, cheeks, under eye, on snout, and chin; dorsal surface of eye pinkish; peritoneum black.

1 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

1 - photographed

Acc. No. _____ Tag No. S-46-477 Sta. No. S-46-477

State or Country: Bikini Atoll

County: Lagoon, Chilton anchorage.

~~Locality~~: Head saved only.

Drainage: _____ Date: July 30, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: 50 feet Depth of water: _____

Method of capture: Hook and line

Collected by: Crewman on Chilton

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Nebrius ferrugineus ♂ color brown.

Measurements in inches		mm
Total length	89"	2260
Snout to dorsal-caudal notch	63 1/2	1600
" " dorsal (1st) origin	38	965
" " " 2nd "	58	1470
" " pelvic insertion	38	965
" " pectoral "	16	406
" " anal origin	55	1400
" " front of arms	42	1070
Length of pectoral	15	381
" " pelvic	9 1/2	241
" " lower caudal lobe from notch	7	178
" " upper " " " "	25 1/2	648
Middle tip of snout to eye	7	178
" " " " " 1st gill opening	17	432
Interorbital space	9	228
Distance upper edge 1st gill opening to last cat	5	127

Width of 1st gill opening 2 1/2"; 2nd 2 3/4", 3rd 2 1/2"; 4th 2 1/2"; 5th 2 3/4".

over for 1-5,

3 preserved
29 discarded

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-478-~~481~~ 481 Sta. No. S-46-478

State or Country: Bikini Atoll

County: Boro pannage City: _____

Locality: _____

_____

Drainage: _____ Date: July 29-30, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Hook and line

Collected by: Brock, Marr & Smith

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

29 sharks - all the grey sharks, were captured. only the 3 embryos from 1 female were saved. also an external parasitic "worm" was taken from the sharks.

Embryos tagged with S-46-478-480

S-46-481 - parasite taken from gill cover of one of the sharks.

about ~~50~~ preserved
75

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-482 Sta. No. S-46-482

State or Country: Bikini atoll

County: Reef just west of ~~City~~ western

Locality: end of Bikini island

Drainage: _____ Date: July 31, 1947

Water: _____

Vegetation: _____

_____ Time: ~~July~~ AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: Breaking up coral heads.

Collected by: Schultz, L.P.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

a few days ago I attempted to find nests of Gobiodon and found several on the reef east of Bikini island. To check on the reef west of Bikini in regard to presence or absence of these nests I investigated a large area but found none. Their absence was largely the lack of suitable coral growths. Although great amounts of the blue coral have been killed off since last year and ~~the remainder~~ are algal covered, a few are living but not the ~~so~~ branching acropora. It is

quite obvious that much damage has resulted to the reef - both on the lagoon and ocean side - probably from the bomb. The reef is now coming back to life, ~~also~~ corals are growing again in places.

One cluster of acropora in this area on ocean side of sand spit contained the young and recent young of the blue (bright) damsel fish part of which were preserved. This coral had one Gobiodon, immature that escaped and at least 200 or more of the blue damsel fish.

I conclude that the habitat is now just becoming favorable again for the breeding of some of the shallow water fishes. It has not fully recovered.

Discarded 640
Preserved 96
736

I .368
22 fish photographed

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-483-504 Sta. No. S-46-483

State or Country: Bikini atoll

County: Eniu daland at ~~City~~: ocean reef

Locality: a channel entrance where Two poisonings took place last year.

Drainage: _____ Date: Aug 1, 1947

Water: area fished 20 yds by 100 yards

Vegetation: = 2000 sq. yds? _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 50 lb cubé root

Collected by: Schultz & Brocks & Hiatt

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

The following tagged fishes were photographed in Kodachrome.

