



TECH: ICE DIVING
IVANA ORLOVIC HEADS
UNDER THE ICE IN
AUSTRIA AND SERBIA

INDONESIA OPENS UP
AS RESTRICTIONS LIFT ADRIAN
STACEY SHOWCASES THE
TOP DIVE HOTSPOTS

BP/W VS JACKET BCD
THE PROS AND CONS
OF BP/W VERSUS
JACKET-STYLE BCDs

SCUBA DIVER[®]

NORTH AMERICA

Clearly CAYMAN

WALT STEARNS ISLAND-HOPS BETWEEN
CAYMAN BRAC, LITTLE CAYMAN
AND GRAND CAYMAN



GIANT CUTTLEFISH ▶ REVIEWED: SCUBAPRO HYDROS PRO

SCUBA DIVER ISSUE #10
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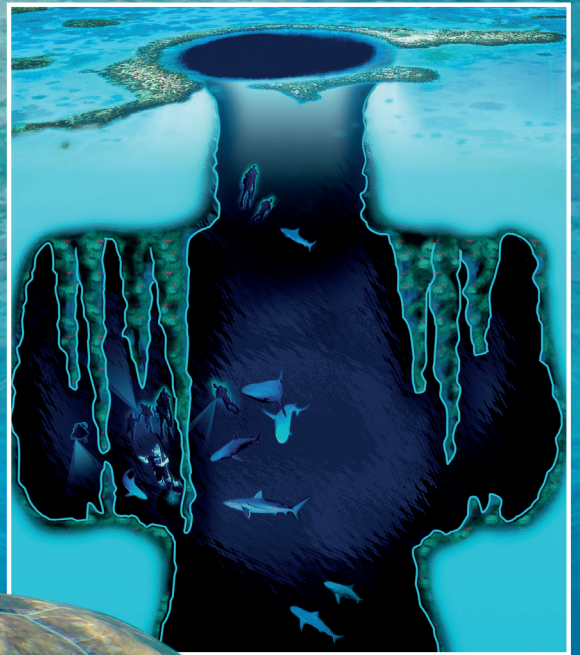
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A NOTE FROM THE EDITOR



It's all in a name...



Obviously, you've noticed this issue the name Destinations is no longer on the cover. Beginning this issue, Destinations has taken up the name of its parent publication, Scuba Diver, along with its bespoke region - North America.

Produced by United Kingdom-based Rork Media Limited, Scuba Diver has been around for five years, but its roots go much deeper. Editorial Director Mark Evans and Publishing Director Ross Arnold know a thing or two about putting together dive mags having been at the helm of Sport Diver UK for more than 18 years.

Scuba Diver was created to fill a void in the market left when Sport Diver UK was shuttered by its parent US company. A year after its introduction, Rork Media Limited launched another monthly rendition of Scuba Diver magazine for both Australia and New Zealand divers. Based on the strong reception of that title, the time was right to enter the US market.

Entry into the market came in the form of Destinations. But while the quarterly publication was well-received, the title made it seem like a bit of an outlier to the Scuba Diver family. Now is as good a time as any to make the change.

The Scuba Diver brand is now the only truly global publication in the diving marketplace, offering bespoke print and digital editions for the three main English-speaking regions on the planet, all supported by a full complement of social media, websites, and YouTube channel.

In addition to serving as Editor for the North American edition of Scuba Diver, I'll be back in the field reporting on products, trends, and diving destinations. This month, I'll take readers on a quick trip through the Cayman Islands, which have been a favorite destination of mine for nearly four decades. With travel restrictions and entry requirements becoming a thing of the past, this is a great time to visit — or revisit — the islands that put Caribbean diving on the map and became one of the first hotbeds of resort diving.

Walt Stearns, Editor (North America)



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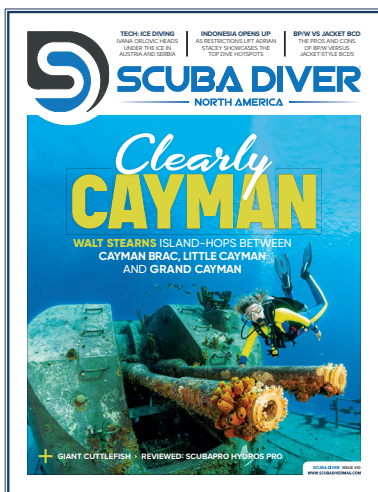


An underwater photograph showing two divers swimming over a vibrant coral reef. The water is clear blue, and the reef is covered in various types of coral and small fish. The text is overlaid on the image.

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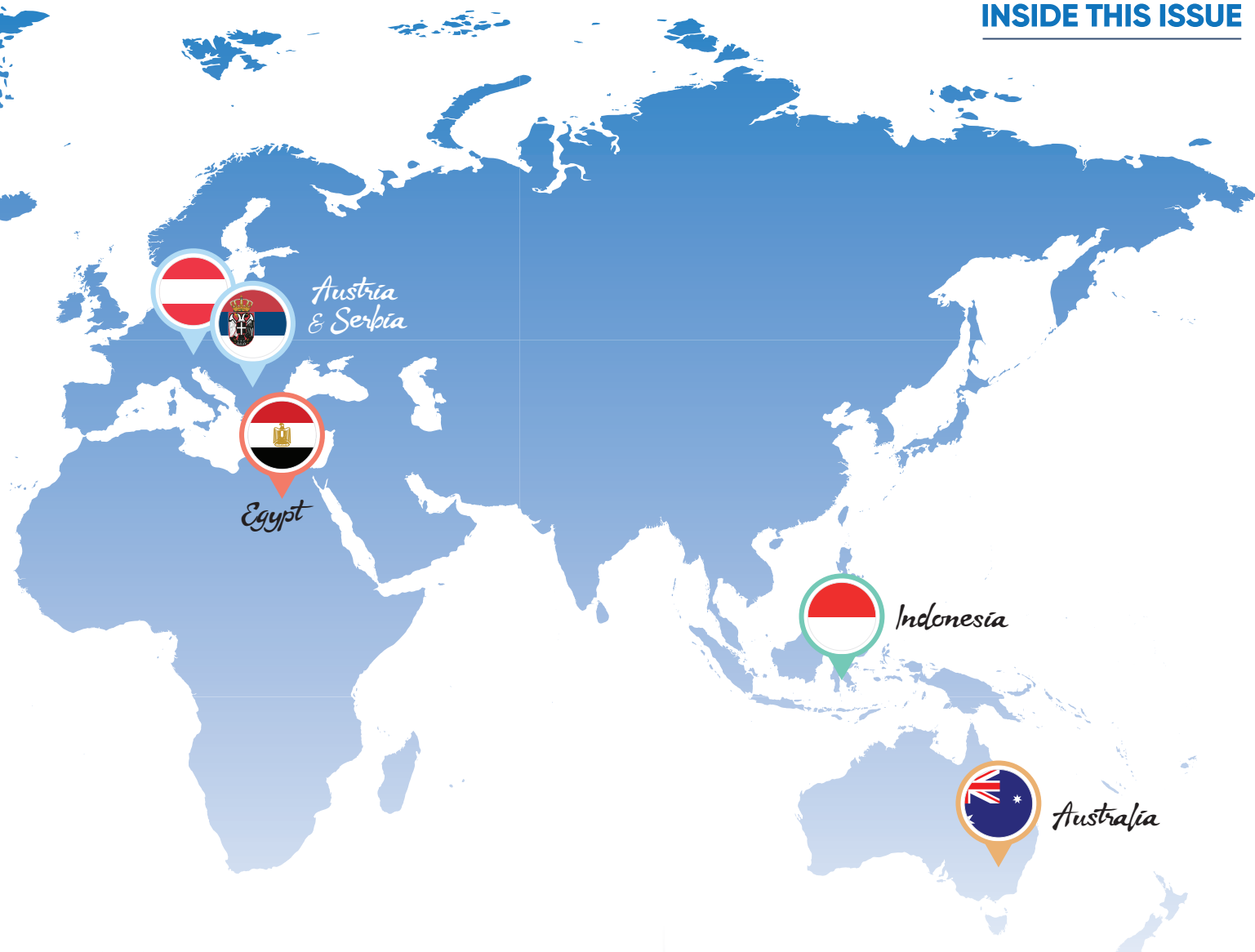
Two tragic diver deaths in Belize, the Socorro Vortex liveaboard runs aground, Blue Heron Bridge gains a snorkel trail map, Divers Alert Network wants your help, and Ghost Diving clean up their first US shipwreck.

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The birthplace of wall diving... The crown jewel of Caribbean diving... A 'must do' destination... The Cayman Islands has been called these things and more in literally thousands of articles dating back more than six decades. And there are good reasons why this trio of small islands deserve such accolades, as Walt Stearns explains.

