

2 June 1985

En route to Bahamas with Seapharm/Harbor Branch crew (Ken Rinehart's project). On board R/V Sea Diver.

Scientific crew: R.C. Brusca

Ed Armstrong (chief scientist)

Amy Wright (replaced 6/10 by Ken Rinehart)

Sue Cross (microbiologist)

Frank Koehn

Bob Hughes

Glynn Faircloth (microbiology; tissue culture)

Oliver M^oConnell

Lynn Hodgson (algae)

Shirley Pomponi (sponges)

ships crew: Bruce Kay (cpt.) - replaced 6/5/85 by J. Morgan

Pete Knight (Enger.)

Paul Tell (cook)

Rick

Crew changes to occur on 10th & 14th, probably at San Salvador Is. Plans are to work east (Atlantic) side of Bahamas. Rinehart replaces Amy on 10th (at Cat Cay?)

Juan Carlos, President, SeaPharm
Seward Johnston, Jr.

Ken Snader (chemist)

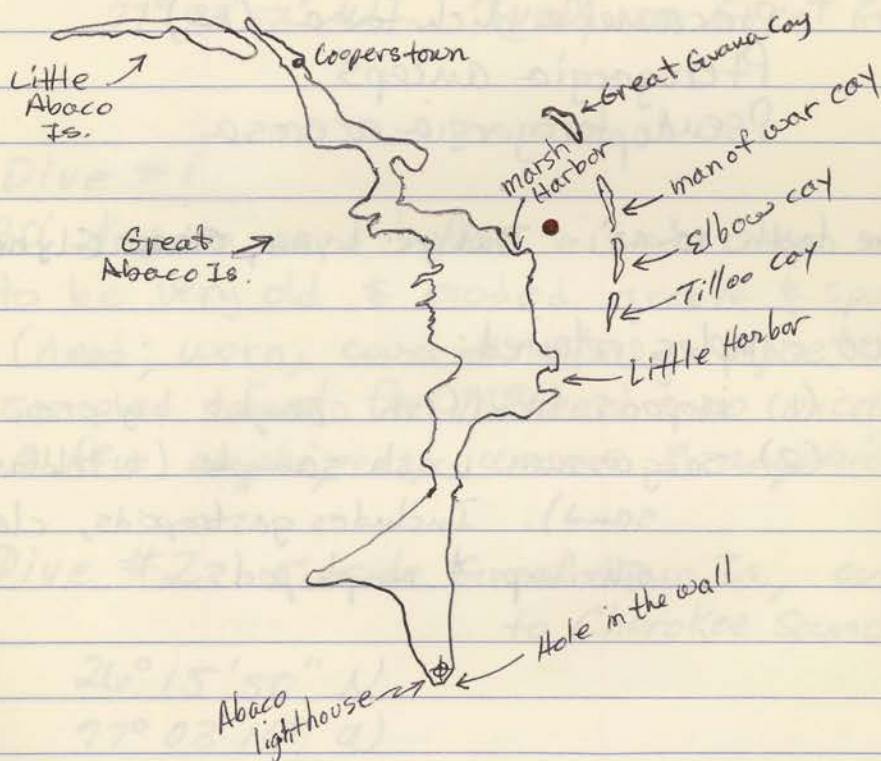
Ed Armstrong (biologist)

Ken Rinehart

3 June 1985

Bahamas.

Anchored off Marsh Harbor, near Man of War Cay,
E. side Great Abaco Is, for customs check.



#1

Afternoon dive - 1st dive of trip - on long ^{rock} reef tracts
set in coral-sand bottom where ship anchored. About

26°46'52" N
77°17'54" W

7 spp. gorgonians, same # sponges, 2 tunicates,
1 colony *Filograna* (polychaetes), + abundant algae.
Collection of Sargassum made to look for crustaceans.
(no isopods, but micro molluscs for McLean +
shrimp & a majid for collections).

Gorgonians collected:

~~Muricea muricata~~ *Eunicea farnetforti*

Muricea elongata

~~Muricea muricata (ex)~~ *Eunicea farnetforti*

Plexaurella dichotoma
Eunicea calyculata
Eunicea tournaforti
Plexaurella dichotoma (x2)
Pterogorgia anceps
Pseudopterogorgia acerosa

dive depth 40'-42'. Buddys: Lynn, ~~Oliver~~ Glynn

Two samples retained:

- #2 (1) isopods from fish caught by crew at night.
- #3 (2) Sargassum wash sample (+ holdfast & some sand). Includes gastropods, clams, shrimp & amphipods.

4 June 1985

#1

Bahamas, SE side Great Abaco Is.,
26°39'12" N
77°03'52" W (very near Great Guana Cay)

Dive #1

30' dive on sand bottom mixed over what appears to be very old & eroded groove & spur reef (dead; worn; covered w/ algae, etc.). Sediment samples sieved for McLean - no micromolluscs but a few amphipods, worms & amphioxys (?) taken.

right.
some

26320A

#5

Dive #2 S. side Great Abaco Is., outside entrance to Cherokee Sound.

26°15'50" N
77°03'10" W

sand & old reef platform bottom, 20'-22'. Abundant small sponges, much algae, about a dozen non-hermatypic corals. Grouper. Lobster. Collection of molluscs, crustacea, ^{worms} & brittle stars made for PCB. Dive buddy: Ed Armstrong.