Film # 6259

S-46-483 - Blue spotted sea bass ✓
484 - Variola louti -
485 - Red streaked wrasse -
486 - Red parrot -
487 - Green " -
488 - Green " -
489 - Cirrhites ✓
490 - Priacanthus ✓
491 - Holocentrus -
(6259-8)

6260

492 - Myripristes
493 - Holocentrus
494 - Blue-lined wrasse - ~~Julis~~ Stethojulis albovittata
495 - Acanthurus -
496 - Salarias -
497 - Chaetodon -
498 - Apogon ✓
499 - Echidna -
500 - Holocentrus -
501 - Cirrhipectes ✓
502 - Grey Electrid with blue line on cheek ✓

5-46-503 - Needlefish ✓
5-46-504 - Worm eel ✓

Following fish discarded in field

green parrot fish	41	
red " "	5	
Myripristes	22	
Lutjanus bohar	1	— 22½ inches, std. length
Naso litturatus	11	
Siganus rostratus	14	asunal
Acanth. guttatus	13	many fish
Balistes aculeatus	5	drifted out
" rectangulus	4	to sea.
Acanthurus triostegus	66	
Holocentrus	9	
Chaetodon fasciogutattus	5	
" hexagonatus	16	
Abudefduf	1	
"	1	
Parapercis	4	
Fistularia	6	
Cirripectes	5	
Abudefduf	1	
Acanth. achilles	342	
Apogon novemfasciatus	2	
Apogon	2	
Chaetodon auriga	4	
Stethojulis	6	
"	1	
Scomyrus	32	
Holocentrus	1	
Naso	6	
Canthigaster solandri	1	
Acanth. elongatus	159	
Pempheris	7	
yellow-streaked surmullet	104	
Black barred "	4	
Salarias	21	
Bothus	1	
Halichoeres	29	
Belone	2	

The small mottled Balistid was green with Two dark green bars and some small dark green spots on body, mouth yellow on mid sides and caudal fin green

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Continued

Acc. No. _____ Tag No. S-46483 Sta. No. _____

State or Country: _____

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: _____

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: _____

Collected by: _____

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

additional discards by Hiatt

Cephalopholis argus	- 1
Conger	1
Thalassoma umbrostigma?	- 2
Cheilodipterus lineatus	1
Apogon fraenatus	4
Cirrhitus pinnulatus	1
Paracirrhites	1
Scorpaenopsis gibbosa	1
Scorpaenoides	1
Caracanthus ~~setifer~~ unicolor	1
Acanthurus guttatus	1
Balistes rectangulus	1
" aculeatus	1
Canthigaster solandri	2

1 specimen.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-505 (42) Sta. No. _____

State or Country: Bikini Atoll

County: Reef off western ~~City~~ end of

Locality: atoll near Namu dsland.

_____

Drainage: _____ Date: Aug 1, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Spear

Collected by: V. E. Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

20 feet depth. Black-banded eel, - Echidna zebra;

Preserved 37 specimens.

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-46-506 Sta. No. _____

State or Country: Kwajalein atoll

County: _____ City: _____

Locality: near stern of the Prince Eugelen on Enubuj island.

Drainage: _____ Date: Aug 3, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: ± 50 feet

Method of capture: Rotenone

Collected by: Brocks, Schultz, and Ronaldson.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

This ship has sunk on reef, then rolled over, bottom up, with 2 of her 3 propellers out of the sea. It is emitting radiations of considerable extent.

about 200 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-46-502 47 Sta. No. 5-46-507

State or Country: Bikini Atoll

County: Western side of City: _____

Locality: reef of Bikini atoll

_____

Drainage: _____ Date: Aug 1-5, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Stomachs contents of Tuna.

Collected by: Marr and Smith

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

During my aid of Marr in the identification of stomach contents some of the better material was saved.

~~227~~ Discarded 227
Preserved 495
722

FIELD DATA RECORD under .128
Division of Fishes
U. S. National Museum 26 fish photographed

Acc. No. _____ Tag No. S-46-508-515 Sta. No. S-46-508
S-1001 to S-1018

State or Country: _____

County: Bikini atoll City: _____

Locality: Namu dsland, lagoon reef
v east end, lithothamnium ridge.

~~Drainage~~: area 5 by 75 yds. Date: Aug 6, 1947

Water: 5625 sq. yds.

