

AQUANEWS

Volume 31, No. 10

October 2007



SECRETARY

MARSHA FREEDMAN

TREASURER

PAUL GALEAZZI JR.

DIRECTORS

ALLAN BLOCK

MARSHA FREEDMAN

PAUL GALEAZZI JR.

STEVE IMPROTE

LES PARKER

DIVE COORDINATOR

MIKE HATALA

PUBLICITY

JEFFREY HOROWITZ

Scientists Discover What They Believe Is a New Fish Species,
New Seaweeds in the Caribbean

By MIRANDA LEITSINGER, The Associated Press

SAN JUAN, Puerto Rico - Scientists have discovered what they believe is a new fish species and at least 20 types of previously unknown seaweeds during a recent expedition to one of the Caribbean's most diverse marine areas a coral-covered underwater mountain off the Dutch island of Saba.

It could take a year before researchers confirm the findings, which local fishermen, working with the Dutch Antilles government, are hoping to use to lobby authorities to steer oil tankers away from the Saba Bank Atoll to protect their livelihoods and the rich underwater life.

During their two weeks at the atoll, divers braved 12-foot seas to plunge 100 feet underwater twice daily to collect marine samples. Their efforts turned up unique striped patterns on the seaweeds and one fish that researchers believe is new to science: a goby with orange spots.

"We were literally discovering a species every day, that's truly remarkable" said Michael Smith, a senior research scientist at Conservation International, which funded the January expedition along with the Netherlands Ministry of Traffic and Water Management and Miami-based cruise operator Royal Caribbean's Ocean Fund.

"There aren't very many places where you can still do that in the Caribbean or very close to North America."

Not to be outdone by the fish discovery were the seaweed findings. Smith called the area "the epicenter of diversity for seaweeds in the Caribbean."

Mark Littler, a marine botanist at the Smithsonian Institution's National Museum of Natural History, said his dives revealed landscapes that he compared to "mini rain forests." They swam through acres of red, green and brown seaweed some that looked like ferns or were several feet high.

"It's extremely important habitat," said Littler, who has studied seaweeds worldwide the last 30 years. "We do work all over the Caribbean and we've found areas that were hotspots of biodiversity, but this exceeds all of them. ... It's an enormous system."

The 850 sq. mile atoll is larger than the five islands of the Netherlands Antilles put together, but it's been little studied by scientists.

The bank is frequented by about 40 Saba fisherman, whose annual catch is about \$1 million a little less than 10 percent of the island's economy.

(Continued on page 3)

AQUANEWS

THE OFFICIAL PUBLICATION
OF THE ROCKLAND
AQUANAUTS ORGANIZATION.
WRITTEN CONTRIBUTIONS &
PHOTOGRAPHS ARE ALWAYS
WELCOMED & ENCOURAGED.
SUBMIT MATERIALS FOR
PUBLICATION BY THE 19TH OF
THE MONTH

CONTRIBUTING EDITORS

PETER BEIN
ALLAN BLOCK
MELISSA BOGEN
MAX ESTROFF
PAUL GALEAZZI, JR
STEVE IMPROTE
LES PARKER

NEWSLETTER COORDINATOR

PAUL A. GALEAZZI

CHANGE OF ADDRESS

TO CHANGE MAILING
ADDRESS, PHONE NUMBER
OR E-MAIL, PLEASE NOTIFY:
INFO@ROCKLANDAQUANAUTS.ORG

Next Meeting: Tuesday October 9th, 2007

7:00 pm at Sunbridge College
Chestnut Ridge, NY

At this general meeting we will be ordering new Rockland Aquanauts shirts, jackets, sweat shirts or just about anything that you would like. We will be bringing in samples of certain items of which you have a choice of any or all.

We have commissioned a new Embroider design which can be put on a variety of garments. We will also have a sample of this design for your viewing. We will also give you information of the location of the store which you can visit yourself. You can then see even more garments which you can also try on. You can then place your own order directly with the vendor and still receive the same design.

The choice is yours.