5 June 1985

Dive #1 Bahamas, Eleuthera Is., Pt. Eleuthera (so.
end of island),
26300C
70
~ 24° 37' N
~ 76° 08' W

Scuba collection in sea grass bed. Grass sparse.
many conchs (*strombus*) and sponges.
Sediment sample made for McLean (1 canvas bag
full ~ ca. 2 quarts), fine coral sand; sorted on
deck for molluscs. [6'-10' depth]

(no dive buddy)

The marina & hotel at Eleuthera Point was built
by a group of Arabs in the late 70's & closed
down in 1982. Although abandoned a caretaker
lives there while the Arabs try to sell it. In
the meantime, the hotel airstrip is used regularly
by drug traffickers. According to the hotel/marina
caretaker (a woman) every police official on
Eleuthera is on the take. The new skipper could not
land at the hotel airstrip because local police have officially "closed" it.

Gorgonians collected:

Pseudoptero gorgia acerosa

Eunicea calyculata

Pterogorgia anceps

Eunicea succinea

Muriciopsis flavida

Plexaurella fusifera

Dive #2 Wemyss Bight, Eleuthera Is. (E. side)

#1 24° 37' N, 76° 8' W

Dive Buddy's
Ed Armstrong

40-45' scuba dive on sand with abundant patch reefs. Many giant sponges, some big enough to sit in



2'-5'

Xestospongia
muta

(Id by Shirley Pomponi)

gorgonians collected:

Eunicea sp. A

Plexaura ?

Pseudopterogorgia americana
(Slimy gorgonian)

Eunicea sp. B

Eunicea sp. C

Pseudopterogorgia ~~sp.~~ bipinnata

Pseudopterogorgia sp. ?

Eunicea laxispica

6 June 1985

Bahamas, w. side Exuma Sound, near
Great Guana Cay (between tongue of the Ocean
& Exuma Sound), Big Rock Cut on Staniel
Cay.

24°37'52"N 76°41'03"W

Dive #1

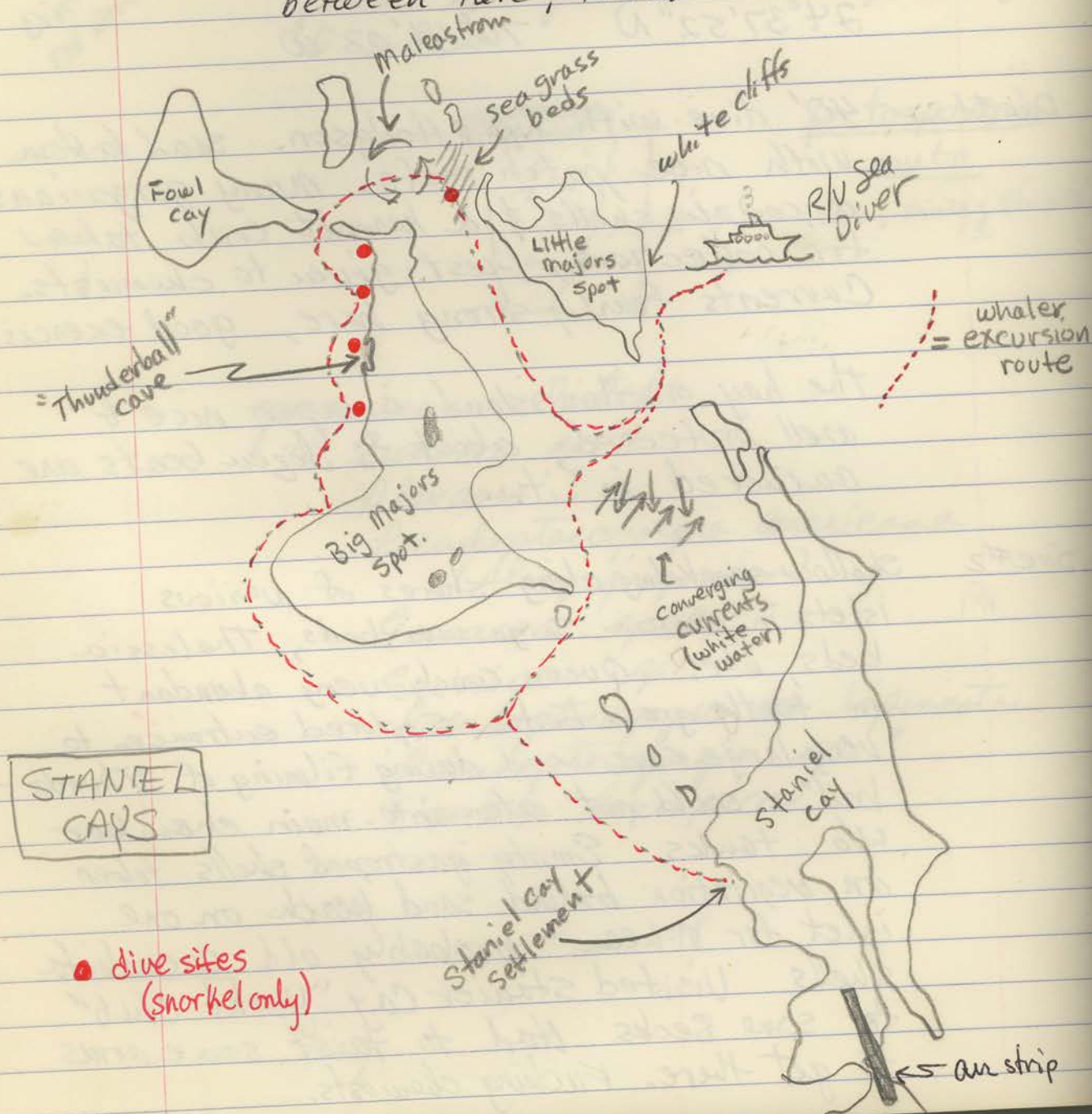
40' dive with Lynn Hodgson. sand bottom
with nice patch reefs, many gorgonians.
a couple shells & a hermit crab taken
for collections, rest given to chemists.
Currents fairly strong here, good exercise!

