2 June 1985

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

Scientific crew: R.C. Brusca

Ed Armstrong (chief scientist)
Amy Wright (replaced 4/10 by Ken Rinehart)
Sue Cross (microbiologist)
Frank Koehn
Bob Hughes
Glynn Faircloth (microbiology; tissue culture)
Oliver McConnell
Lynn Hodgson (algae)
Shirley Pomponi (sponges)

Ship's crew: Bruce Kay (opt.) - replaced 4/15/85 by Jim 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 Snodderly (Chemist)
Ed Armstrong (Biologist)
Ken Rinehart
Bahamas.
Anchored off Marsh Harbor, near Man of War Cay, E. side Great Abaco Is., for Customs check.

Afternoon dive - 1st dive of trip - on long reef tract 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 Elograna (polychaetes), + abundant algae.
Collection of Sargassum made to look for crustaceans.
(No isopods, but micro molluscs for Melean +
shrimp & a majid for collections).
Gorgonians collected:
Muricea muriatica
Muricea terniforti
Muricea elongata
Muricea muriatica (Q2) Eunicea ferniforti
Plexaurella dichotoma
Eunicea calyculata
Eunicea tourneforti
Plexaurella dichotoma (x2)
Pterogorgia anceps
Pseudopterogorgia acerosa

Dive depth 40'-42'. Buddys: Lynn, Otter, Glynn

Two samples retained:
1. (1) isopods from fish caught by crew at night
2. (2) Sargassum wash sample (+ holdfast & some sand). Includes gastropods, claws, shrimp & amphipods.
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 saved for McLean — no micromolluscs but a few amphipods, worms & amphipods (?) taken.

Dive #2 SE 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, some brittle stars made for RCA.
Dive buddy: Ed Armstrong.
Dive #1
Bahamas, Eleuthera Is., Ft. Eleuthera (so. end of island),
~ 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]

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 calciculata
ptero-gorgia anceps
Eunicea succinea
Muriciopsis flavida
Plexaurella fusiforme
Dive #2  Wannessa Light, Eleuthera Is.  
24° 37' N, 76° 3' W

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

Xestospongia muta

2'-5' (id by Shirley Rampsie)

gorgonians collected:
- Eunicella sp. A
- Plexaura
- Pseudopterogorgia americana (slimy gorgonian)
- Eunicella sp. B
- Eunicella sp. C
- Pseudopterogorgia sp.  
- Pseudopterogorgia sp.  
- Eunicella laxicirca
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 ½ 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 "Thunderball" - could not enter into main chamber w/o tanks. Empty gastropod shells taken in vegetation behind sand beach on one islet for McLean - probably old conchita shells. Visited Staniel Cay "Yacht Club" for some beers. Had to faxist some arms to get there.
Eve took whales to Staniel "Yacht Club" for drinks. ¡Qué 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.
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: Plexaurella grisea

Eunicea palmeri
Eunicea (fuscata?)
Eunicea succinea
Eunicea sp. - purple, very brittle, ascending, short branched

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

Eunicea turnerfosti
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)
Pseudoporexaura porosa
Briaricum asbestinum
Eunicea guccinea (?)
Pseudopterogorgia acerosa

Dive #2
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: Muriceopsis (salvadori (purple))
Muricea atlantica

Dive #3
Same area but in 20' depth off ship:
Muricea atlantica
Eunicea mammusa
Gorgonia mariae
Eunicea tournedostti

Note: Bayer describes 97 spp. of gorgonian in his W. Indies monograph, and 5 pennatulaceans (Renilla reniformis, R. mulli, Sclerobelemnon theseus, Virgularia physa, Stylatula diadema).
8 June 1985

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

23°40' N    75°22' W

10'-15' patch reefs

Dive #1
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 sunflower anemone, Stoichactis helianthus is present here, but not abundant. Gorgonians collected:

Muricea muricata (flattened axes), Muricea atlantica,
Eunicea taurina f. flat (flattened axes), Eunicea mammosa,
Pseudoptergorgia acevosa, Pseudoptergorgia americana,
Briarium asperatum.

Dive #2
N.E. end Long Island, just SE of Cape Santa Maria, Newton Cay area (off Seymour).

23°40' N    75°18' 30" W

Dive off "Sea Diver" to 40' bottom of sand & large patch reefs. Gorgonians: Pterogorgia anceps,
Muricea atlantica, Eunicea palmata? (ascending on 1 plane, exudes small ants, purple dye), Plevaura? (ascending on 1 plane, highly branched, both lateral & dichotomous, the former prevailing, and branches (cont.)
cont.)

2.5 mm across, 25-45 mm long, tan in color, "colony 35."

tall; surface "glass beaded"; apertures oval or round, up to minute calyx w/distinct small bowie lip;
and Pseudopleurae crassa? (exudes copious purple dye upon death).
Dive # 3 - same area as # 2, but into<br>the seymour Shallows for snorkeling<br>over sea grass beds, collecting mangrove<br>area, and snorkeling over good reef<br>development around entry to seymours.<br><br>This is the first real coral reef<br>we have dived on (everything till now<br>having been patch reefs). The staghorn<br>coral (Acropora cervicornis) and elkhorn<br>coral (A. palmata) was profuse here.<br>A. palmata had "stems" & "trunks" several<br>feet thick! Many other corals present<br>also, including Porites compressa<br>Mussa fungiata, Scleractia hyades, &<br>Corals, Echinoids, natures (the giant brain corals).<br><br>Many fish, including an enormous<br>school (several hundred) of blue tangs<br>(Acanthus coeruleus), each about a foot<br>long. Also more barracuda; I've<br>seen one large barracuda on nearly<br>every dive this trip, large (~ 4-5', long)<br>- Sphyraena barracuda (apparently this<br>barracuda is toxic to eat). They typically<br>circle slowly observing divers very<br>much like sharks. Probably curiosity
9 June 1985

Bahamas, Cat Island, So. End, anchored off Hawks Nest.
24° 9' N 75° 38' W

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

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).