Pizza & refreshments will be provided

Directions:

BY CAR, FROM THE SOUTH

Take the Garden State Parkway north to Exit 172 (Grand Avenue). Turn left at the bottom of the ramp, go under the overpass and turn right at the stoplight onto Chestnut Ridge Road (Route 45). Continue/or about two miles, through two traffic lights, the New York State border and a third traffic light. Just past the first sign for Green Meadow Waldorf School on your left, turn left onto Hungry Hollow Road (the Hungry Hollow Co-op will be on the far corner).

BY CAR, FROM THE NORTH OR EAST

Take the New York State Thruway (Route 87) to Exit 14A (Garden State Parkway). Take the first exit (Red Schoolhouse Road, also identified as Last Exit in New York), turn right at the stop sign and go to the stoplight at Chestnut Ridge Road (Route 45). Turn left, and then take the first right turn onto Hungry Hollow Road. (The Hungry Hollow Co-op and Green Meadow Waldorf School are on the north and south corners of Hungry Hollow Road.)

AS YOU GO DOWN HUNGRY HOLLOW ROAD:

The second driveway on your left is the entrance to the Green Meadow Waldorf School's Nursery/Kindergarten parking lot.

Just past the bottom of the hill on your left is the parking lot/or short-term visitors to the Main House which houses Sunbridge's Offices, Dining Room and Teacher Training Room and Brookside Building.

Orchard Lane, the first actual street on your left, is the entrance For Holder House (the student dormitory) and student parking.

100 yards further on your right, opposite the entrance to the Fellowship Community, is the entrance of the Threefold Auditorium, which also houses both the Sunbridge College Library and the Bookstore.

Rockland Aquanauts Organization Inc.

Mission Statement:

To provide, promote, and advance environmental protection, care, and voluntary clean-up of waterways by any and all lawful means; to promote the importance and care in every manner possible by environmental awareness and otherwise; to purchase, print, publish, and circulate literature to promote the importance and care of the waterways and the work of the Corporation. To perform all acts the Corporation may deem appropriate or advisable in such operation; to establish, provide, and voluntary clean-up waterways, to encourage, support and subsidize the cleaning and protection from pollution.

Scientists May Have Found New Fish Species

(continued from page 1)

The fishermen, concerned about supertanker traffic that passes over Saba Bank on its way to an oil terminal on the nearby Dutch island of St. Eustatius, asked the government what it could do to protect the atoll, said Paul C. Hoetjes, a senior policy adviser in the Netherlands Antilles environmental department.

The Dutch Antilles government will use the data to apply to the International Maritime Organization to create a protected space for the atoll, Hoetjes said.

Smith said it will be about a year before they know if they have new species. That process typically includes comparing the specimen to known fish, DNA sequencing, reviewing tissues samples and X-rays, counting the number of scales on the side of the body, counting the number of vertebrae on the skeleton and the number of rays on the fins.

Among other criteria set up by international commissions regulating animal and plant names, the scientists' findings have to be published preferably, but not necessarily, in a peer-reviewed scientific journal before being officially classified as new species.

C. Lavett Smith, who has studied tropical marine fishes for about 50 years and was not involved in the research, said the discoveries weren't unusual.

"There's no question that it is a very rich area," said Smith, author of the National Audobon Society Field Guide to Tropical Marine Fishes. "It is not at all surprising that they would find new species of gobies. ... Those are being discovered all the time."

Nonetheless, the findings show there's still much to uncover in the Caribbean Sea.

"Any time we find new species it tells us that we've only sort of begun to characterize our biodiversity," said Don R. Levitan, a Florida State University professor of biological science.

The Caribbean wasn't a "novel place" for researchers, he said, "so the fact that they're finding new species there tells us we still have a lot to learn."

Passport Changes

Advisory: As of January 23, 2007 passports are required for travel between the United States and Canada, Mexico, the Caribbean (excluding U.S. territories), and Bermuda. However, due to longer processing times, exceptions are being made only for those passengers who can provide proof of passport application. This only affects U.S. rules. Destination countries keep their own rules and may require passports.