The bay on this island is super nice &
well protected. about 1/2 dozen boats are
anchored in it.

Dive #2

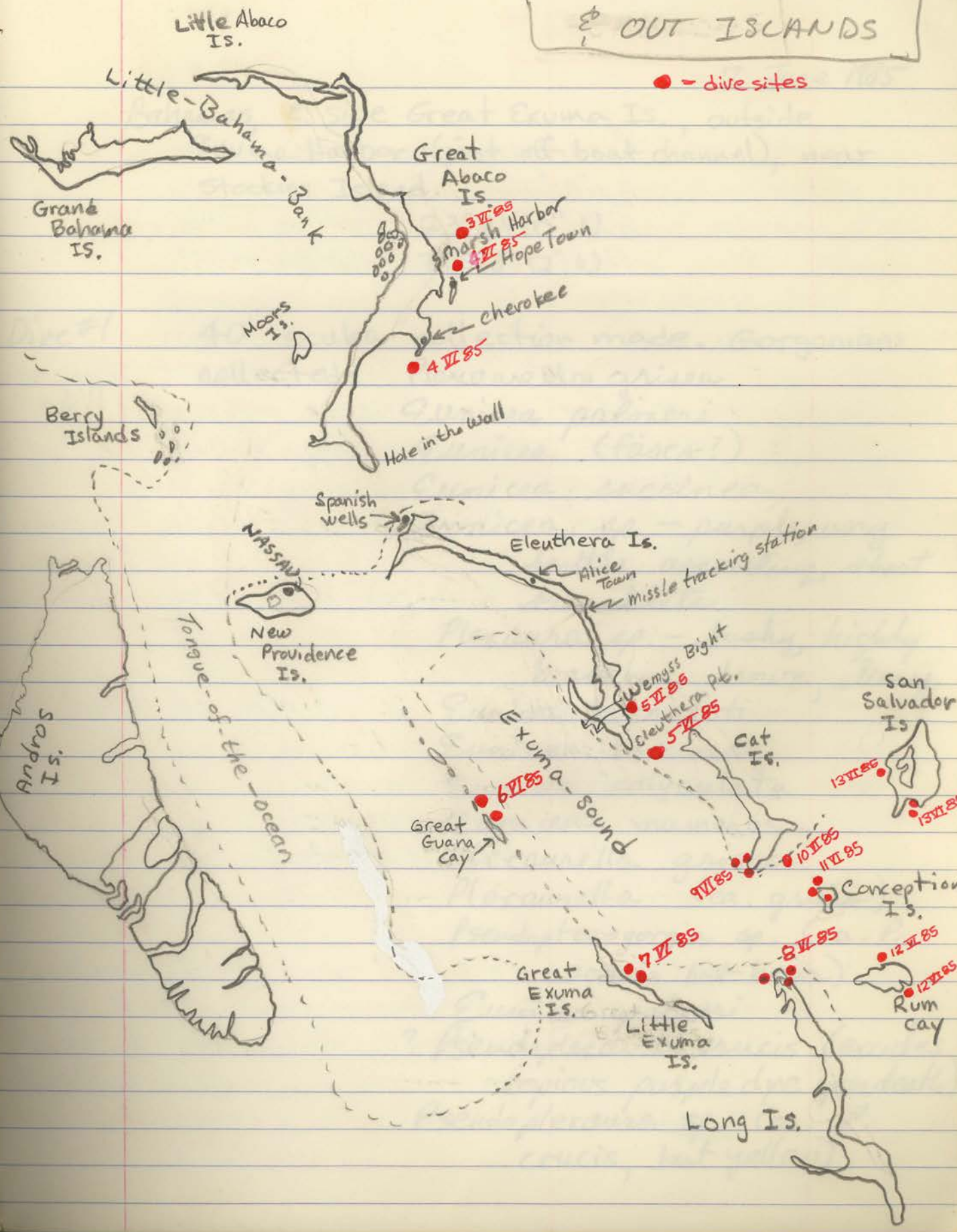
Shallow snorkeling along shores of various
islets in area. Sargassum beds, Thalassia
beds, etc. Queen conch very abundant
in turtle grass beds. Explored entrance to
very large cave used during filming of "Thunder-
ball" - could not enter into main chamber
w/o tanks. Empty gastropod shells taken
in vegetation behind sand beach on one
islet for McNear - probably old Coenobita
shells. Visited Staniel Cay "Yacht Club"
for some Becks. Had to twist some arms
to get there.

Eve: took whales to Staniel "yacht club" for drinks. 'Que tropical!' Finding our way back to the R/V Sea Diver in the dark was a real thrill, negotiating reefs, protruding rocks & small cays between here & there.



NORTHERN BAHAMAS & OUT ISLANDS

● - dive sites



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water excursion route

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7 June 1985

Bahamas, E. side Great Exuma Is., outside
Exuma Harbor (just off boat channel), near
Stocking Island.

23°24'00" N

75°48'52" W

Dive #1

40' scuba collection made. Gorgonians
collected:

#10

Plexaurella grisea

Eunicea palmeri

Eunicea (fusca?)

Eunicea succinea

Eunicea sp. - purple, very
brittle, ascending, short
branchlets

Plexaura sp. - bushy, highly
branched, brown, slimy.