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Scuba Diver Editorial Director Mark Evans looks at the pros and cons of traditional jacket-style BCDs and the increasingly popular backplate-and-wing set-ups, and proposes a third option for recreational divers, the back-inflate BCD.

60 **GEAR TEST EXTRA**

The Scuba Diver editorial team rate and review a selection of dive gear, including Fourth Element's new Tech Fins, Scubapro's Hydros Pro back-inflate BCD, and SeaLife's Sport Diver smartphone underwater housing.



US DIVERS DIE IN **SEPARATE BELIZE INCIDENTS**

Early May saw the deaths of two 60-something American divers in the popular waters off Belize. On Friday 6 May, 62-year-old Celeste Lee Bondurant Bell was out on a night dive over the Belize barrier reef with her husband, other tourist divers and several guides. She failed to resurface, and minutes later was seen floating. She was rushed to Caye Caulker Polyclinic, where CPR was performed without success. She was pronounced dead at 8.05pm. Then on Sunday 8 May, 64-year-old Michael Williams Coli was on a dive trip to Turneffe Atoll aboard the Belize Aggressor IV liveaboard when he failed to return to the surface after a dive. He was subsequently rescued from the water and CPR was administered, to no avail. He was rushed to the mainland and pronounced dead at 11.46am.

DAN ASKS DIVERS TO **SUPPORT DIVE SAFETY**

Every year, Divers Alert Network (DAN) strengthens its commitment to serving the diving community, and it owes its success to its members and supporters. Your tax-deductible donations help DAN dedicate resources to preventing incidents, managing injuries, and saving lives. When you give to DAN, you support the DAN Emergency Hotline, ensuring it stays available 24/7 to assist divers everywhere. Since it went live in 1981, the hotline has helped tens of thousands of divers in times of need. With many people returning to the water this summer after prolonged periods away, continued operation of this essential emergency service is more important now than ever before. Your gift also helps DAN support recompression chambers. DAN's Recompression Chamber Assistance Program (RCAP) provides chambers worldwide with training, essential equipment, safety assessments, and more. Plus, your donation enables DAN to equip dive professionals with oxygen units and first aid kits that allow them to respond to emergencies faster.

www.dan.org/adout-dan/donate



BLUE HERON BRIDGE GAINS SNORKEL TRAIL MAP



Snorkellers can now explore Blue Heron Bridge in Florida with greater confidence with the unveiling of a new Reef Smart map. The Reef Smart team have used 3D mapping at various popular dive sites across the State, and now they have utilised their skills to create a map of the Phil Foster Park Snorkel Trail at Blue Heron Bridge, which is one of Florida's go-to shore-dive sites. A shore-side sign has been erected, but visitors wanting their own personal version can get a waterproof dive card from Reef Smart for \$9.95.

The Reef Smart card features two views of the site, with detailed 3D-rendered close-ups of the many artificial reefs that make up the snorkel trail, along with important depth information, a suggested route for the site, images of six species and where you might expect to find them, and ratings on the level of difficulty, current, depth, reef and fauna for the site. The rocky reef around Blue Heron Bridge provides a rich habitat for fish, octopus, seahorse and other types of marine life. A trio of hammerhead shark statues are located near the west end of the snorkel trail, and the best time to explore is at high tide, when underwater visibility is the clearest.

www.reefsmartguides.com

SOCORRO VORTEX LIVEABOARDS RUNS AGROUND

The luxurious liveaboard Socorro Vortex is apparently a total loss after running aground in the remote Revillagigedo Archipelago in early May, but all passengers and crew were evacuated. According to reports, the vessel ran aground on Socorro Island and the crew radioed for assistance. On arrival at the scene, the Mexican Navy found 14 passengers – a mix of Americans, Britons, Belgians, Irish and New Zealanders – and 11 crew members in a liferaft, some apparently with minor injuries.



GHOST DIVING TARGETS CALIFORNIA SHIPWRECK

Six volunteers from Ghost Diving took to cleaning part of the wreck of the USS Moody that in 1933 made its final plunge for the filming purposes of Hell Below. Since then, as with any underwater object protruding from the seabed, the wreck has been accumulating fishing nets – the deadliest form of marine plastic pollution.

The project marked the USA launch for international non-profit Healthy Seas that already works in 12 countries in Europe, North Africa and New Zealand. To make it happen, they teamed up with the volunteers of the newly established Ghost Diving USA chapter.

The clean-up took place off San Pedro, California, in the morning hours of 28 April, with divers descending to 147ft. Despite bad visibility and a strong current, the well-trained Ghost Diving team successfully recovered 297lb of a mixture of tuna and squid nets during a single dive. The area is covered by kelp forests, one of the ocean's most-diverse and productive ecosystems. When the nets reached the surface, they were treated by a dozen individuals, partners and friends of the organization that helped to release living organisms, like crabs, worms and sea anemones, that were entangled or growing on the nets.

"Thanks to the support of Healthy Seas, we look forward to continuing regular sea clean-ups in the area and are already surveying the wreck of UB88 and Farnsworth Bank, a beautiful reef that is populated by the very rare purple hydrocoral," said Norbert Lee, Ghost Diving USA co-ordinator.



"We are thrilled to be returning in a few months! The reef systems here are the most unspoiled we have seen in our travels around the world and the resort is paradise. We can't wait to see all our friends at Wakatobi." ~ Robert and Barbara Hay



At Wakatobi, you don't compromise on comfort to get away from it all. A private guest flight brings you directly to a remote island, where all the indulgences of a five-star resort and luxury liveaboard await. The Wakatobi dive team will ensure your in-water experiences are perfectly matched to your abilities and interests so your underwater encounters can create memories that will remain vivid and rewarding long after your visit is concluded. While at the resort, or on board the dive yacht Pelagian, you need only ask and the Wakatobi team will provide any service or facility within its power. This unmatched combination of world-renowned reefs and first-class luxuries put Wakatobi in a category all its own.



Island hopping the **CAYMAN**

Did you know?

Christopher Columbus called the Cayman Islands 'Las Tortugas' because of the high density of sea turtles swimming in its nearby waters. Current preservation efforts ensure that there will be sea turtle generations to come!



MS

The underwater landscapes of the Cayman Islands are indeed spectacular, with shorelines flanked by sheer underwater cliffs rising from depths of more than a mile. There is a mature and well-developed dive infrastructure, an excellent range of resorts to choose from and 365 dive sites to explore — literally one for every day of the year. There are shallow sites for snorkelers and novices, shore dives, wall dives, wreck dives and opportunities for techies with extended-range dives down into the sponge belt.

Given the historic and ongoing popularity of the Cayman Islands, the question for most dive travelers isn't 'should I go', it is 'where do I start?', as the only real challenge is which island to choose. So why not all three?

Getting to all three islands is easier than you would think. For example, my most recent travel to the Cayman Islands involved a visit to three different dive resorts: Cobalt Coast on Grand Cayman's North Side, Brac Reef Beach Resort on Cayman Brac, and Little Cayman Beach Resort on its namesake island. Because all three properties are operated by Clearly Cayman, I was able to organize my stay with each dive resort in the order needed, and tie everything together. Helping to tie everything into an even neater package was being able to coordinate a flight schedule with Cayman Airways, the region's national carrier. In addition to providing service from Miami, Tampa and New York's JFK on a daily basis, the airline provides inter-island service between the Brac, Little Cayman and Grand Cayman. My itinerary began in Miami to the Brac, followed by the Brac to Little Cayman, Little Cayman to Grand Cayman, later back home to Miami. ►

The birthplace of wall diving... The crown jewel of Caribbean diving... A 'must do' destination... The Cayman Islands has been called these things and more in literally thousands of articles and blog posts dating back more than six decades. And there are good reasons why this trio of small islands deserve such accolades, as Walt Stearns explains

Photographs by Walt Stearns

Back on the Brac

A direct flight from flight from Miami into Cayman Brac made for an easy transfer to Brac Reef Beach Resort to start my trip. A chip shot away from the airport, this long-time favorite sits on the southwestern corner of the island and is the Brac's only dedicated dive resort. Family-owned and operated since its humble beginnings, Brac Reef Beach Resort has undergone several sweeping renovations in recent years. The most substantial took place after it was ravaged by Hurricane Paloma (fifth major hurricane of the 2008 Atlantic hurricane season) when the resort received the first of several major makeovers, with the final renovations completed in December 2015.