For details see the U.S. Department of State's [Western Hemisphere Travel Initiative information](#).

**POKING FOR LOST TREASURE
TO LOOK FOR SILVER IN THE KILL, THEY USE A STICK**
BY : John Holl, Star-Ledger Staff

About 5 feet below the small boat, in the murky waters of the Arthur Kill, might lie a fortune in century-old silver bars.

Yet all some modern-day treasure hunters can do is poke the depths, using a metal rod with a nail attached to the end, in hopes of hitting an object and retrieving a silver sample that will tell them where to go into the water.

It was 1903 when a barge listed in the Arthur Kill while carrying nearly 8,000 silver bars belonging to the Guggenheim family. The precious cargo spilled over the side. Most of the bars were recovered, but it is believed about 1,400 of them – worth \$6,000 to \$7,000 each – are still scattered on the bottom of the busy shipping channel.

Aqua Survey, a Hunterdon County company that specializes in environmental research, is on the hunt for the remaining bars. Since the spring of 2006, it has used advanced technology to map the waters, and it believes it is close to a find. It even has petitioned a federal judge for scavenger rights.

A five-member team was out last week in a small boat on the harbor's Story's Flats, just north of the Outerbridge Crossing and south of the Arthur Kill landfill on Staten Island. They probed the murky bottom, usually coming up with thick mud and sediment aptly nicknamed "black mayonnaise."

Ken Hayes, president of the Kingswood based company, said they do not fancy themselves treasure hunters but rather scientists with curiosity.

Their operation is both high-tech and low-tech.

The team has used advanced global positioning software, electromagnets and sonar equipment to locate about 270 potential targets. The software is designed to locate silver but not iron, making the search easier – "though we could also just find a car battery," Hayes said as he piloted a motorboat on the relatively calm water last week.

After the use of the Global Positioning System to get to the target area, the low-tech method took over. Using a long pole with a mason nail on the tip, four men took turns at poking around, hoping to strike something hard.

Visiting different spots throughout the morning, the crew grew excited while probing the third location. One of them landed the nail on something hard, and they feverishly worked to hammer the pole down.

When the pole was lifted to the surface, no silver bar accompanied it, but the nail was bent – a good sign. It was unscrewed from the pole and isolated, to be analyzed at a lab for traces of silver.

Hayes and others believe the bars weigh about 75 pounds each and are about 75 percent pure silver.

The bars were being transported from the Port of New York to the Guggenheims' smelting facility in Perth Amboy on the night of September 27, 1903, when nearly 300 tons of cargo toppled into the water.

(Continued on page 5)

POKING FOR LOST TREASURE

(continued from page 4)

The cargo landed in one spot and was raised to the surface within several days, but the theory among scientists and history buffs is that in the moments before the large drop, the ship began to tilt and some bars slid off, leaving a trail.

Some have tried to locate the silver, and none has been successful.

If Hayes' map is correct in showing silver bars below, historians will be "able to better understand what happened the night," he said.

Hayes said the whole experience has been slow and methodical. "There might be some 'Eureka' moments, but most of it is regular scientific work," he said. But he added: "Sometimes it's neat to unravel history."

The mission has been dedicated to the memory of David Bright of Raritan Township, a colleague who died last year while diving off the wreckage of the Andrea Doria, the luxury ship that crashed and sank off the coast of Massachusetts in 1956. If Hayes is successful, he says, he would sell or auction many of the bars. But while hoping to find them all – which could range in price from \$10 million to \$20 million, depending on the collector's market – Hayes said he would settle for two bars. One for himself and the other to be returned to Mexico.

Hayes visited Tampico, the region of Mexico where the bars originated, and, after speaking with government officials, was surprised that none had been left behind, not even as a museum display.

