

Lyford Cay
Nassau, Bahamas
July-1961 - August
24 — 16

W. Schmitt
U.S.N.M.

239841

7530-222-3521
FEDERAL SUPPLY SERVICE

(GPO)

acc. no.

239841

Rec'd Aug. 24, 1961

All stations in this book
unless otherwise noted are in
and about Clifton Bay Con
which Nason House rented by
Pedersons for summer from
Lytford Cay, Nassau, Bahamas.

1961

July 24, arr. 9 a.m. "Bahama
Start". Did not get off ship
till 11. Had lunch in town
with Penny and Mrs. P.

1 - mysids - 4

1-61 July 25-61

Clifton Bay "cage" area
[where photo station is estab-
lished].

Mr. Pedersen brought me sever-
al tiny crimson mysids from
an anemone not yet ready for
pickling; wishes to photo. This
anemone is attached to conch
shell and can be moved about
for photoing
Brought in in afternoon

mysids - 4

2

Polychaetes - 3

Tanaid - 1

Shrimps - 24

Crabs - 8

Stomatopods - 6

Also: Fish -

Mollusks

2-61 July 26-61

From rocks picked off bottom
in weedy patch near south
"horn" of Bay [Clifton Point]
in 3-4 feet water ^{low from coral}
Cracked a number of alpheids
in sep. vial.

Mollusks and "squillas" in an-
other vial. Largest stomatopod;
and 3 largest taken by Chris
Pedersen and Jimmy Deal in
6-7 feet of water little farther
out. ^{They} Also got a small one
wandering about on bottom
(hunting?) - free swimming?

I took another stomatopod
from cracked rocks, some mollusks
from rocks, and a large photid
from cracked rock

Boys' squillas might be
numbered # 2a-61

Chris

3 - Sponge
Hermit - 1
Crab - 1

#3-61 July 26-61

After supper (dinner) do-
ward 9 p.m. Mr. Pederson and
* Chris, with heavy duty "flash"
lamp, went along beach in
dark looking for swimming
crabs; got 8 or 9 in quite
shallow, scarcely more than
ankle deep, water; Chris
also picked up a nice clean
horse sand, which large Par-
danus quitted while in buck-
et. Large grey mottled crabs
were put in live jar to use
as fish food + octopus food
in pens or cages. One
small crab almost totally
dead with crushed finger was
preserved, believe it juvenile;
also sp. sponge saved. Large
crabs damaged little wire
bucket

2 starfish listed on label
but not found

4 - Polychaetes - 2
Shrimps - 6
Porcellanid - 1
Hermits - 4
Crabs - 23
Stomatopods - 3
Sea Urchin - 1
Tunicate - 1
Corals - 2
Mollusks
Fishes

4a - Hermit - 1

41-61 July 27-61

Clifton Bay down near
canal at breakwater near
side. Got 2 dark, almost
black green, squillas ^{from} under
breakwater rocks embedded
in white ~~sandy~~ muddy sand or
ooze

Off mouth of canal a
large horse crab and number
of xanthid mud crabs and
couple of alpheids, greenish
drab burred, and 1 small dark
brown purplish blue tipped
legs ~~legs~~ and body longitudinally
white striped (name slips me),
1 large Pinna shell, and 1 small
dead ant.

worked in 1 to 3 feet
water.

5 - Shrimps - 7
Porcellanid - 1
Hermit - 3
Crabs - 3
Mollusks - 2 lots
Corals - 3

Chris
& Jimmie

and # 6-61

5-61

July 28-61

In afternoon
went out to Goulding Key
~~island~~ W. Mc Chris
and Jimmie primarily for shells
Got a small Percnon. Any
shells from this visit to island
were given # 6-61, ditto Percnon.
Cam. stuff is # 5-61. This after
noon's material = # 6-61

→ This morning went back to
eel grass beds off canal
got 2 pinnae, small one with 2
pan. mids in it.

6 - none found labeled
sta - 6 - found small
vial with shells labeled
5 -

7- Squid

△ 5m

17-61

July 30-'61

In boat this a.m. Tom found an
expiring squid; pulsation had al-
most stopped (saw but 3 or 4)
but chromatophores red and "black-
brown" expanded and contracted
in groups, and also singly. When
fully contracted were pin-points (
looked like tiny black spots) but
when expanded were like pin-heads
in size and showed plainly their
color.