Guest accommodations in the property's primary two-storey, L-shaped building look better than ever, and each of the 40 rooms had received a total renovation right town to new electrical and plumbing systems before being tastefully redecorated and furnished. Accommodating choices include one king or two double beds per room with all the expected amenities, and the in-room WiFi actually works quite well (maybe a little too well if you are trying to dodge the office back home).

Property upgrades during this renovation process included a new, larger free-form pool with a two-storey bar overlooking both pool and the ocean.



Did you know?

The Cayman Islands is often seen as the birthplace of scuba diving. Today, more than 360 dive sites lie scattered throughout the Cayman Islands, ensuring that divers both local and international will have a memorable experience here.





“ Running the length of the Brac’s south side, reef topography tends more towards the dramatic with steep descents plummeting straight down from depths beginning at 55ft-65ft below the surface ”

In addition to the traditional breakfast, lunch and dinner service provided in buffet fashion, the resort added their own steak house restaurant, Island Prime, for a more formal dining atmosphere.

Diving Services on the Brac, as well as Brac Reef’s two sister operations on Grand and Little Cayman are handled by Reef Divers, Clearly Cayman’s own in-house diving operation. Reef Divers operates the largest fleet of 42- and 47-foot Newton Dive Specials (11 boats total) in the Cayman Islands. There is a large cache of aluminum 80 cu.ft. tanks and a limited number of 63 cu.ft. models readily available with standard 3,000 psi air and 32 percent nitrox fills.

Prior to the recent pandemic, Reef Divers established support services for rebreather diving, including sorb, pure O2 fills and cylinder rentals. While this option is not currently available as of Spring 2022, Reef Divers is planning to have it up and running again soon.

As would be expected, Cayman Brac has no shortage of dive sites. The island is ringed with over 50 named sites on both the north and south side. Since my first introduction to diving the Brac as a teenager back in 1979, I have seen and visited nearly every named site the island has to offer, many more than twice.

Reef Divers also makes regular trips to Little Cayman for a taste of Bloody Bay Wall. Between the two islands, divers have more than 100 sites to explore. Dives are generally consigned to a 50-minute, non-deco profile for wall dives. Max depth is 110ft per Cayman regulations. The profile for the second dive and the third afternoon dive is a 60-minute immersion with a max depth at 60ft.

Reefs, walls, and a wreck

Reef and wall profiles on the Brac and around Little Cayman come in two flavors. Running the length of the Brac’s south side, reef topography tends more ▶

PREVIOUS PAGE
The MV Keith Tibbetts

LEFT
Large sponges adorn the reef

MIDDLE
Over the past few years the Brac has experienced wonderful rebound in the Nassau grouper population on the reefs

TOP RIGHT
Free-form pool overlooking the ocean

ABOVE
Vibrant hues on the two-storey accommodation



TOP
Atlantic hawksbill
turtle

ABOVE
Reef Divers' dive
boat heads out
to sea

RIGHT
Diver suiting up
for a dive



towards the dramatic with steep descents plummeting straight down from depths beginning at 55ft-65ft below the surface. Lining the edge to this plateau are ridges of massive coral fortifications pierced by numerous passages, tunnels, and chasms that snake their way through the wall's crest to the open blue void on the other side. At a site called Anchor Wall divers will find its namesake, an enormous, 16th century iron anchor tightly wedged in the middle of a 20-foot-deep crevasse.

Brac's north side bottom contours vary between patch reef and classic spur-and-groove coral formations in the 10ft-60ft range. The crest of the reef at the lower edge of the shelf meets the drop-off and is punctuated by broad sand chutes. Among more highly colorful wall dives this side of the island is Cemetery Wall. While most of the north walls vary from 55ft-80ft in the start of their tumultuous plunge, Cemetery Wall is one of the few exceptions, as the top of wall begins just 45ft from the surface.

“

While wall diving is a given at sites all around the Cayman Islands, the underwater cliffs at Bloody Bay Wall on Little Cayman's north-facing side are in a class by themselves

”

The sides of this steep precipice form an underwater tenement of vigorous mid-water corals, sponges, and reef fish. Embellishing its vertical front are the profuse colonies of bright yellow and green tube sponges, and red, lavender, blue and green rope sponges. Red vase sponges with deep hues nestle among the branches of large black coral trees between profuse groves of deep-water gorgonians. Sharing the same section of this dramatic drop-off is Strawberry Sponge Wall to the west, with Garden Eel Wall taking up the eastern end.

One site I am always partial to at the Brac is the Captain Keith Tibbett's wreck. Wreck diving is not a strong point on the Brac as wrecks are far and few between, but this one is special because it's a 330-foot-long former Russian missile frigate that was put down as an artificial reef. Over the years since I first watched it slip beneath the surface on a calm sunny day in 1996, the huge Brigadier Type-II Class Missile Frigate has undergone a considerable transformation. This former warship, which sports ►



TOP LEFT
Diver checking
out the iron
anchor



TOP RIGHT
Vibrant coral
and sponges



BELOW
The guns on
the MV Keith
Tibbetts

Did you know?

The Tibbetts wreck is 330 feet in length and lies on its side between two coral reefs on Cayman Brac's north shore.

a 43-foot beam, came to rest upright and on an even keel on the sloping contours of the Brac's north side at depths between 60ft-80ft. At the time the vessel's tall profile topped out less than 15ft from the surface, while the knife-like bow pointed out to sea from the edge of the drop-off.

Surveying the warship's comprehensive bulk today, one might conclude she had succumbed during a fierce battle. At the 80ft mark, that same knife-like bow sits sharply askew, twisted hard to port from a partially flattened section of her mid-ships. Above, the frigate's large radar array still has managed to remain upright 20ft from the surface. Adding to the ship's surreal outline, both fore and aft gun batteries remain fixed inside their rotating deck turrets, as if ready for an assault. With a little imagination, the dark delta-winged eagle rays and large southern stingrays typically forging in the surrounding sandy bottom could pass for stealth fighters on the prowl.

Little Cayman

With Little Cayman a scant three miles away, the hop over from the Brac takes approximately 15-20 minutes (airstrip to airstrip) to complete, via one of Cayman Airways 19-passenger Viking Air DHC-6 Twin Otters. If going directly from Little Cayman to



“ With Little Cayman a scant three miles away, the hop over from the Brac takes approximately 15-20 minutes (airstrip to airstrip) to complete ”

Grand Cayman or vice-versa, the flight via the same 19-passenger Twin Otter takes about 40-45 minutes in air travel time. A convenient feature is that most flights between the two as well as to Grand Cayman happen daily. Keep in mind with these flights, baggage allowance is limited to 50 pounds per person before fees for excess are applied.

Little Cayman Beach Resort has been a fixture on the island since opening its doors in June 1993. The Singaporean saying 'same, same, but different' sums up my thoughts about this resort. It looks much the same as when I first visited in 1996. A pair of two-storey guest wings face each other over a central courtyard with an open-air poolside bar and a freshwater swimming pool surrounded by an expansive wooden sundeck. What has changed is the furnishings, which have been kept up to date and immaculately clean. And most striking is that the resort's dining room has been completely renovated (more like rejuvenated) with modern décor and an indoor bar. Together, they form a deep, inverted U-shaped arrangement facing the beach and pier from which four of Reef Divers Newton dive specials make their daily departures. The same as on the Brac, Reef Divers provides a daily dive schedule starting with an 8am departure for two-tank morning dives on either Bloody Bay Wall or Jackson Bight. Afternoon is generally a single tank boat dive departing around ▶

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Did you know?

The USS Kittiwake is one of the best-known wreck dives in the Caribbean. Its convenient location, just off Seven Mile Beach in Grand Cayman, and shallow depths make it a popular site among scuba divers as well as snorkelers and freedivers.

“ Surrounded by some of the whitest sand bottom the 251-foot Kittiwake presented a highly photogenic profile rising to within 15ft of the surface ”

PREVIOUS PAGE TOP

Strawberry vase sponges on Little Cayman

PREVIOUS PAGE BOTTOM

Hard and soft corals, along with waving sponges, make for interesting dives

ABOVE

The Kittiwake sites canted 45 degrees to port adjacent to the crest of the drop off

RIGHT

Vivid orange sponges

2pm with night dives two times per week.

While wall diving is a given at sites all around the Cayman Islands, the underwater cliffs at Bloody Bay Wall on Little Cayman's north-facing side are in a class by themselves. Among the most iconic are Marilyn's Cut, Donna's Delight and Randy's Gazebo, which begin their plunge straight down into the abyss from depths shallow as 20ft from the surface. Second place for starting shallow goes to Great Wall East and Great Wall West which start at about 25ft.