Accepted Hessian Lake Dives 2007

Sunday June 3rd at 9am
Saturday July 7th at 9am
Sunday August 5th at 9am
Saturday September 8th at 10am
Sunday September 30th at 10am
Saturday October 13th at 10am
Sunday October 21st at 10am

New Nudibranch Species Found on Bonaire

Bonaire Insider

Sent In by Marsha Freedman

Long-time Bonaire resident Ellen Muller recently found what may be a never-before-described nudibranch species. While on a dive last June, Ellen saw what appeared to be some animal, black and white, about the size of grain of rice. Not sure what she was seeing, she took two quick photographs, thinking it was some sort of crustacean, most likely a shrimp. However, once she viewed the image on her computer screen, she could easily see it was some sort of mollusk, but she had never before seen anything similar!

So Ellen decided to do some research, and she first turned to Leslie Harris from the Natural History Museum of Los Angeles County. True to form, within an hour, Leslie had identified the unusual animal--well, at least by genus. Here is an excerpt from Leslie's email, posted with her permission: "That is a spectacular photo of something you couldn't even see! It's a nudibranch in the genus *Trapania* - that much I could tell but I didn't recognize it. Since my copy of the carib nudi book is at home, I forwarded your pic to Angel Valdes, primary author of the book and our mollusk curator, in hopes of a species id."

His response - and this is a direct quote - "WOOOWW! OH MY GOD! WOOOWWW! This is so COOL!!! It's a *Trapania* and it's completely new. Totally new. Never been seen before. WOOOWW!!!!!"

However, the story gets more interesting. Since her first discovery, Ellen has found six more of these wonderful new creatures, ranging in size from smaller than a grain of rice to about 1/2 inch. [Thanks to husband Erwin for finding the last one!]. In addition, a mating pair of *Trapania* have been seen several times at Klein Bonaire and were photographed laying eggs. These two are much larger than the others --about one inch long. So the question becomes: Is it really so rare? Or is it just unknown because of its tiny size?

Angel Valdes, Associate Curator of Malacology at the Natural History Museum of Los Angeles County, offered this in response: "I collected in Curaçao and all over the Caribbean before and never saw this species.

Considering that these animals have population explosions and then may disappear for years it is critical that we can obtain a few specimens now. I'm afraid that this population will disappear before we have the chance to describe the species. When I became interested in nudibranchs I found a very common species of *Trapania* in northern Spain that I couldn't identify and it turned out to be a species described in Naples 100 years ago and never found again. The next year the species was gone and never found again in that area."

So, all those diving on Bonaire: Keep your eyes open for black and white grains of rice. If you find this new *Trapania* species, note its size, depth, location, and report in to the Bonaire Insider (simply add a comment via the link below). If you're carrying a camera, please take pictures.

Trapania eat entoprocts, tiny animals that look like hydroids but have a very different internal body construction. The kamptozoans or entoprocts are the translucent blobs with black dots in the image.



ANNUAL MEMBERSHIP FEES ARE DUE

Rockland Aquanauts Organization
2007 Dues

I guess it is that time of the year again, Membership Dues are due. Last year all our members received much more than they gave out to the Organization. As usual you will be receiving a tax donation for the first \$25.00. All members who attended the Annual Dinner not only received money off their own dinner but they also received money off their guests dinner. Everyone whom attended also received prizes, some worth many times the cost of their Dues. Don't forget the Annual Picnic as well as all the BBQ lunch's after the Lake Dives.

So please send in your \$42 dues early to;

Rockland Aquanauts Organization
c/o
Paul Galeazzi Jr.
4 Greensward Drive.
Valley Cottage New York 10989

Deadliest Sea Creatures

Sea Snake



There are 32 species of sea snake. Their venom is more toxic than that of land snakes, but sea snakes are shy and tend to stay away from people, so there is little risk. A small number of bites can be fatal to people



**Rockland Aquanauts
Post Office Box 387
New City, NY
10956**

October 2007

Bonaire, New Species of Fish Silver, Passport Changed, Membership Dues, Hessian Lake Schedule

****Next Meeting: Tuesday October 9th, 2007****
7:00 pm at
Sunbridge College

Directions inside