8 - Polychaetes - 2
Amphipods - 6
Barnacle - 1
Shrimps - 23
Porcellanid - 1
Crabs - 3
mollusks

8a - mollusks

8 - 61; + 8a - 61 Monday
July 31 - 61

8 - 61 Cracked from rocks,
from 3 ft water. a.m. ^{10:11}~~10:11~~
Toward south point of Bay
beyond Canal.

Got a few tiny alpheids, few
crabs; saw peacock flounder,
white with lavender (purple)
edging.

8a - 61 of many there,
^{odd} few shells picked off
rock out-crop on shore at waters
edge, "tooth" shells etc.

Aug. 1-61
Day for camera tryouts
Harry's camera with synchro-
nized telephotos.

Aug. 2-61
Out most of day looking
for sea-cucumbers for
Fieraster for Ferner

Aug. 3-61

10a-61

Got about a dozen holothurians speckled brown, olive yellow.

Out of a dozen found under rocky ledges in 6-8-10 feet water got about 6 *Fierasfer*. When water in tub got warm (quite warm) fishes came out and jumped over edge (rim) of $\frac{3}{4}$ full tub. ~~etc.~~

9- Medusa 1
Earthworm - 1

10- Sea Anemone - 1
Polychaete - 1
Shrimp - 1
Mollusk

10a- Fish
Octopus
Holothurians - 2
~~Mollusk~~

9-61; 10-61; 10a-61

9-61 Harry brought in yellow jelly-fish (*Cassiopea*). Says they are common in shallow water off beach before house.

10-61 Out toward Point to right in 10 feet to 2 fms Harry got two shrimp from one anemone (*annulata*) = red ~~fish~~ alpheid (as we had in aquarium in Antigua in '59) and a *Periclimenes yucatanicus* ~~tonicus~~ I would expect 2 of these, but Harry says only saw one. In same broken conch shell in which this anemone ~~was~~ nested, I am sure the octopus we found in bucket had holed up.

10a-61 see left hand p.

#11-61

Aug 4-61

At night along shore with
light, boys got 8-10 large
swimming crabs, were put
in live ear but all got away

The one large hermit cracked
out of turret, conch is in
jar with #1 ~~XII~~.61

part of gut? 17 holothurian thrown
out - c&c -

Hermit - 1
crab - 1

#12

Sponge
Polychaetes - 10+
Gorgonian - 1
Shrimps - 3
Hermit - 1
Crabs - 5
Stomatopoda - 4
Nemertean - 1

#12 -61

Chris and Jimmie ^{very industrious}
This a.m. worked along &
close to shore of left hand,
S.W. point of Clifton Bay.

Chris got nearly a dozen
Perhaps 8 or 10 *Gonodactylus*,
and *Microphry bicornutus*, =
decorator crab.

I got drumid & sponge
but could not find a second
one. Also couple of small
Microphry out of coral clumps
between sponges; one yellow
sponge with blackish exterior
stained ^{my} fingers black but by
next day ^{was} washed off.

and few small plumed tube worms
part of small cluster.

#13-61

Aug 5-'61

In afternoon (at extreme high tide it was) got a xanthid ~~snail~~ under rocks in barren looking sand before last rock out crop near canal inlet but not at breakwater; and shell

mollusk

#14 -
Copepods - 19
Ostracods - 7
Tanaid - 1
Isopod - 1
Polychaetes - ~~4~~ 20
Amphipods - 4
Crabs - 7
Stomatopods - 2
Nematodes - 4
Hermit - 1
Washings mostly algae

#14-61

Aug 5-61

From pile stumps ~~2~~ 2-3 feet ~~long~~ long broke off "rotten" wood, under water, MacTaggart Dock (pier) Clifton Bay Lyford Cay, got jar misc. things including few gribble. One needs to take gribble infested wood ~~apart~~ in room or lab. As one breaks off bits of wood, they go always deeper in the "leaves" of wood and honey combed wood.

Got red-orange Macro-coelema with same color sponge on top.