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 50 lb. Cube

Collected by: Schultz, Brock and Hiatt

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Kodachrome photos of fish

film # 6251

S-46-508 } Hyporhamphus ✓
509 }
510 - Chaetodon citrinellus ✓
511 - Holocentrus diadema ✓
512 - Green damsel fish ✓
513 - apogon ✓
514 - Brown damsel fish ✓
515 - Puffer ✓
S-1001 - apogon ✓
*11 S-1002 - Parrot fish (green) ✓
1003 - acanthurus olivaceous ✓ - yellow color phase "change key 1)
S-1004 - chaetodon ✓
1005 - acanthurus ✓
1006 - Gody ✓

6261 film #

1007 - trigger fish ✓
1008 - Wrasse ✓
1009 - Thymonocanthus ✓

Over

~~S-11~~ ? E. Bovides

S-1010 - Bovisi grouper "
S-1011 - myriptristis "
S-1012 - " "
S-1013 - Siganus "
1014 - acanthurus "
1015 - Holocentrus "
1016 - Damsel fish "
1017 - Naso "
S-1018 - Gomphosus Caeruleus

films #
6262

Discarded fishes

	?
Cephalopholus argus	1
Epinephelus	1
Hyporhamphus	~~77~~ 55
Siganus rostratus	14
Naso lituratus	1
Green parrot fish	8
Gray " "	3
Acanthurus triostegus	4
P emphieris	2
Chaenochaetus striatus	28
Black abundance	47
myripristis - 2 species	15
Epinephelus hexagonatus	15
Holocentrus - 2 species	7
Balistes rectangulus	1
~~Cha~~ green abundance	3
A. achilles	14
Chaetodon citrinellus	3
Apogon novemfasciatus	1
" sp.	1
Parapercis	1
Labrids	2

Discarded — 511
Preserved — 520
1031

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

index .306
31 fish photographed
563

Acc. No. _____ Tag No. S-42-533 Sta. No. S-42-533

State or Country: Bikini Atoll

County: Reef in lagoon about at

Locality: end of sand spit west of Bikini island

Drainage area 50 x 100 = _____ Date: August 18, 1947

Water: 5000 sq. yds.

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 50 lb. poisons

Collected by: Brock, Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drown or discussed: _____

Following fishes photographed in Kodachrome.

Film #s
6274
6275
6276

S-42-533-Holocentrus
-534-Surmullet (yellow streak)
-535-Chaetodon
-536-Wrasse
-537-Gramastes
-538-Epinephelus
-539- "
-540-acanthurus elongatus
-541-Holotrachy-
-542-Wrasse

no good 4w

-543-naso litturatus
-544-Eleotrid-blue cheeb line
-545-goatfish
-546-Wrasse
-547-Wrasse
5-42 -548-mullet, yellow pect. base

only

5-46 - 549 - Wrasse — Cheilinus tribolatus
550 - Gomphosus } no good eaw
551 - Wrasse
552 - Gymnothorax
553 - Bothus
554 - Gymnothorax - fins green edged
555 - " - eye - blueish purple
556 - worm eel
557 - Gymnothorax
558 - Holocentrus
559 - Gymnothorax
560 - Conger
561 - Wrasse
562 - Echidna zebulosa
5-42 - 563 - Parrot fish. ✓ ABCR 6275-11

no good

Following fishes discarded in field

naso litturatus	10
monyrus chaptallii	87
acanthurus triostegus	53
yellow striels surmullet	49
Siganus rostratus	34
Acanthurus elongatus	48
Gnathodentex aureo.	14
Epinephelus hexagonatus	74
Ectopus	6
Abudefduf - black	95
green parrot fish	3
grey parrot	8
Holotrachys	1
Holocentrus (yellowish fins	7
" red stripe	1
Labrid	11
Cheilinus	2
Thalassoma - with black caud. spot	4
~~Mullo~~ surmullet (blackbars)	4
	511

114 fish specimens

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-42-564 Sta. No. S-42-564

State or Country: Bikini atoll

County: Bikini island sand spit

Locality: at western end in shallow tidal pools.

Drainage: _____ Date: Aug 18, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Cube root

Collected by: Schultz and Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

These pools were only 3 & 6 inches deep with a few loose rocks.