Joining Bloody Bay Wall from the East is Jackson Bight with an equally large assortment of wall and reef sites, where walls rise to around the 30ft-35ft mark. Popular sites such as Jackson Wall, Coconut Walk Wall, Blacktip Boulevard and Nancy's Cup of Tea feature large winding cuts in the reef line with crevices, and tunnels meandering their way toward the blue void. Adding to the attraction is the impressive collections of richly colored tube, vase and rope sponges that decorate vertical contours. Strawberry vase sponges are often found growing on deep-water gorgonians and black coral trees.

Grand Cayman

My third and final leg of this recent island hop was the shortest of the trip, with only three days before heading back home. Another inter-island flight brought me to Cobalt Coast Beach Resort on Grand Cayman's northwest coast. Cobalt Coast is billed as a small, quiet dive resort not too far from the action – meaning Seven Mile Beach and George Town. This unique three-storey complex includes 21 accommodations divided up between one and two-bedroom suites. The property also includes the Mermaid Studio, which is a small condo with a king bed, extra-large bathroom, a lounge area with a full sleeper sofa and a private Juliette balcony.

Most of the suite's include wicker/rattan furnishings in the living area, with more contemporary furnishings in the bedrooms. All are provided with satellite LCD TV's and WiFi. Across the street are three one-bedroom Cottage Suites which include lounges with full sleeper-sofa and a fully equipped kitchen. The cottages also include an outdoor grilling area, should you opt out of dining at the resort's ►



Did you know?

The Grand Cayman wall is considered by many to be one of the best dive destinations in the world! The famous Cayman wall runs around the island and drops to 3,000 ft in places. The walls are generally a short swim from most moorings.



ABOVE

In the shallows of Grand Cayman's North Sound, snorkelers and scuba divers alike can still frolic with friendly southern stingrays at Stingray City

RIGHT

Overhang on Grand Cayman bedecked with sponge and soft coral growth

restaurant overlooking the pool and ocean.

Cobalt Coast also offers a house reef for shore diving. A short distance out from the end of the dock, the hard pan bottom gives way to a 20ft-high mini wall formation that drops down to a depth of 60ft. Going a little farther out, the terrain changes to white sand bottom with scattered elongated shaped coral islands running perpendicular to shore. Those with good air consumption can likely make it to the drop-off, where the wall begins at a depth of 70ft-80ft.

As I mentioned earlier, Grand Cayman is the birthplace for wall diving and the north wall region has some of the best the island has to offer, with 45 named walls. Then, of course, there is Stingray City for those who wish to frolic with friendly southern stingrays. And if you must have a wreck, Grand Cayman has that covered too. Much like the Russian Frigate on Cayman Brac, the USS Kittiwake is a former Submarine Rescue Vessel that was put down 5 January 2011 as a dive attraction off Seven Mile Beach.

As planned, the Kittiwake was positioned upright on the bottom in 65ft of water, allowing leisurely explorations of both her exterior and interior for even the most-novice certified diver. Surrounded by some of the whitest sand bottom the 251-foot Kittiwake presented a highly photogenic profile rising to within 15ft of the surface. But as often is the case where men plan, Gods laughs, in October 2017, the wreck (still fully intact) was moved by storm surge 20ft deeper where it now sits canted 45 degrees to port adjacent to the crest of the drop-off. Although this slightly deeper profile limits the total time one can spend on the wreck, it does provide the opportunity for a short excursion on the wall as it now sits next door to the dive site known as the Sand Chute. ■



WHAT YOU NEED TO KNOW

Cayman Islands



Getting there

Grand Cayman is well served with flights from numerous airports in North America, but as we've shown, you can fly into the Brac as well.



When to visit

The rainy season is from May to October, and the dry season is from November to April, but to be honest, the weayjer is very pleasant all year round.



Currency

The Cayman dollar, which is interchangeable with the US dollar.



Entry Requirements

You will need a valid passport with six months left to expiry. The Cayman Islands recently reopened after COVID restrictions, check for the up-to-date requirements for entry.



Electricity

The Cayman Islands runs a 120-volt electricity system with three-pin plugs, but the outlets are designed to accommodate two-pin American plugs.



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AGGRESSOR ADVENTURES®



expand in 2022/23



Aggressor Liveboards have added, or will be launching, several new liveboards and destinations to their impressive line-up through this year and into the next

The Philippines

The Philippines Aggressor embarked on her maiden voyage on 9 April 2022. While there are thousands of superb dive sites throughout the 7,640 islands, Philippines Aggressor's guests will focus on the best-of-the-best with scuba diving cruises to Tubbataha Atoll and Visayas/Cebu regions.

The beautiful new, 135-foot Philippines Aggressor yacht offers Tubbataha cruises departing from Puerto Princesa, Palawan exploring the Tubbataha Atoll. A seven-night cruise includes Tubbataha Reefs National Park, a UNESCO World Heritage Site, protecting over 350 species of coral and almost 500 species of fish in an area of approximately

100,000 hectares at the center of the Sulu Sea. Whales, dolphins, sharks, turtles and Napoleon wrasse are among the species found here. This healthy reef ecosystem supports legendary diving and encounters often include hammerhead sharks, manta rays, Moorish idols, parrotfish, eels and more.

There are several Visayas cruise options departing from the Mactan/Cebu or Dauin/Dumaguete areas to experience some of the best diving in the region. The Visayas itinerary will be available for either seven or ten nights. The area provides opportunities for divers to see thresher sharks, huge schools of sardines, and whale sharks, while Dauin is a photographer's delight with macro, black sands dives. This signature cruise includes a parade of exotic islands – Cebu, Cabilao, Balicasag, Sumilon, Pescador, Malapascua, Kalanggaman, Camotes, Pamilacan, and Panglao Islands.

The Philippines Aggressor liveboard pampers 24 guests with 15 staff in the same luxury and signature amenities that Aggressor Liveboards has been offering around the world for the past 38 years. Itineraries include diving, accommodations, gourmet meals and snacks, soft beverages, and local alcohol.

ABOVE

The stunning new Philippines Aggressor

TOP RIGHT

The BVI Aggressor, which is now sailing the waters of the British Virgin Islands, after previously sailing around the Cayman Islands in its previous guise as the Cayman Aggressor V



British Virgin Islands

The British Virgin Islands (BVI) Aggressor is a new location for the 'fleet', with the first trip on 4 June 2022. The BVI Aggressor (formerly Cayman Aggressor V) is a 110-foot yacht that sleeps 20 guests comfortably and features a roomy, air-conditioned salon and dining area, sun deck complete with a hot tub, lounge and deck chairs, an outdoor sound system, shaded cocktail deck with a grill, and a photo editing computer for guests.

The Cayman Aggressor IV, an 18-passenger yacht, has undergone a complete rebuild and will return back to its home in the Cayman Islands to resume charters starting 2 July 2022.

The BVI are a British overseas territory comprised of four large islands – Tortola, Virgin Gorda, Jost Van Dyke, and Anegada – and 50 smaller islands and cays. The wreck of the Rhone, one of the world's best shipwreck dives, is a highlight of the area, along with beautiful coral gardens, seamounts, canyons and sandy bottoms.

Cocos Island

From 13 January 2023, the all-new, 121-foot Cocos Island Aggressor will cruise from Puntarenas, Costa Rica, to Cocos Island, the remote, uninhabited Pacific island whose waters are world-renowned for schooling hammerhead sharks, manta rays and whalesharks.

The 22-passenger, four-level luxury dive yacht was designed from the keel up with passengers' comfort, safety and indulgences in mind. Onboard amenities include a sun deck with hot tub, two guests' lounges, restaurant with chef-prepared meals, spacious dive deck and a computer station for editing underwater photos and videos.

Eleven spacious staterooms feature private baths and individual climate controls. Throughout the ten-night adventure, guests receive five-star service from eight professional, experienced staff members, many



of whom have been with Okeanos Aggressor I and II for decades.

The trip includes an average of 21 thrilling dives in the nutrient-rich waters surrounding the lush island. Swift currents and underwater sea mounts attract massive fish schools, giant marble rays, tuna, whitetip sharks, Galapagos sharks, and hammerhead sharks. When conditions allow, the staff shuttles guests to the island for hiking and swimming in the pools of Cocos' many majestic waterfalls.

After the charter's final dive, the Cocos Island Aggressor is escorted by dolphin and false killer whales for the 342-mile voyage back to Puntarenas. Guests may continue their adventure in Costa Rica with optional rainforest tours, white-water rafting or surfing.