Eunicea tournefati

Eunicea succinea

Eunicea calyculata

Eunicea mammosa

Plexaurella grisea

Plexaurella (ca. *grisea*)

Pseudopterogorgia sp. (ca. *P.*
acerosa but brown)

Eunicea palmeri

? *Pseudoplexaura crucis* (exudes
copious purple dye upon death)

Pseudoplexaura sp. (ca. *P.*
crucis, but yellow)

Pseudoplexaura porosa
Briaricum asbestinum
Eunicea (succinea?)
Pseudopterogorgia acerosa

Dive #2

203000

dive buddy: #11
Lym

E. side Great Exuma Is., near Mt. Thompson.
10'-15' dive near 3 large rocks just
offshore. Saw very large spotted Eagle Ray
(*Aetobatus narinari*) w/ 2 remoras on belly.

Gorgonians: *Muriciopsis flavida* (purple)
" " (brown)
Muricea atlantica

Dive #3

#12

same area but in 20' depth off ship:
Muricea atlantica
Eunicea mammosa
Gorgonia mariae
Eunicea tournetarti

Note: Bayer describes 97 spp. of gorgonian
in his W. Indies monograph, and 5
pennatulaceans (*Renilla reniformis*, *R. mull*
Sclerobelemnon theseus, *Virgularia presb*
Stylatula diadema).

8 June 1985

Bahamas, Long Island (northwest end), between
Cape Santa Maria & Calabash Bay.

23° 40' N 75° 22' W

10'-15' patch reefs

Dive #1

#13

Dive made near offshore rocks, surrounded
by rock reef & isolated coral heads. As elsewhere,
the anemone Bartholomea annulata is common,
but hidden in inaccessible holes. The sun flower
anemone, Stoichactis helianthus is present here,
but not abundant. Gorgonians collected:
Muricea muricata (flattened axes), Muricea atlantica,
Eunicea turneforti (flattened axes), Eunicea
mammosa, Pseudopteroorgia acerosa, Pseudopteroorgia
americana, Briaricum asbestinum.

Dive #2

#14

N.E. end Long Island, just SE. of Cape
Santa Maria, Newton Cay area (off
Seymours).


23° 40' N 75° 18' 30" W

Dive off R/V "Sea Diver" to 40' bottom of sand &
large patch reefs. Gorgonians: Pterogorgia anceps,
Muricea atlantica, Eunicea palmeri? (ascending on 1
plane, exudes small aunts, purple dye), Plexaura?
(ascending on 1 plane; highly branched, both lateral &
dichotomous, the former prevailing; end branches

(cont.)

(cont.)

2.5 mm across, 25-45 mm long, tan in color; colony 35" tall; surface "glass beaded" & apertures oval or round, w/ minute calyx w/ distinct small lower lip, and Pseudoplexaura crucis? (exudes copious purple dye upon death).



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20300
#15
Dive #3 - same area as #2, but into
the Seymour Shallows for snorkeling
over sea grass beds, collecting mangrove
area, and snorkeling over good reef
development around entry to Seymours.

This is the first real coral reef
we have dived on (everything till now
having been patch reefs). The staghorn
coral (Acropora cervicornis) and elkhorn
coral (A. palmata) was profuse here.
A. palmata had "stems" & "trunks" several
feet thick! Many other corals present
also, including Siderastrea siderea,
Mussa angulosa, Solenastrea hyades, &
Colpophyllia natans (the giant brain coral).

Many fish, including an enormous
school (several hundred) of blue tangs
(Acanthus coeruleus), each about a foot
long. Also more barracuda; I've
seen one large barracuda on nearly
every dive this trip, large (~4'-5' long)
- Sphyraena barracuda (apparently this
barracuda is toxic to eat). They typically
circle slowly observing divers, very
much like sharks. Probably curiosity?

9 June 1985

Bahamas, Cat Island, So. End, anchored
off Hawks Nest.

24° 9' N 75° 38' W

#1 Dive #1: off R/V "Sea Diver" in about 40-45'. Dive
aborted due to presence of large shark
(10'-15'). RCB not on this dive.

#2 Dive #2: snorkeling near shore, around entrance
to Hawksnest creek, 5'-15'. Good elkhorn
coral development on s. side of channel
entrance. Two large (~4') barracuda
cruising area (Sphyraena barracuda).

Gorgonias: ① Pseudoplexaura sp. (brown
slime Pseudoplexaura; none collected
it once or twice before).

② Plexaura homomalla (?)
dark brown w/ tan open apertures;
no distinct calyces; surface "glass-
headed".