12 specimens

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-42-565 Sta. No. 5-42565

State or Country: Bikini ~~reef~~ atoll

County: Reef on Ocean side of

Locality: Bikini daland

Drainage: _____ Date Aug. 16, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Breaking up Corals

Collected by: Ted Bayer

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

1 specimen

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. 5-42-566 Sta. No. 5-42-566

State or Country: Bikini atoll

County: Namu dalond City: _____

Locality: Western end ocean reef

Drainage: _____ Date: Aug 19, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Spear

Collected by: V. Brock & L. P. Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

~~Belone~~ Tylosurus

2 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-42-567,568 Sta. No. 5-92-5[illegible]

State or Country: Rongerik atoll

County: _____ City: _____

Locality: _____

_____

Drainage: _____ Date: Aug 22, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: Trolling

Collected by: J. Marr

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Sphyraena –

There are two [yellow - orange] streaks on the sides of this species of barracuda.
Myers has published a note in Copeia on this species and thinks it is aureoflamma?
but (II/8/48) I find it is
Sphyraena helleri Jenkins

800

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-42-569 Sta. No. _____

State or Country: Johnston Island, about

County: 750 miles southwest City: of ~~Hawaii~~ Honolulu.

Locality: northwest side and northeast side of reef.

Drainage: _____ Date: August 29, 28, 1947

Water: _____

Vegetation: Corals abundant, also many deep pools - 5 to 10 feet. Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: 45 lb. Cubè root

Collected by: L. P. Schultz, R. Thiasoosh and

~~Preservative~~: L. Warren Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

several species here are not found at Bikini. -

The Pomacentrid was bright reddish-orange with several narrow blackish bars on sides. A most gorgeous creature.

Another Pomacentrid - centers of scales white. Had dark blue pelvics with white edges.

There were no groupers taken which may mean that they have not yet reached this island.

A large Caranx was seen, blennies are very uncommon. I saw no Caracanthids, Parapercids or Gobiodons. Eviota was seen and a few taken. Manta ays

here along with sharks; a stingray was seen by Warner;

The

500

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-42-570 Sta. No. _____

State or Country: Oahu Island: One mile

County: northeast of Waimea Bay; City: _____

Locality: High but deep tidal pool nearly 150 feet long - & 6 feet deep.

Drainage: _____ Date: Aug. 31, 1947

Water: _____

Vegetation: _____

_____ Time: 7 to 9 AM

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: About 10 lb Cubè root

Collected by: Schultz and Brock

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Discarded 383
Preserved 397
780

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

.156
~~.0052~~
21 fish/photographed

Acc. No. _____ Tag No. S-1019-1039 Sta. No. S-1019

State or Country: Bikini atoll

County: Namu dsland City: _____

Locality: Ocean side in pools and at lithothamnium ridge.

Drainage: Area 180 x 350 yds Date: Aug. 7, 1947

Water: = 35,000 sq. yds.

Vegetation: _____

Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: _____

Method of capture: 50 lb. Cubè root

Collected by: Brock, Hiatt and Schultz

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drown or discussed: _____

Following Kodachrome photos made:

* film 6263

S-1019-Pterois antennata ✓
1020- " radiata
1021-Wrasse-red spots on head, white background
1022- " " " " " , green background ✓
1023-Echidna zebra ✓
1024-Canthigaster ✓
1025-Damsel fish-white peduncle ✓
1026- " " 4 pale bars ✓
1027-~~Salarias~~ Pseudochromid-purple ✓
S-1028-Salarias ✓

6264

S-1029-Acanthurus elongatus ✓
1030-Chaetodon
1031 " ~~punctatus~~ reticulatus ✓
1032 Synodus ✓
1033 Cirrhitichthys leopardus ✓
1034-Chaetodon ✓
1035-Chaetodon-long nosed (no good)
1036 " ✓
1037-Parrot fish ✓
1038-Siganus ✓
1039-Chaetodon ✓

Following fishes discarded

a. guttatus — ∅	4
Epinephelus Rhapagonatus	35
Chaetodon reticulatus	4
acanth. elongatus	44
Green parrot fish	25
Gnathodentex	18
Gray parrot fish	5
Clenochaetus striatus	25
Black abudefduf	15
Chaetodon citrinellus	8
a. achilles	4
a. Trivostegus	58
Red lined Holocentrus	65
Gray Holocentrus	29
abudefduf glaucus	1
Myripristis	27
Chaetodon punctafasciatus	3
Holocentrus	2
Cephalopholis argus	1
Red parrot	1
Holocentrus yellow fins (large species)	8
Epinephelus - large brown spots —	1
	~~9~~
	383

26 preserved

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

Acc. No. _____ Tag No. S-1040 Sta. No. S-1040

State or Country: Bikini atoll

County: Enyu island offshore in

Locality: deep water.