#15 - Sea Anemone - 1
mollusks

#15a - Shrimp - 1

Sunday
Aug. 6-61

#15-61

Got one small hermit, annulata
+ 2 shells (has one a hermit?
save for M.I. no)

Saw stomatopod but could
not bait him.

#15a-61 a little shrimp
in "puddle" in sand under
breakwater rocks, canal inlet.

#16 - Fish

#16-61

Aug. 6-61

With flashlight along
beach at night, in front
of house and Gas Mac
Taggart pier.

not found 1 lge swimming crab
2 needle fish.

17- Isopod - (parasitic on crab)
Crabs - 8
Stomatopods 2
Hermit - 1
Mollusk
Porcellanids - 2

#17-61

Aug. 17-61

From under rocks on sand
by break water, N. side
Canal inlet got few xanthids
also couple of porcellanids

17a-61 Chris got a
little cerianthid that
sprang down in sand in
very shallow ~~to~~ film of
water as he stepped
along the beach. He also
got 2 stomatopods, med +
small size and 2 small
fish on flats near break
water

No sea anemone found in
sta. 17- one found in #15
no listed by W.S.

18 - medusae - 3
Sea Anemones - 2
Shrimps - 2
Fish - 1

18 - 61

Aug 7-61

Wandering over extensive
turtle grass flats got a
small annulata, seemed to
have had something inside
which looked like small ^{dead} crab
_{remains}
3 ~~Pecten~~ ^{Pecten} shell plus two
Pantoniids; ~~an annulata~~

Got 9-10 inch diam.
Asterias which was put
in live car to try out
on Octopus.

#19- Sea Anemone - 1
Shrimp - 1
Tunicate - 1

#19-61

Aug. 7/61

Went out diving with
Harry, over photoid reef.

Also brought in
slide stuff ^{tunicate} that the
turtle loved to eat,
(hawkbill)

some in
alcohol
some in
formalin

#20 - Stomatopods - 2
Crab - 1

Blackish yellow sponge
and dromid - filed together

#20-61

Aug. 8/61

Chris & I an stomatopod
hurt in 2-2½ feet water
near Clifton Point in
a rocky sandy bottom.

21 - Hydroids
Gorgonian (*Briareum abbestianum* ^(Pallas))
Polychaetes - 20+
Shrimp - 1
Mollusk

21a - Holothurian - 1
Fish - 1

This sea cucumber is in one
of my mussel bags

21 - 61; # 21a - 61. Aug 9/61

Chris dived for Sargassum growing on bottom in 12-14 ft water off Clifton Point

Also got some jelly fish off sand bottom in front of house but they died before they could be taken out to photo stage.

Mostly picked up things for Harry to photo at reef station.

21a - 61 Harry brought in some things from turtle grass in front of house. ~~From~~ same area Chris found a small sea-cucumber and on boat in bucket (in ^{heat of} sun) a *Feraster* poked out its head was delivered to Harry on location.

#22 -

Sponge

Polychaetes - 2

Crab - 1

Starfish - 1

Tunicates - 4

Sea urchin - 1

mollusks

22 - 61

Aug. 9/61

While Chris was taking out bristle worm I got to hurry to photo on location, I picked up small porbunid ~~under~~ ^{near} rocks by canal area was near edge of water but dug in a little ~~deeper~~ further out in 6-8 inches water.

#23-61 Aug. 10/61

2 remoras taken from
shark caught with
groupers head just
off pier. These are

#23-61.
Have photos of shark
Harry and boys,

#23a - Crab - 1
Anemone - 1

#23-61; 23a-61 Aug 10 - '61

~~With Chris went around
to S. side Clifton Point.
Bold rocks there and
on bottom.~~

Working over the
grass beds down near
Canal inlet.

Chris came along and
took me around to
rocky area on S. side
Clifton Point. Turned
over rocks in 3-4 ft
water. = #24-61
(see over)

#23a-61
Picked up red anemone, green
tentacles, purple, dipped, on
beach before house on
way to inlet.

24 is duplicated

#24-61 ^{this should} be 23 b.-61 Aug. 10-61

Prusky area S. Clifton
Point / from under
and about
rocks in 3-4 feet
water got another
dromid with yellow
sponge & corals I had
not seen before.

