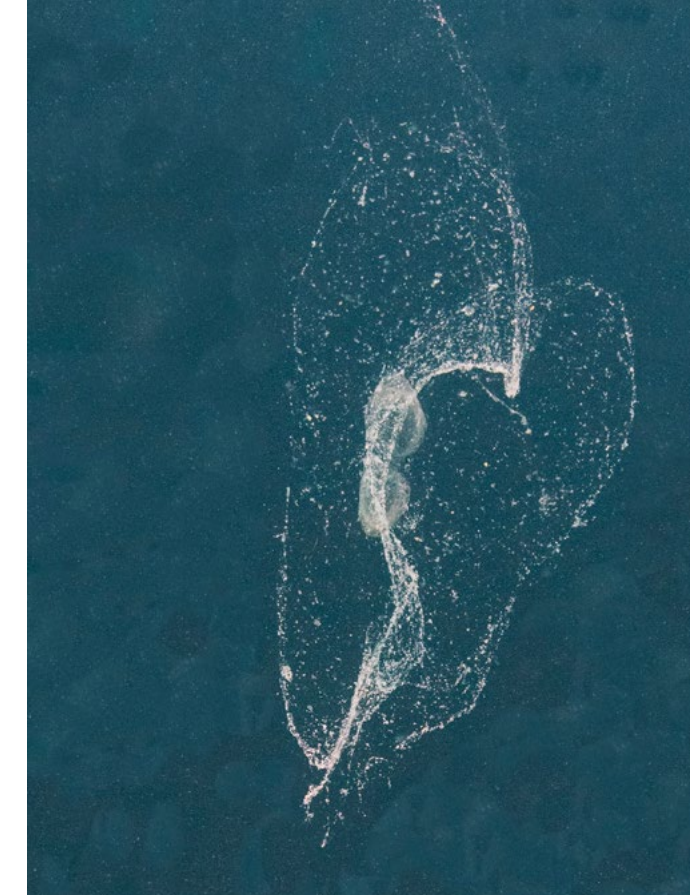


feature

Photo 1. (right) Pyrosome, Jupiter, Florida, USA. Gear: Nikon D500 camera, Tokina 10-17mm lens, Nauticam housing, Inon Z-330 strobes. Exposure: ISO 100, f/11, 1/125s, FL 11

Photo 2a and 2b. (far right) Larvacean, Jupiter, Florida, USA. Gear: Nikon D500 camera, Tokina 10-17mm lens, Nauticam housing, Inon Z-330 strobes. Exposure: ISO 200, f/11, 1/125s, FL 14

Photo 3. (below) Octomom, Blue Heron Bridge, Riviera Beach, Florida, USA. Gear: Nikon D500 camera, Nikkor 85mm lens, Nauticam housing, Inon Z-330 strobes. Exposure: ISO 200, f/11, 1/125s, FL 85



Invertebrates and Chordates

Text and photos by Gary Rose, MD

Little did I realize in my college days, as I was falling asleep in Biology 101,

that the lecture topics of invertebrates (with no spinal cord) and chordates (with at least a stiff supporting rod) would one day become very relevant in my diving world. Now, when I come across these fascinating crea-

tures, I enjoy watching the confused looks on the faces of my fellow divers as they observe these captivating creatures in the water column.

Photo 1 is of a four-foot-long pyrosome, a tunicate (chordate) that is a cylindrical colony made up of thousands of individual zooids. Pyrosomes are transparent, gelatinous, and float, writhe and dance close to the surface of the sea. As they drift with the prevailing currents, they catch phytoplankton in a self-created mucus net and feed on them. At night they are bioluminescent. I have seen only a few pyrosomes in my many years of diving. Their large size and mystery create a very lasting impression.

In contrast, Photos 2a and 2b are of a much smaller larvacean (chordate), also a transparent tunicate. This one was about five inches long. The central part looks like a tadpole. The larger outer parts are self-created gelatinous wings with which the larvacean captures and eats tiny particles and debris that sink in the water column. They are hard to find. It helps to be near the surface, have

good visibility and bright sunlight. Shooting upwards and at an angle allows light to both transmit through and reflect off the surface of a larvacean, enhancing the ability to take very creative photographs. By playing with the ambient light and patiently adjusting your settings, you can capture the central larvacean and the delicate mucus wings.

Every time that I see a bottle, can or pipe lying in shallow water, I look inside and closely inspect it. There are all types of surprises to be found. Many wonderful creatures take refuge and hide in these man-made objects. I like to use a very low intensity dive light to help with my investigation. Photo 3 was the reward for such an investigation. This beautiful "octomom" was protecting her bead curtain of eggs. It is easy to see the tiny, almost fully formed octopi inside the individual transparent eggs.

This was one of the most technically difficult photos that I have ever taken. The 14-inch segment of pipe protruding from the sand was pointing straight up. The diameter of the pipe

was just large enough for my camera lens to slightly overlap. Forced to handhold my strobe remotely, above and just off to the side, I shot a series of photos—all the while being careful not to burn Octomom's eyes or the eggs. Each photo was taken blindly and was dependent on my pre-shoot setup. The strong ebbing tide in shallow water added another level of difficulty. The octopus is an invertebrate and not a chordate.

The first time that I encountered a huge invertebrate chordate was in a cave in the British Virgin Islands. It was about eight feet long, amorphous and, frankly, quite scary. I was a relatively new diver and had no idea what it was, but I was fascinated by it. I saw my dive guide's terrified face and was unfortunately forced by the guide to abandon my investigation of one of nature's marvels. As humans, we are often afraid of the unknown and that which we do not understand. As we explore the sea with our cameras, we will find many new and fascinating creatures. Visit: garyrosephotos.com