Gorgonians: 1) Pseudoplexaura sp. (brown slime Pseudoplexaura; whole collected it once or twice before). 2) Plexaura hortomelilla (?). Dark brown w/ ten open apertures; no distinct calyces; surface glassy head. 3) Cuvicca tenuiforti 4) Heteropora acacea 5) Gorgonia flabellum

Also: Calyptus caribba (?), elkhorn coral (Acropora palmate), & many fish, including: Barracuda, blue tangs, jewfish (?), groupers, yellowgrunt, wise, queen triggerfish & trumpetfish, cowfish (Lactophrys).
South End Cat Island

- Dive site (coral heads well developed)
- Mangrove swamps
Bahamas, S. end cat Is., off Dolphin Head.
24°08.30'N 75°24.45"W

Dive #1  Dive off RV "Sea Diver" in 55' depth. Long parallel tracts of either rock or dead coral, with sand patches in between. Very luxurient growth of gorgonians, algae, & sponges.
Sponges:  Xenospongia muta
Teichaxinella murchella
Callyspongia plicifera
Siphonodictyon siphonum (?)
Agelas sp.
Agelas (A. conifera ?)
Eurylus formosus (?)
Ptilocaulis gracilis (?)
Cribrachelina vasculum
Ectyoplosia ferox
Didiscus flavus (?)
Pandaros acanthophorum

Gorgonians:  Pterogorgia acacps
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 mounds; somewhat thick)
Plexaura homomalla (brown & purple forms)

Eunice calyculata – 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 (1993)
Since I’ve seen him. Looks the same – a little less hair & a little mellower. Good guy.
CONCEPTION ISLAND

- = coral

- = dive site

30' break (low water)

60' break (low water)

wedge Pt. (8'-12' 10 water)

south rocks

Booby Cay

Great turtle nesting area
Bahamas, Conception Island, Southampton Reefs, N. end island.

24° 51' 15" N
75° 07' 35" W

Dive #1  Dive on Southampton 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 jackfish (~ 3' long).

Treek shark stick with me on this dive, though saw none. Crew did see shark from R/F "Sea Diver" while we were off diving. Too many sharks for us! Got some good photos on the reef.

Gorgonians collected: Eunicella laxispica
Pseudopterogorgia bipinnata
Briarium
Eunicella sp. - 8 lobed calyx but w/o lower lip; branch tips illus; brown.
Dive #2 - Snorkeling around West Cay. Good reefs on w. side, saw another shark. Many gorgonians, including Pseudothecastra mutans. Many Halimeda on S. 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 ft), 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 wreck-like shells. Crayfish burrows on beach. Stromatolites (?) taken from outer cay of West Cay.

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

- Hartford Cove
- Blue holes
- Port Nelson
- Sumner Pt.
- Cotton Field Pt.
- Sandy Pt.
- Nesbitt Pt.
- Flamingo Bay

Coral reefs

H.M.S. "Conquerer"
(101 Gun man-of-war, Britain's 1st screw-driven battleship)

Dive sites

We ran to Rum Cay & anchored off Port Nelson in hopes of taking whalers into town for beer tomite, but heavy seas & cloudy skies aborted the idea. SE swells at about 4'-6'.
Bahamas, Rum Cay, off north side, in lee of strong SE seas.

Dive #1. off RV "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 & gorgas 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 Weahart wouldn't leave as he had 1500 psi. I asked him for 5 min. & he agreed, but after 5 min. still wouldn't start back, so I left him as I was down to 1000 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 fire 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. blanquillensis?)
- Pseudopterogorgia (P. albatrossi?)
- Atergorgia citrina (purple)
- " " (yellow)

- Muricea muricata
- Muricea atlantica
- Muricopsis florida
- Muricopsis sp. (identical to M. florida but with stronger color)
- Pseudoplexaura sp. - slinky brown

(also collected on June 9, June 7, & perhaps earlier; slime emerge mainly from apical region)

Steam to San Salvador Is.

Eve 12/185: Took whaler ashore, tied up at "Riding Rock Yacht Club" & walked a 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 "Habem Square Club."

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

Anchored off Riding Rock Marina, near Cockburn Harbor.


**Dive #1**


**Dive #2**

RCB, Ed & Frank on coral reef area (Gardena's 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 sponge's & green algal & 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 86' in blue water — bottom approx. 140'. While decompressing on anchor line the largest barrocazada I've ever seen last
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 came with Ken.

Tonight is Shirley's "bachelor party," either on board or back at the Harlem Square Club at Cockburn Town! Tomorrow at this time I'll be in the swimming pool at the Dune Inn in Vero Beach, drinking Priceloses & talking to H.M. on the phone!

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

Back in Vero Beach, Ft. Hous picked up up in his 4-seat Piper for a low altitude flight from Sea Salv to W. Palm Beach (for customs & drop off Shirley), & then on to Ft. Pierce. Tomorrow I'll be enjoying Eastern from Melbourne to LAX.