Cocos Island National Park was designated a World Heritage site by UNESCO in 1997. ■

For more information, visit www.aggressor.com

ABOVE

The Cocos Island Aggressor marks the third vessel run by the company to this iconic destination

DECOMPRESSION SICKNESS (DCS) **UNCERTAINTY AND TREATMENT DELAY**

Common symptoms of decompression sickness (DCS) include extreme fatigue, achy joints and confusion. There are also numerous uncommon symptoms, however, and these are often associated with lesser-known forms of DCS. Because the most-common symptoms represent only a partial list of potential complications, gaps in divers' (and dive professionals' and doctors') understanding of DCS are common. This can lead to misdiagnoses and delays to treatment.

DAN member Kelly, a Master Scuba Diver Trainer with more than 500 lifetime dives, had taken months to prepare for her technical sidemount diving certification — she was ready to tackle the classroom portion of her course, manage multiple gas cylinders and complete 12 dives in six days.

The course started in shallow water, with dives becoming progressively deeper and longer. Kelly's overall approach was cautious — she had experienced skin DCS the previous year, and she wanted to follow her decompression stops exactly as her late-model, multi-gas dive computer prescribed.

First, she completed two dives to 9m on air. Then Kelly completed three nitrox dives to 27m. After one dive, Kelly had a small snag while exiting the water — rough seas jostled her, and she collided with the ladder. For the next two dives, Kelly introduced 100-percent oxygen as her decompression gas. These dives were to 29m for 42 minutes and then to 36m for 67 minutes.

Now more than halfway through her dives, Kelly noticed her left bicep was sore and the skin felt taut and warm. She assumed the injury came from her collision with the ladder, and unfazed, kept diving. But the pain worsened and spread to her left breast. The working hypothesis among those on the dive boat was that Kelly had suffered a haematoma on



her left bicep. However, the lack of bruising to the area contradicted that assessment.

Four days had passed since symptom onset, and the symptoms were worsening — her fingers were tingling, her chest was tight, and her vision was becoming impaired. The boat crew decided to transport Kelly back to shore and take her to the nearest medical facility while her partner contacted DAN. Once the DAN medic heard Kelly's symptoms, they became concerned about the possibility of inert gas bubbles in Kelly's lymphatic system.

At the hospital, Kelly was directed to the nearby hyperbaric chamber for treatments. When she arrived at the chamber, she relayed the information she received from DAN about lymphatic DCS, and that helped inform her treatments.

Lung barotrauma was ruled out, and Kelly was wheeled into a hyperbaric chamber to undergo a five-hour U.S. Navy Treatment Table 6 — standard care for DCS. Kelly was eventually discharged, and her symptoms diminished as she recovered at home.

Fortunately, the DAN medic's knowledge and quick thinking gave the doctors a starting point when assessing Kelly, who made a full recovery.

DANAP.org

ABOVE
Divers taking a giant stride entry into the water



INSURE THROUGH DAN

DAN Dive Accident Insurance provides up to \$500,000 of eligible medical expense coverage for diving, nondiving, and named watersports accidents and injuries.

[DAN.org/Insurance](https://dan.org/insurance)



For more details, see handbooks under Compare Coverage at [DAN.org/membership-insurance/dive-insurance](https://dan.org/membership-insurance/dive-insurance).

For residents of NY, insurance is underwritten by The United States Life Insurance Company in the City of New York, NAIC No. 70106 domiciled in the state of New York with a principal place of business of 28 Liberty Street, Floor 45th, New York, NY 10005-1400. It is currently authorized to transact business in all states, plus DC, except PR. This summary is a brief description of benefits only and is subject to the terms, conditions and limitations. Coverage may vary by state. AG 12070

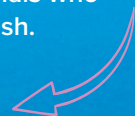
For residents of all other U.S. states and the District of Columbia, insurance is underwritten by National Union Fire Insurance Company of Pittsburgh, Pa., a Pennsylvania insurance company with its principal place of business at 1271 Ave of the Americas FL 37, New York, NY 10020-1304. It is currently authorized to conduct insurance business in all states and the District of Columbia. NAIC No. 19445. The issued policy and certificate will contain reductions, limitations, exclusions, definitions and termination provisions. Full details of the coverage will be contained in the issued policy and certificate. Coverage may vary by state or may not be available in all states.

NUFIC-SM-12299-2022DA4AD

“ This stunning scenery also extends down under the water. Part of the fabled Coral Triangle, the reefs of Indonesia are spectacular, and the variety of marine life is staggering ”

Did you know?

Corals are actually animals, not plants! They may seem like a plant because they don't have any significant movement, but corals really are animals who are related to jellyfish.



DIVING

Indonesia

As Indonesia reopens its borders to international tourists, Scuba Diver Australia and New Zealand Editor Adrian Stacey showcases what people have been missing out on these past two years

Photographs by Adrian Stacey



Indonesia is one of the top dive destinations in the world, offering everything from big animal encounters to tiny critters, stunning coral reefs and impressive wrecks. So, to celebrate the fact that the Indonesian government has recently flung open its doors to international travelers and lifted all quarantine requirements, we thought it would be a good idea to look at what divers from around the world have been missing out on over the past two years.

The destinations mentioned in this article represent some of the best-known dive locations around this vast country, plus some lesser-known gems. This is by no means an exhaustive list of Indonesian diving, but it does demonstrate the diversity and scope for adventure on offer. Before we look at specific dive areas, I think it is important to understand the geography of the country and what makes the diving so good.

Indonesia is vast - it stretches from the bottom tip of Thailand to the northern end of Queensland in Australia. This huge archipelago consists of over 17,000 islands and is the 14th largest country by landmass. With a population of over 270 million, Indonesia has a rich and interesting history and boasts incredible biodiversity from rainforest to savanna and, of course, coral reefs. Many of the country's birds and mammals are endemic, including the impressive Komodo dragon. Part of the Pacific 'Ring of Fire', Indonesia is home to more volcanoes than any other country in the world and has been blessed with some spectacular scenery. This stunning scenery also extends down under the water. Part of the fabled Coral Triangle, the reefs of Indonesia are spectacular, and the variety of marine life is staggering. Much of the bustling reef's success is due to the geography of the country and the Indonesian throughflow (ITF).

The ITF, one of the most-significant movements of water on the planet, is an ocean current that flows from the Pacific to the Indian Ocean. Vast amounts of water are flushed through the maze of islands at the eastern end of the country. These islands act like a giant sieve, filtering the nutrient-rich water from the Pacific.

Traveling around the Indonesian archipelago is not always very quick or easy. For instance, Komodo and Raja Ampat look relatively close, however, getting from one to the other involves two flights with a long stopover in either Jakarta or Makassar. If you are looking at diving multiple locations, it is wise to map out a route well in advance. An excellent website to help plan a trip is Rome to Rio, or speak with a good specialist dive travel agent. With Indonesia's wealth of diving, it isn't easy to know where to start. As Bali is perhaps the most well-known location in Indonesia and was the first to reopen, it makes sense to begin with this bustling tropical island. ►

Did you know?

Hosting over 25% of the world's fish species, as well as over 72% of the worldwide coral species, Indonesia is often cited as the world's epicenter of biodiversity with the greatest marine life variety ever recorded on Earth.