③ Cericea tourneforti

④ Atergorgia anceps

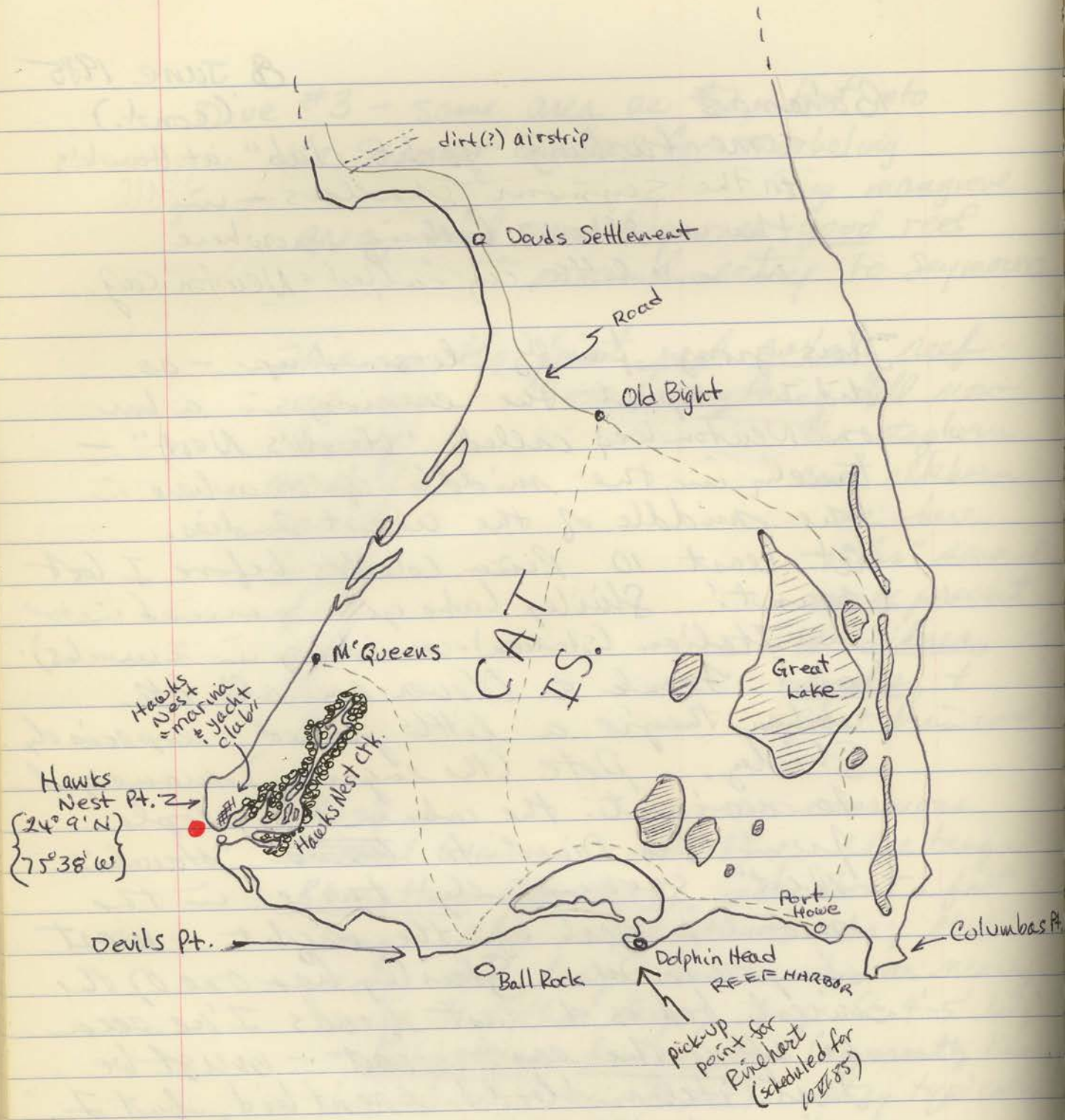
⑤ Gorgia flabellum

also: Palythoa coriubbea (?), elkhorn
coral (Acropora palmata), & many
fish, including: Barracuda,
blue tangs, jackfish (?), grouper, yellow
grunts, wrasse, queen triggerfish &
~~troutfish~~, cowfish (Lactophrys).

+ brain coral
(Diploria labyrinthiformis)

olumbas Pt.

South end cat Island



● Dive site (coral heads well developed)

☿ Mangrove swamps

CONCEPTION ISLAND

10 June 1985

Bahamas, S. end cat Is., off Dolphin Head.

24°08'30"N 75°24'45"W

Dive #1

#18

Dive off R/V "Sea Diver" in 55' depth. Long parallel tracts of either rock or dead coral, with sand patches in between. Very luxuriant growth of gorgonians, algae & sponges.

Sponges: Xetospongia muta

Teichaxinella morchella

Callyspongia plicifera

Siphonodictyon siphonum (?)

Agelas sp.

Agelas (A. conifera?)

Eurylus formosus (?)

Ptilocaulis gracilis (?)

Cribrochalina vasculum

Ectyoplesia ferox

Didiscus flavus (?)

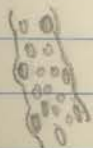
Pandaros acanthifolium

Gorgonians: Pterogorgia anceps

Eunicea succinea


Plexaurella nutans

Plexaura sp. ? - chocolate brown, ascending lateral branches, end branches 4 mm wide, lower lip slightly raised, apertures indistinct.



← Lophogorgia sp. (purple; apertures on small nodules; somewhat stiff.)

Plexaura homomalla (brown & purple forms)

Eunice caliculata - resemble a Plexaura superficially, tan, very rigid ascending branches (very tall), apertures: 