#24 Holothurians - 4

This should be the
correct #24

Aug 11/61

#24-61

Diving about reef
with Harry's rig.
2 "transparent" holo-
thurians from under
side rocks } 12-14 feet
 } water

habbed angle fish
being "cleaned"

Harry's reef - photo
side looks as though
turtle grass was taking
over.

25- Polychaetes - 2
Oligochaetes - 2

25-61 Aug. 11-'61

Along beach at high
tide 8:30 to 9 p.m.
in about 6 inch water
(flash light) 3 crabs;
few reddish worms

26 - Shrimps - 2
ruptured anemone - 1

26-61

Aug. 12/61

Overcast and threaten
to day, will cancel photo
effort more or less

Darry brought in granulate
anemone and 2 red shrimp
from reef in 12-14 feet
water, from his "reef."

Anemone was in conch
shell (is a bit ruptured)

Worked reef collections

Also in a.m. down by
inlet I got large anemone
which? eats fish, appeared
or did take pe. of my frozen
"minnow" bait.

3 S. matagods not found → these

perhaps should have
had sep. no.

27 Fish

27a - mollusk eggs

From ^{reef} photo location

27-61

Aug. 12/61

2 Holothurians with
5 toothed posterior opening
one good sized one containing
a Pteraster, saved.

27a-61

mass of empty
mollusk eggs among
which was found a tiny
shell.

also an annulata

anemone + 2 red alga
at this location also

28 - Sea Anemone - 1

28 - 61

Aug. 13/61

About 10 a.m. every
body over to ~~Gould~~ Gould island
with baby gull.

After lunch went down
for about an hour in
12-14 feet water. Preedy
out here wilder but with
face mask could crawl
around on bottom.

Got an anemone way
down in hole (crevice) in
rock, and yellow alpheid
in sand under rock; under
overturned rocks little Steno-
ryhynchus, few shells and two
bristle worms saved for
Kurny

Very peculiar anemone with 4
black "trees" and regular ^{orange} ~~orange~~
tentacles; underneath body like
any other anemone. ^{But on bottom just} ~~the~~ greatly expanded

#29 b. Crab-1

#29- Mollusks
Hermit-1
Sea Anemones - 2 spec (2 bats)
Sea Urchin - 1
Crabs - 2
Shrimps - 5 and 2 (2 lots)
Stomatopods - 2
Polychaetes - 6+

#29 a - Sea Anemones - 2
Shrimp - 2
Mollusks -

29 b - 61 Aug 14 - '61

Along beach at night
with flash light close
to water's edge

large Callinectes in sand
by MacTaggart pier

One was dis hypnotized
in Nylon net in which I
scooped him up; I put
in bottle with no struggle
at all

Old shells were on sandy
flats off inlet where jaw
fish were taken

29-61; 29a-61. Aug. 14 / '61

Harry and Tom diving.
examined a number of
old dead anchs. got 2
stomatopods (one green) and
an annulata anemone ~~and~~
with 2 alpheids; also a
small red apogon. (not found)
Harry says he can get
2 of those alpheids most
any time, especially in deeper
water with an annulata.

Antennae of these alpheids
are red banded like? base
of Stenopus, is it protective
resemblance ~~to~~ ^{over turtle grass flats}

29a - 61 ^{over turtle grass flats} on way back
I picked up old partly rusted
through beer can with 2 annulata
inside had 2 red alpheids
inside can and when I strained
out water got also 1 P. yucatanicus
Should there have been 2.

30 - fish

- # 30a - Sea Anemone - 1
 Shrimps - 2
 Crab - 1
 Hermit - 1
 Polychaete in algae
 Mollusks
- labeled
 ident crust.
 early
 from dead couch
- (Polychaetes - 2
 - Nemertean - 2
 - Mysids - 4
 - Amphipod - 1
 - Shrimp - 1
 - Crab - 1

Strangers that
alpheids

Pistol crabs resent their commensals when introduced and chase them out or away.

where an Apogon is around apparently no cleaner shrimp??

30-61

Aug 15/61

From 9-10 feet water got jaw fish.