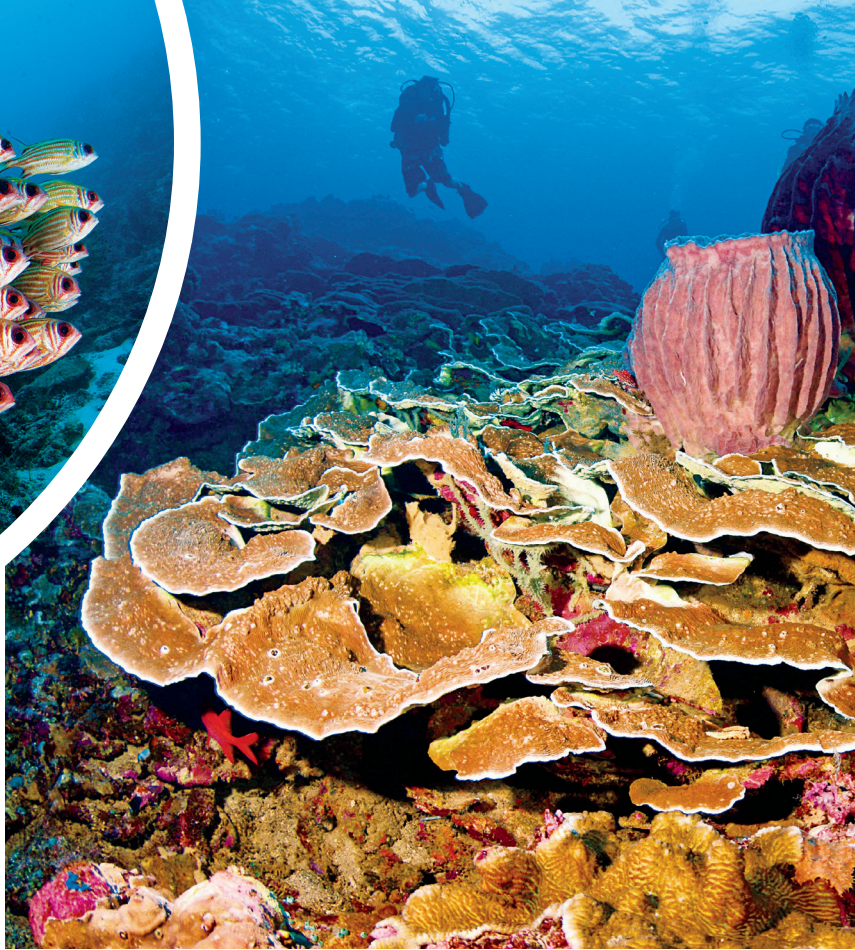


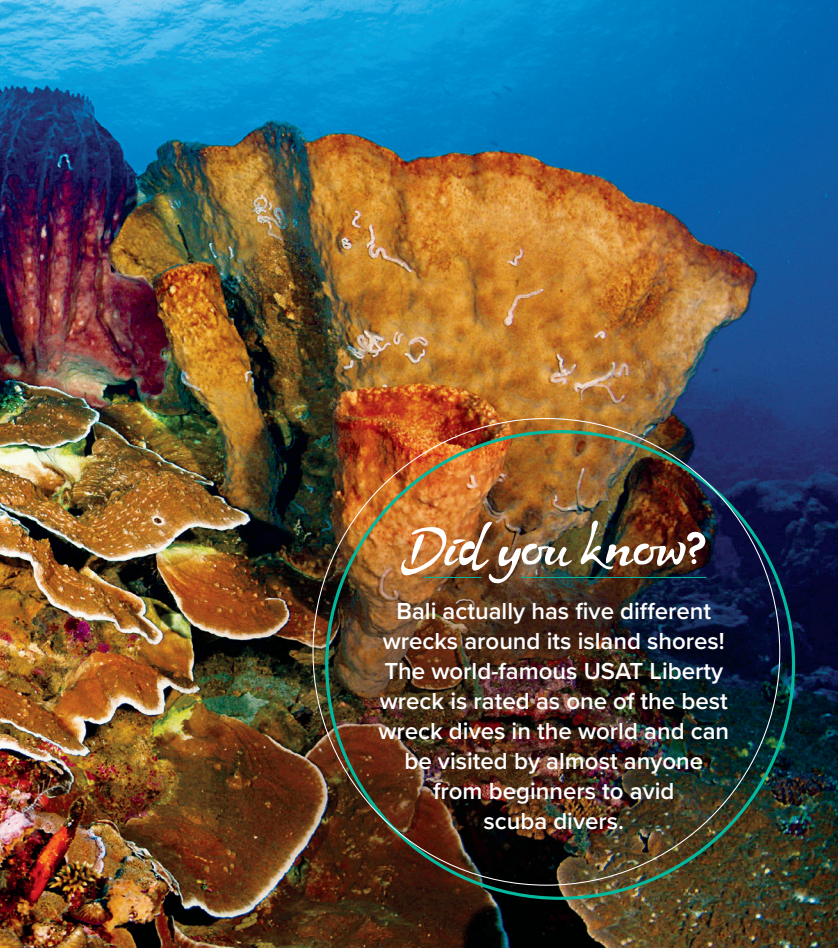
Bali

Bali is perhaps better known as a party destination, especially among Australians. Still, this stunning island also has some great dive sites with outstanding big animal encounters and a world-class wreck. To the south of Bali are the Nusa Penida islands. This area is famous for manta rays and the elusive mola mola, and it is also well known for strong currents along the east coast in Amed, Padang Bai, Candidasa and Tulamben, which is home to the Liberty shipwreck. The Liberty has mainly collapsed now, but what is left is covered in coral and home to all manner of little critters, including the tiny pygmy seahorse. Amed is also great for muck diving, and the occasional mola mola has been known to cruise past. To the northwest coast of Bali, the quieter end of the island, is Menjangan Island, Permurtaran, Lovina and Gilimanuk. This area offers excellent wall diving, with great hard and soft coral coverage.

Komodo

This UNESCO-listed region is simply stunning - the savanna-like landscape is patrolled by the largest living lizard on Earth, the Komodo dragon. Underwater the landscape, topography and animal encounters are even more spectacular. The Komodo National Park is renowned for its ripping currents and consists of three main areas, the North, the middle and the South. The North can be reached by day boats from the small town of Labuan Bajo on Flores. To get to the park's central and southern reaches, you need to be on a liveaboard. In the North, famous dive sites like Castle Rock and Crystal Rock attract vast schools of fish, attracting predators of every description. The Cauldron, also known as the Shotgun, and Batu Balong, are two other dives not to be missed. Manta Alley is one of the best places to dive with mantas, while the Tatawa and Siaba islands offer endless coral gardens. In the middle section of the park, there are some stunning





Did you know?

Bali actually has five different wrecks around its island shores! The world-famous USAT Liberty wreck is rated as one of the best wreck dives in the world and can be visited by almost anyone from beginners to avid scuba divers.



“ Still, this stunning island also has some great dive sites with outstanding big animal encounters and a world-class wreck. To the south of Bali are the Nusa Penida islands ”

dives around the island of Padar. The spectacular walls of Pilaarsten and the coral-covered pinnacles of the Three Sisters are particularly good. World's End is another great dive along coral-encrusted walls. Other highlights include the dive sites around the southern tip of Rinca - this area is fantastic for macro life. The pick of the dive sites here has to be Cannibal Rock. There are also several dive sites on the West Coast of Komodo.

Alor

Alor is not quite as well-known as some other Indonesian dive destinations, but this is an unspoilt gem. Prone to strong currents, the area boasts untouched coral gardens and superb macro life, including the photographer's favourite, nudibranchs and rhinopia. The strong currents also attract some pelagic species like thresher sharks and mola mola.

Banda Sea

Although the Banda Islands themselves do have a couple of dive shops and the diving around

these remote islands is very good, this is most definitely liveaboard territory. A dive site called Nil Desperandum is hundreds of miles from the closest land, and in the right season, huge schools of hammerheads can be found around this stunning hard coral reef. Other highlights include Manuk and Gunung Api, both of these islands are famous for sea snakes.

Ambon

Ambon lies at the northern edge of the Banda Sea and is another of Indonesia's extraordinary muck diving sites, home to rhinopia, wonderpus, seahorses, nudibranchs and the very photogenic psychedelic frogfish. Ambon is not just about critters, though, and besides excellent muck diving, there are beautiful soft corals and fantastic wall dives with overhangs, caves and caverns, plus plenty of fish.

Raja Ampat

Raja Ampat is famous for having the greatest marine biodiversity on the planet. The reefs here are ►

PREVIOUS PAGE

Vivid colours of soft corals adorn the reefs

TOP LEFT

Vibrant shoals of fish inhabit the reefs

TOP MIDDLE

Barrel sponges on the reef

TOP RIGHT

Komodo dragon

ABOVE

Hard corals provide a hiding place for smaller fish

LEFT MIDDLE

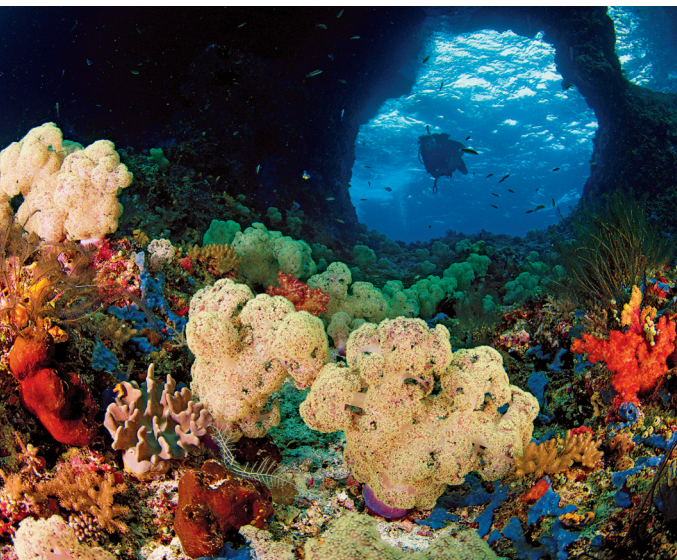
Indonesia is equally stunning above water

LEFT BOTTOM

Porcelain crab

Did you know?

With over 17,508 islands and situated in the heart of the coral triangle, Indonesia is a diver's paradise. From tiny pygmy seahorses and macro critters to magnificent manta rays and the mighty mola mola, there's plenty to see.