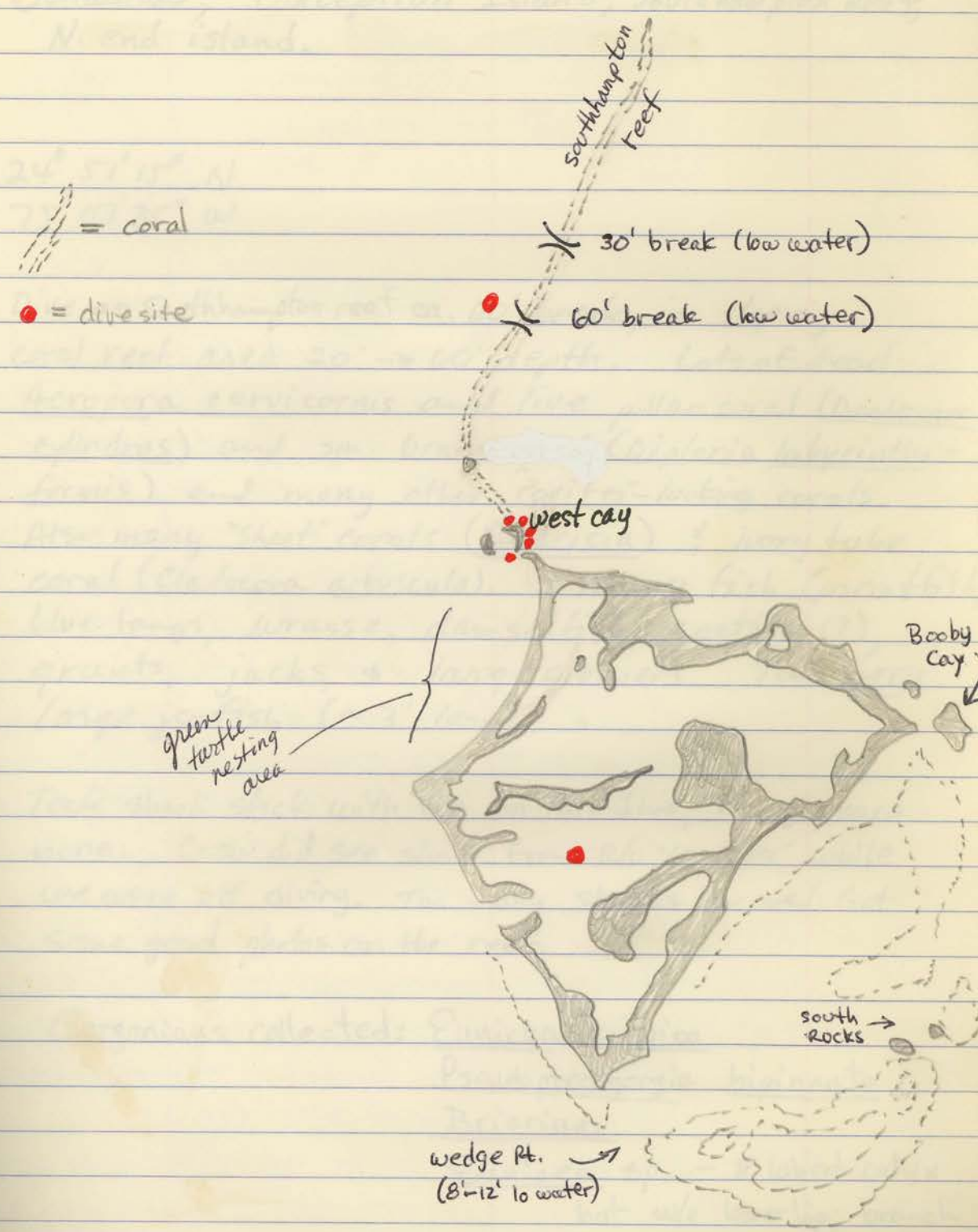
Dive #2: on Acropora reefs ~100 yards off Dolphin Head - aborted due to shark.

Picked up Ken Rinehart & sent back Amy Wright.
Good to see Ken - it's been since Belize trip (1978?)
since I've seen him. Looks the same - a little less hair
& a little mellowed. Good guy.

CONCEPTION ISLAND

Bahamas, Conception Island, Southwestern Reef
N. end island.

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xauva
end rig
hair
(1998?)



RUM CAY

11 June 1985

Bahamas, Conception Island, Southhampton Reef,
N. end island.

24° 51' 15" N

75° 07' 35" W

Dive #1

Dive on Southhampton reef ca. 60' break, in sloping coral reef area 20' → 60' depth. Lots of dead Acropora cervicornis and live pillar coral (Dendrogyra cylindrus) and sm. brain coral (Diploria labyrinthiformis) and many other "Porites"-looking corals. Also many "sheet" corals (Agaricia) & ivory tube coral (Cladocora arbuscula). Many fish (parrotfish, blue tangs, wrasse, damselfish, goatfish(?), grunts, jacks, & large groupers. Two very large jacks (~ 3' long).

Took shark stick with me on this dive, though saw none. Crew did see shark from R/V "sea diver" while we were off diving. Too many sharks for me! Got some good photos on the reef.

Gorgonians collected: Eunicea laxispica

Pseudopterogorgia bipinnata

Briaricum

Eunicea sp. - 8 lobed calyx
but w/o lower lip; branch
tips 11mm; brown.

11 June 1985 (cont.)

263000
#2
Dive #2 Snorkeling around West Cay. Good reefs on w. side. Saw another shark. Many gorgonians, including Pseudoplexaura nutans. Many Halimeda on so. end. East bay absolutely beautiful - shallow crystal clear blue water w/ white coral sand bottom. The terrestrial vegetation on West Cay is fascinatingly diverse & attractive, w/ tall grasses (~4'), ice plants (2 kinds?), little miniature palm-like plants that aren't palms, a Ficus-like plant that probably is Ficus, & others.