30a-61

Aug. 15/61

From one dead couch got uninjured annulata
2 red alpheids
3 red mysids.

another shrimp and amphipod, and small crabs were ^{also} found in bucket in which anemone was expanded using Epsom salts, pickled at night.

Seldom an anemone with out associates from 2-3 feet of water out to at least 14, and over (though we did not collect in deeper water).

- 31 - Tunicate - 1

31-61

Aug 15/61

Late afternoon Harry and Tom went back to photo reef and brought me an apple green tunicate from about 12 feet water.

Packed collections most all fore noon.

But did take time to do photo glass plate put over jaw fishbone

Then began chase over sand flat with hand nets and diving (face) masks

#32. Hippas - 4

#32 - 6t

Aug 16/61

This a.m. worked along beach for "Hippas" where Chris said they were very common on beach before house. Didn't have much luck nor did he.

I got 3 with scoop of $\frac{1}{4}$ inch mesh wire; most of them passed through one was really tiny.

I tried a number of places, by pier, canal inlet, and about Gould's Key. Either season or I was wrong.

- # 33.
- Polychaetes - 2
 - Balanoglossid - 1
 - Isopods - 3
 - Holothurian - 1
 - Shrimps - 3
 - Hermit - 1
 - Crabs - 7
 - Stomatopods - 5
 - Fishes
 - Mollusks - part under #29
 - Anemones - 4

These anemones should perhaps have been given #33A-61. But were not.

33 - 61

Aug 16/61

Scouted south end beach near canal inlet. and over turtle grass flats used insecticide without much luck; did little later pick up a few fish that had been over come and 2 small Calappas (one was tiny)

Along edge of turtle grass (bank of it alongside channel) ^{3 feet water} got one large anemone, spread of 4-5 in from edge of old rusted paint bucket, and a purple tipped (tentacles) one on exposed channel side of turtle grass bed about 2 1/2 feet water. ^{original} saw no ammensals. neither

#34 - Shrimps - 2
Crab - 1

Suggested to Harry
to try to see if cleaner
shrimps would be safe
from fish if not in
their normal or typical
surroundings.

Last day last field sta

#34-61

Aug 16/61

From photo reef (location)
Harry and Tom from
annulata // 50% brown +
white beautifully marked
Mithrax from rock about
a gigantea, also a
little colorless shrimp
First I had seen or
noted. → was like one
Tom brought in yesterday
both were ovigerous ♀♀

No station number

Holothurian - 1

mollusks - 1, 1,

Barnacle - 1

Fishes 1, 1, 1,

From sargassum -

Bryozoans

hydroids

Shrimps - 2

Spiny lobster larva - 1

Crabs - 2

Fishes - 2

Ship
Bahama Harb. left on
Aug-17¹⁵
for Miami

Sponges - 3 lots
Hydras - 2 lots
Medusae - 2 lots - 4 spec.
Gorgonians - 2 lots
Sea Anemones - 12 lots - 17 spec.
Nemertean - 2 lots - 3 spec.
Nematodes - 1 lot - 4 spec.
Bryozoans - 1 lot
Balanoglossid - 1 lot - 1 spec.
Polychaetes - 13 lots - 73+ spec.
Oligochaetes - 2 lots - 3 spec.
Ostracods - 1 lot - 7 spec.
Copepods - 1 lot - 19 spec.
Barnacles - 2 lots - 2 spec.
Mysids - 2 lots - 8 spec.
Tanaids - 2 lots - 2 spec.
Isopods - 3 lots - 5 spec.
Amphipods - 3 lots - 11 spec.
Shrimps - 19 lots - 90 spec.
Spiny lobster larva - 1 lot - 1 spec.
Porcellanids - 4 lots - 5 spec.
Hermits - 11 lots - 16 spec.
Tippas - 1 lot - 4 spec.
Crabs - ~~19~~ lots - ~~74~~⁷⁷ spec. 20 lots - 78 spec.
Stomatopods - 8 lots - 26 spec.
Tunicates - 4 lots - 7 spec.
Starfish - 1 lot - 1 spec.
Sea Urchin - 3 lots - 3 spec.

Washings - 1 lot mostly algae
Polychaetes - 5 lots - 9 spec.
Corals - 2 lots - 5 spec.
Also: Mollusks - 2/ lots
Fishes