ABOVE
Striking array of soft coral growth

LEFT
Soft corals await the diver as they venture through an archway

BOTTOM
Turtle on the reef



stunning, and the amount of marine life is staggering. Raja Ampat covers a vast area encompassing over 1,500 islands. Divers can choose to dive from a liveaboard or base themselves on land to explore a particular region. There are three main areas in Raja Ampat. The northern part includes island-like Wayag, renowned for its stunning topside scenery. Keawe also boasts spectacular dive sites like Black Rock, with its amazing soft coral gardens and Eagle Rock, which houses a manta cleaning station. The central zone includes the Dampier Straight and has some of the region's most well-known dive sites. Manta Sandy, Cape Kri, Blue Magic and Melissa's Garden, to name but a few. The diversity of marine life here is second to none. Huge schools of fish can be found at Cape Kri, mantas galore at Manta Sandy and spectacular hard coral gardens at Melissa's Garden. To the south of the marine park is Misool. This region is famous for its coral coverage, both hard and soft corals vie for space, and it seems like every inch of rock is covered in multiple layers of coral growth. Plus, plenty of schooling fish, reef fish and sharks of varying descriptions.

Cenderawasih Bay

Cenderawasih Bay on the northern coast of West Papua is off the beaten track and as yet not as famous as its neighbours, Raja Ampat. Still, this destination is gaining a reputation for fantastic diving. This is primarily due to the whalesharks that congregate around the fishing platforms. This considerable bay also has numerous World War Two wrecks, incredible corals and plenty of macro life.

Triton Bay

Located on the southern coast of West Papua, this is another up-and-coming destination that is well off the beaten track. Described as the final frontier of



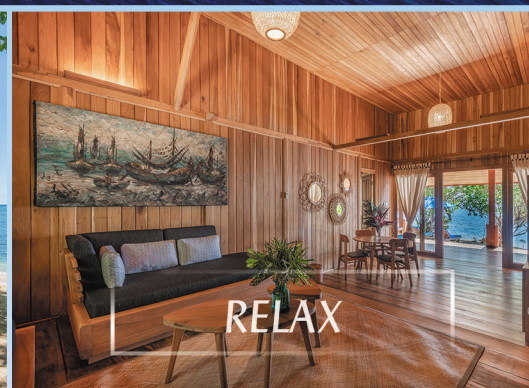
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TOP
Vast hard corals
await

RIGHT
You can freedive
some wrecks

diving in Indonesia, this bay offers some exceptional diving. Like its counterpart in the North, Triton Bay provides the opportunity to dive with whalesharks. The corals are pristine and plentiful, as is the marine life. Vast schools of fish, turtles, sharks, and many endemic species and macro critters call the bay home.

Sulawesi

Sulawesi is one of the largest islands in the Indonesia archipelago, comprising of four main peninsulas and has long been known for its excellent diving. Most diving is located at either the northern peninsula or down the southeastern peninsula. Although the other peninsula also offers some superb diving. In the North, there is the Lembeh Strait, a world-renowned muck diving destination boasting a wealth of weird and wonderful creatures. The Bunaken National Park has its dramatic coral-encrusted walls and stunning marine life, including frogfish, sharks, schooling fish, and more.

Kalimantan

Perhaps because it can be a bit difficult to get to the Kalimantan region on the island of Borneo is not as well-known as some of its neighbours, but it offers some outstanding diving. The Sangalaki island just off the east coast is a feeding ground for mantas, which gather there in large numbers. Other areas like Samana and Nabucco are excellent for critters, while Kakaban features drop-offs and pelagic action.

Conclusion

Indonesia has been blessed with great diving; there are some stunning resorts and some genuinely spectacular liveaboard diving, including relocation cruises when the boats are moved from one location to another. It is fantastic that this diving wonderland is once again open for eager divers to explore. ■



WHAT YOU NEED TO KNOW



Indonesia Overview

Getting there

There are many flights to Indonesia from US hub airports and you can get internal flights to different areas.



When to visit

You can dive in Indonesia all year round, though certain areas have better conditions at different times.



Currency

Indonesian rupiah (US\$1 = IDR14,500), though credit cards are generally accepted in-resort.



Entry Requirements

You will need to get a visa on arrival in Indonesia that is valid for 30 days, and you must have six months left on your passport to expiry.



Electricity

The electric supply in Indonesia is 230 volt / 50 hz and a two-pin European-style socket - you will need an adaptor.



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INTO THE Deep S



Richard Cullen: It had been 30 months, mainly due to COVID, since my wife Christine and I had traveled together to the Red Sea. The ending of many COVID restrictions and the opportunity for a week's safari on Pharoah Dive Club's new liveaboard **Big Blue** (www.mybigblue.com) was too tempting to refuse.

Wearing my Depththerapy hat, our relationship with Roots Red Sea and Pharoah Dive Club has existed for many years and I was fortunate enough, with the rest of the Depththerapy team, to visit Big Blue when she was being fitted out in Hurghada. What was striking then, and was brought back to me on this safari, was the size of the boat - it really matches its name 'Big'. Oh, and by the way, it is blue! When Depththerapy chose Roots to be our base in Egypt, manager Steve Rattle built four fully accessible bedrooms for use by those in wheelchairs or using prosthetics. In the design of Big Blue, the same thinking was applied - the boat has two fully accessible cabins that are on

the same deck as the restaurant and dive deck. Big Blue was completed towards the end of 2019 and although undertaking a few safaris, COVID restrictions meant she was confined to a dock - until now.

The safari was based out of Port Ghalib (Marsa Alam), and Steve was joining us, his first time on the liveaboard during a safari. He wanted to see how the team on the boat worked, whether clients were being given the 'ultimate' experience, checking on standards and looking at what work needed to be carried out on the boat when she goes into dry dock for a service and refurb. Big Blue looked magnificent, but I must admit, tiredness and a couple of Sakaras meant I was ready for bed! The following day, after a late breakfast, it was time to check out Big Blue. It looked very different now that

South



it was fitted out, with furniture and fittings installed, Big Blue presently has four set itineraries - Ultimate Wrecks, Pelagic Encounter, Ultimate Brothers, and Wall to Wall. If you book the whole boat, then a tailor-made itinerary can be put together.

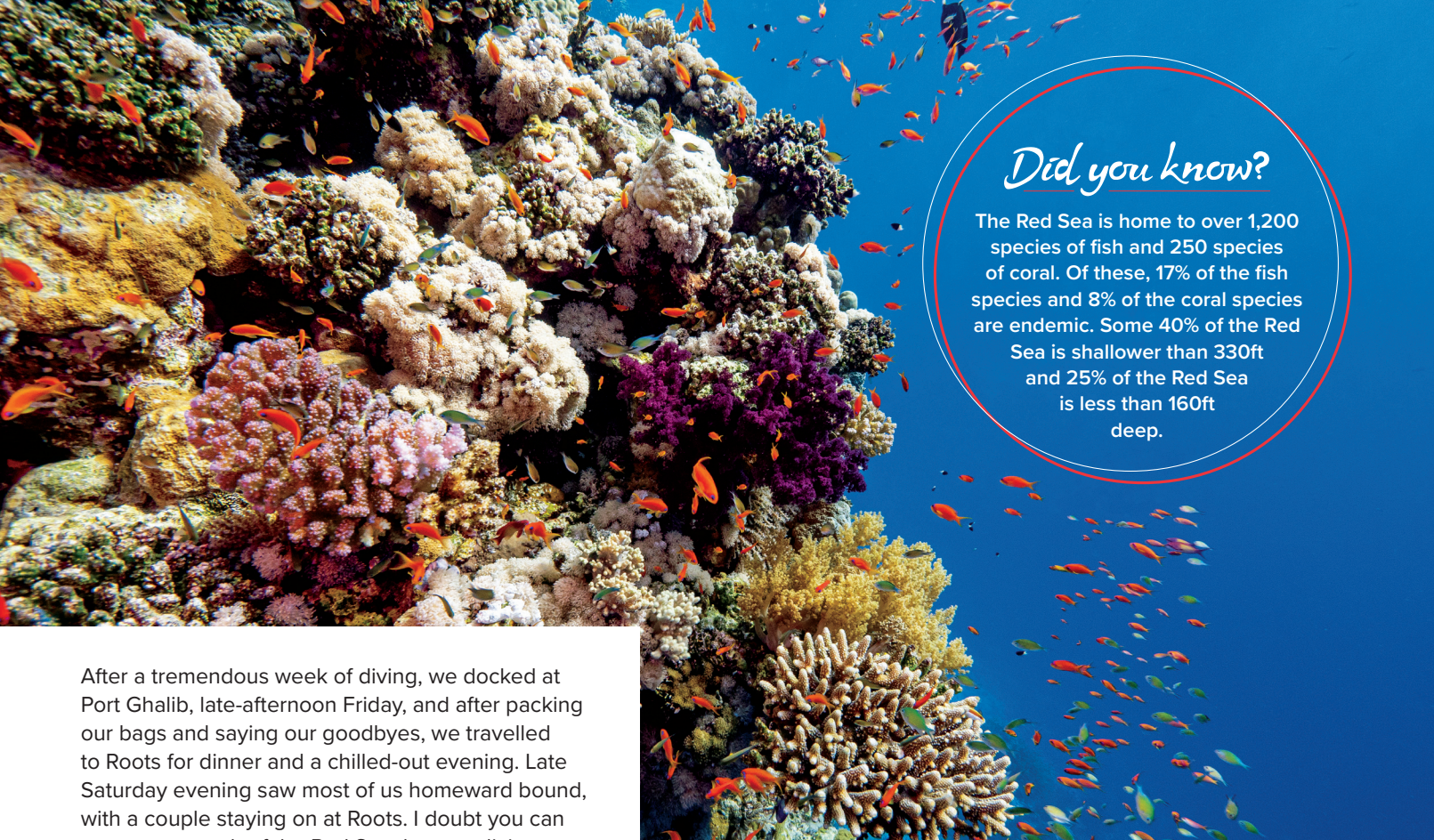
Big Blue has cabins to accommodate 28, but they prefer to entertain a maximum of 24 clients on the boat. We had a mixed bunch of divers on the boat, some like Richard Stevens, Ryby Stonehouse and Guy Henderson I have known for years. For others, it was the first time of meeting. There were some who were doing technical diving, some on sidemount and conventional recreational scuba divers. Oh, and there were lots of cameras!