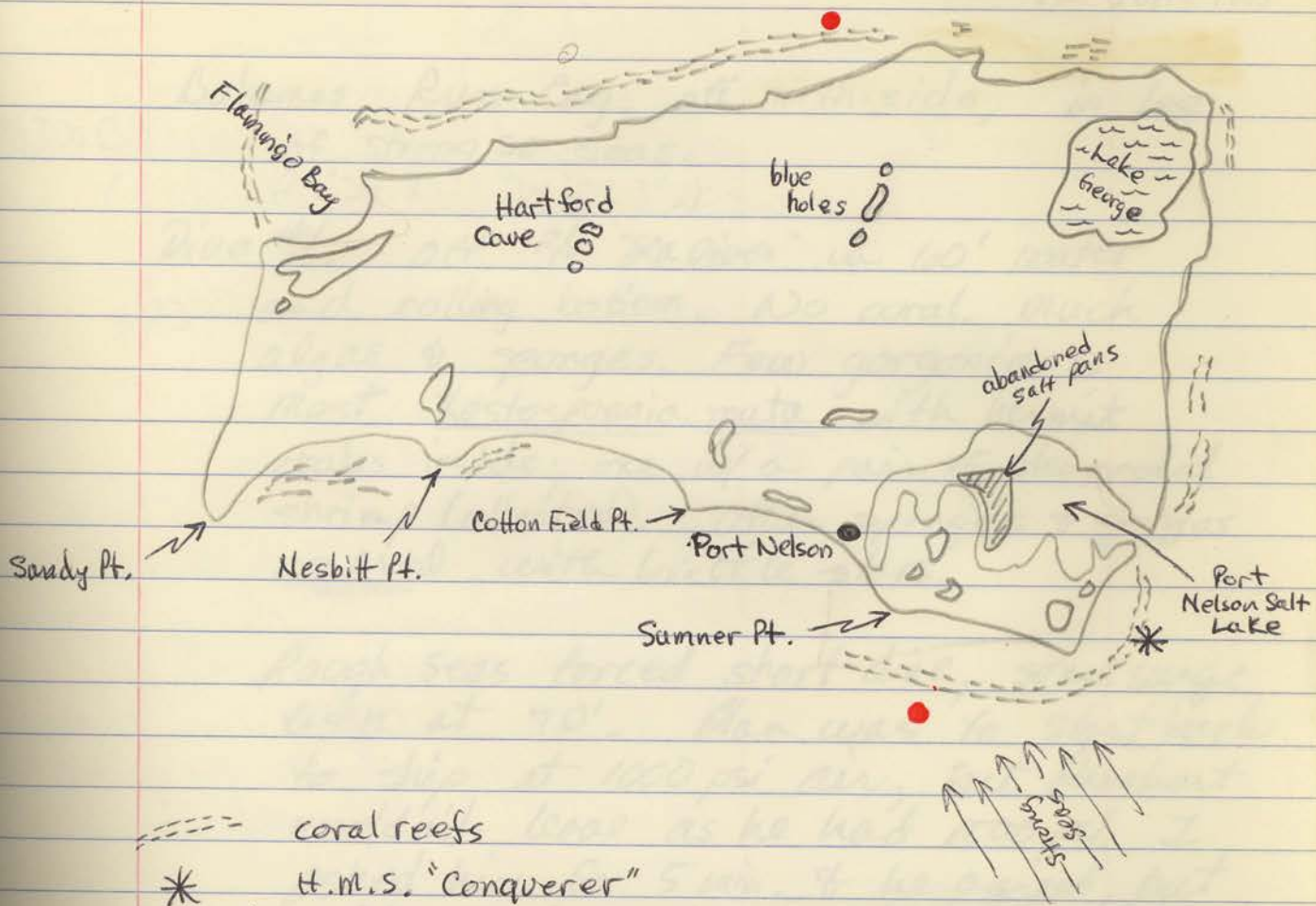
Collected periwinkles for J.M., as well as wrack-line shells. Ocyropsis burrows on beach. Stromatolites(?) taken from outer cay of West Cay.

#3
Dive #3 - Snorkeling/wading in shallows of interior. Mangroves sparse; no sea grasses; quite clean & pleasant w/ white coral sand bottom.

11 June 1985 (cont.)

RUM CAY

85 (cont.)



- - - coral reefs
- * H.M.S. "Conqueror"
(101 gun man-of-war, Britain's 1st screw-driven battleship)
- dive sites

Ran to Rum Cay & anchored off Port Nelson in hopes of taking whalers into town for beer tonight. But, heavy seas & cloudy skies aborted the idea. SE swells at about 4'-6'.

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12 June 1985

26300 C Bahamas, Rum Cay, off north side, in lee of strong SE seas.
23°37.2'N, 74°51.3'W

423 Dive #1. off R/V "Sea Diver" in 60' water and rolling bottom. No coral. Much algae & sponges. Few gorgonians, most Xestospongia muta with hermit crabs inside; one w/ a pair of stenopodid shrimp (collected). Other sponges & gorgos covered with brittle stars.

Rough seas forced short dive, some surge even at 70'. Plan was to start back to ship at 1000 psi air, but Reshart wouldn't leave as he had 1500 psi. I asked him for 5 min. & he agreed, but after 5 min. still couldn't start back, so I left him as I was down to 600 psi & knew I had a long swim & couldn't surface due to sea condition. He finally followed but too far behind me to have been helpful if either of us got into trouble. Bad buddy! I also acquired a bad five coral hit on my top thigh! Rough seas forced move around point to get offshore of north side Rum Cay, in lee of SE seas.

gorgonians collected:

Pseudopterogorgia acerosa

Pseudopterogorgia (*P. blonquilleensis*?)

Pseudopterogorgia (*P. albatrossi*?)

Pterogorgia citrina (purple)

" " " (yellow)

Muricea muricata

Muricea atlantica

Muriceopsis flovida

Muriceopsis sp. (identical to *M.*

flovida but with stronger calyces)

Pseudoplexaura sp. - slimy brown

(also collected on June 9, June 7,

& perhaps earlier; slime emerges

mainly from apical region).