Drainage: _____ Date: August 7, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: _____

Depth of capture: _____ Depth of water: ± 30 ft.

Method of capture: Poison at 20 to 30 feet

Collected by: Donaldson, L.R. & Welander, Art

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed: _____

Stirocaerio ~~or Caerio~~ tbl colored ~~in~~ ~~life~~ as follows in formalin day after capture with no observable change: Back dark blue & light blue, sides above lateral line light blue, underside rose colored, this color caused by the center of each scale being rose tinged, with margins white; a yellowish-brown streak along lateral line anteriorly then running a straight course to fins with and continue as the black streaks in upper lobe of caudal ~~peduncle~~ fin, lower lobe with black streak; eye pinkish.

Discarded - gave to Donaldson of U. of Washington

Preserved 161 / 217 / 398

FIELD DATA RECORD
Division of Fishes
U. S. National Museum

36 fish photographed

Acc. No. _____ Tag No. S-1041-1075 Sta. No. S-1041

State or Country: Rongerik atoll

County: Lalobach ols. in City: _____

Locality: lagoon

_____

Drainage: _____ Date: August 14, 1947

Water: _____

Vegetation: _____

_____ Time: _____

Bottom: _____

Shore: _____ Current: _____

Distance from shore: _____ Tide: low

Depth of capture: _____ Depth of water: _____

Method of capture: 50 lb. Cube

Collected by: Schultz, Brocks and Donaldson et al.

Preservative: _____ Temp: _____ Air: _____

List of species or kinds, with tag numbers if drawn or discussed:

Following photographs taken in color

		shot #
Film II 6265	S-1041 - Serranid (no good)	1
	1042 - E. hexagonatus	2
	1043 - Wrasse - Thalassoma quinquevittata	3
	1044 - Ahogon - black Cand. spot.	4
	1045 - Holocentrus diadema	5
	1046 - Scorpaena	6
	1047 - Epibulus	7
	1048 - green parrot	8
	1049 - Serranid	9
	1050 - Chaetodon striatus	10
	1051 - Chaetodon	11
	1052 - Wrasse	12
Film 6272	S-1052 - Wrasse (done over)	1
	S-1053 - acanthurus	2
	S-1054 - Surmullet - black bars	3
	S-1055 - Scorpaenodes parvipinnis	4
	S-1056 - Wrasse	5
	S-1057 - Holocentrus	6
	S-1058 - abudefduf - blue specks	7
	S-1059 - Scarus - yellow shot	8

over

Film #
6272

S-1060	Gymnothorax ✓	9
S-1061	Wrasse ✓	10
S-1062	Serranid ✓	11
S-1063	Parrot fish ✓	12

Film #
6273

S-1064	Cephalopholis argus ✓	1
S-1065	Wrasse ✓	2
S-1066	Amphiprion melanopus	3
S-1067	yellow box fish ✓	4
S-1068	Bascyllus ✓	5
S-1069	Wrasse ✓	6
S-1070	~~Amphiprion~~ Parrot fish	7
S-1071	Epinephelus fuscoguttatus ✓	8
S-1072	Wrasse ✓	9
S-1073	Parrot fish ✓	10
S-1074	Holotrachys ✓	11
S-1075	acanthurus ?	12

Following fishes discarded in the field

E. pinephelus fuxogonatus - 25
Ctenochaetus striatus - 45

Pomacentrus -	21
Green parrot fish, yellow bar -	2
Surmullet - yellow streak -	3
Holocentrus diadema -	~~24~~
Grey parrot -	5
Naso literatus	1
Hyporhamphus - ~~42~~	42

Corgures came from armless starfish Culcita