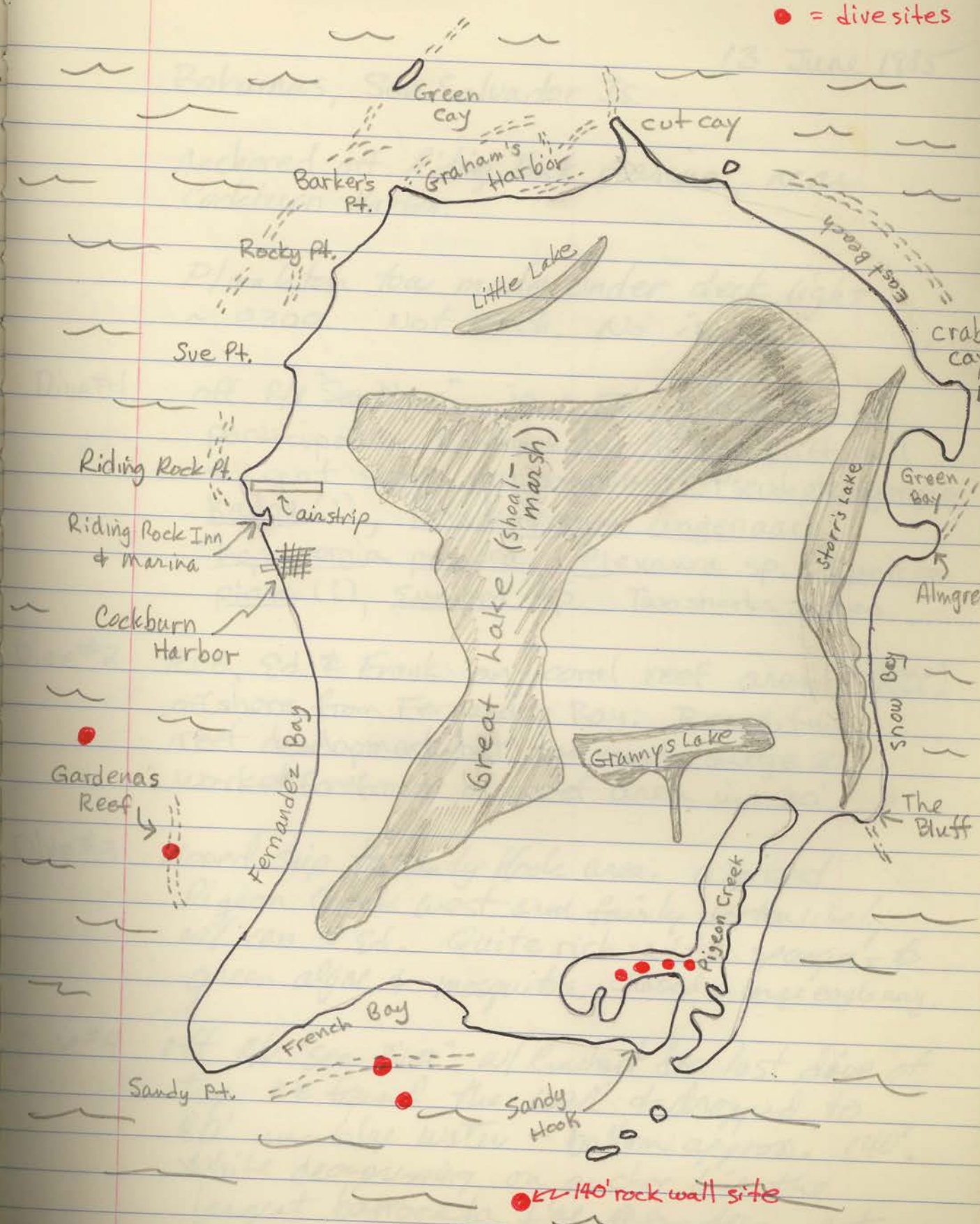
steam to San Salvador Is.

Even 12 VII 85: Took whaler ashore, tied up at "Riding Rock Yacht Club" & walked ~ 1/2 mile to Cockburn Town, San Salvador. Drank rum, danced, shot pool, donated to the mosquito blood drive, all at the only bar in town, the "Harlem Square Club."

Cockburn Town is a very quaint little village of ~ 100 people & several blocks of homes & shops. strictly local color - no tourist stuff. The Harlem Sq. Club is a cement floored shack w/a decent bar & local good ol' boys. Nice place. The men like their women fat in this neighborhood!

San Salvador Is.

--- = Reefs
 ● = dive sites



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13 June 1985

Bahamas, San Salvador Is.

Anchored off Riding Rock Marina, near
Cockburn Harbor.

Plankton tow made under deck light
~ 0300. Not much. No isopods.

Dive #1 off R/V "Sea Diver", in ~ 50'. RCB did not
participate. Rinehart hit 90' on cliff wall
& got some new gorgonians: Pseudopterogorgia
kallos (?), Pseudoplexaura wagenaari,
Lophogorgia punicea, Plexaura sp., Eunicea
pinta (?), Eunicea sp. Two sharks spotted.

Dive #2 RCB, Ed & Frank on coral reef area (^{Gardens} Reef)
offshore from Fernandez Bay. Beautiful
reef development but too much surge so
worked forefront of reef area in 30'.

Dive #3 Moved ship to Sandy Hook area. Worked
Pigeon Creek west arm fairly extensively
w/ Ken & Ed. Quite rich with sponges &
green algae & mosquitos. Chased a large eagle ray.

Dive #4 off R/V "Sea Diver" w/ Rinehart for last dive of
trip. we found the wall & dropped to
80' in blue water - bottom approx. 140'.
While decompressing on anchor line the
largest barrocada I've ever seen sat

and watched us (~5'). As always they just seem very curious. They seem like smart fish. This may have been the most beautiful dive of the trip for me. I'm glad it was with Ken.

Tonite is Shirley's "bachelorette party", either on board or back to the Harlow Square Club at Cockburn Town! Tomorrow at this time I'll be in the swimming pool at the Brit Inn in Vero Beach, drinking Palmdades & talking to A.M. on the phone!

Locals claim shark attacks are rare, but barracuda attacks are common! Riding Rock Inn & the Dive School are both closed.

Back in Vero Beach, Ft. Hans picked us up in his 4-seat Piper for a beautiful low altitude flight from Son Sal to W. Palm Beach (for Customs & drop off Shirley), & then on to Ft. Pierce. Tomorrow I'll fly Eastern from Melbourne → ATL → LAX.