On Big Blue, there is a more-relaxed atmosphere than that which you find on most liveaboards. No crack of dawn reveille to be first on the dive site, only to find all the other boats have

Richard Cullen and Richard Stevens embark on an epic diving safari into the Egyptian Deep South aboard the brand-new liveaboard vessel Big Blue

Photographs by Richard Stevens/Black Manta Photography and Steve Rattle

done the same. On Big Blue, it was a case of 'let the others do their first dive, then we dive'. This worked tremendously well. I have dived the South Red Sea many times and although we visited a few dive sites I had visited before, we went to several I had never dived. ▶



Did you know?

The Red Sea is home to over 1,200 species of fish and 250 species of coral. Of these, 17% of the fish species and 8% of the coral species are endemic. Some 40% of the Red Sea is shallower than 330ft and 25% of the Red Sea is less than 160ft deep.

After a tremendous week of diving, we docked at Port Ghalib, late-afternoon Friday, and after packing our bags and saying our goodbyes, we travelled to Roots for dinner and a chilled-out evening. Late Saturday evening saw most of us homeward bound, with a couple staying on at Roots. I doubt you can ever get enough of the Red Sea, but our diving appetites were sated. A great itinerary on a first-class liveaboard - we will be back for more!

Richard Stevens: It had been three weeks since my last visit to Roots Red Sea, yet here I was back again sat having dinner - a quick stop-gap as the actual reason for being back in Egypt was to head out on the maiden voyage of Big Blue, the latest Egyptian liveaboard to enter the market, and owned by the team at Pharaoh Dive Club. Big Blue was actually completed in 2019 and ready for the 2020 season - alas, the global pandemic put a stop to that meaning she sat idle in the relentless heat and sun for almost two years before we got to play.

The itinerary for the week was the Deep South, an area of the Red Sea that has eluded me thus far in my diving life despite over 30 trips to Egyptian waters in the past 15 or so years. I'd heard many stories about Zabargad, Rocky Island, St John's, Fury Shoals, and the stunning reefs that could be found, so the excitement levels were high as we headed south from Port Ghalib.

The first dive of the trip was a simple check dive at Abu Dabbab followed by a gorgeous drift along Elphinstone Reef. We then settled in for the evening for the long overnight journey down to Zabargad Island. The most-striking thing about Zabargad is the rich azure-blue waters that line the shore in the lagoon. We were the only boat moored up, so it very much felt like our own paradise island - in fact, most of the week seemed to follow suit. We always





“ The larger fish and sharks are often the draw for diving further south in the Red Sea, but this dive alone was worth the journey, and one I will definitely want to do again ”

seemed to be where the other boats weren't, such is the clever planning of the Big Blue crew.

'Heaven on Earth' is a term loosely banded around when describing something nice, but it wasn't until I got in for the first dive at Zabargad did I realise the true definition. I mean - wow! I've been fortunate to dive in some utterly stunning places across the globe, but the reef at Zabargad is possibly the prettiest and most stunning I've seen anywhere underwater. The visibility was endless, and the anthias - I've never seen so many fish in hues of orange and purple in my life!

Huge coral mounds, caverns and cracks in the reef wall that were drenched in dancing rays of dappled light, and more marine life you could point a camera at. It was so good I did all five possible dives available to me before we moved on to Rocky

Island the following morning. Rocky Island was more reminiscent of the Red Sea islands I'm more familiar with. Small and roundish, Rocky Island is a bit like Small Brother Island further north.

A little more current here than at the neighboring Zabargad, but with it the sharks and dolphins came aplenty. In fact, the second dive at Rocky we were followed for the RIB journey out, only to literally trip over them as we entered the water. Such was the commotion, I failed to get anything on camera!

The next stop was St Johns - with the reef Habili Gefar providing one of the most-exhilarating dives. Fleeting glimpses of a thresher shark were matched with two oceanics closer to the surface that were chased the entire dive by dolphins. I had a sore neck by the end of the dive as I was constantly turning left and right with every dolphin call I could hear trying ▶

TOP LEFT
Photo opportunities are plentiful

LEFT MIDDLE
One of the spacious sun decks

LEFT BOTTOM
The bedrooms have plenty of room

ABOVE LEFT
Ready to go diving

ABOVE MIDDLE
The dive deck is absolutely huge

ABOVE RIGHT
Big Blue in the marina

ABOVE
Vibrant reef



“ Huge coral mounds, caverns and cracks in the reef wall that were drenched in dancing rays of dappled light, and more marine life you could point a camera at ”

TOP
Richard returning from a dive

RIGHT
Exploring a Deep South reef

to see what was going on. If that wasn't enough, we were joined by one of the largest shoals of barracuda - cautiously keeping their distance away from the reef, but impressive nonetheless. However, it was the dive at Umm Arouk which provided the most-atmospheric dive as we traversed dozens and dozens of pinnacles, large and small.

But despite all of these amazing dives at stunning reefs, it was the dive at Claudia located at Fury Shoal that was the absolute highlight of the trip - I mean, what a dive! The most-stunning cavern swim-throughs full of jumping light and gorgeous colors. The larger fish and sharks are often the draw for diving further south in the Red Sea, but this dive alone was worth the journey, and one I will definitely want to do again. Heading back north with the last dive on Elphinstone was the icing on the cake - I could dive here over and over and never get bored.

The trip was a true delight - the diving was utterly mind-blowing, the crew were fantastic, and Big Blue did not disappoint. I'd estimate I've been on 40 liveaboards over the years all varying in different levels of luxury and accommodation. But the stand-out thing that was consistent across the whole week was the quality of the food - most definitely up there as the best food I've had on a boat.

Add all of this into the mix - the quality of accommodation, the space on board, the quality of food, and the executive diving experience makes diving from Big Blue one of the very reasons you need to head to Egypt as soon as you can. I promise you won't be disappointed! ■



WHAT YOU NEED TO KNOW

The Red Sea

Egypt

Getting there

Various US hub airports have flights into Cairo, and you can then get an internal flight to your chosen resort area. Alternatively, you can fly into resort airports via European main airports.



When to visit

You can dive in Egypt all year round, but beware, the summer months - June to August - can be exceptionally hot and arid on the surface.



Currency

Egyptian pound (US\$1 = EGP£18.5), although credit cards are widely accepted in resorts and on liveaboards.



Entry Requirements

You will require a visa, which can be obtained on entry for US\$25 - bring the correct amount in notes.



Electricity

Egypt has 220 volt / 50 hz power supply, with twin-pin European-style plugs, so you will need an adaptor.



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The first ones start to appear in early May, as the southern hemisphere fall fades away and the winter months loom. Initially they just blend in with the abundant seagrass and, to the casual observer, there is little to indicate what will happen over the next three to four weeks...

But as June approaches and the water temperature drops below 62°F, things change rapidly as the full aggregation is triggered. And, by the middle of month, tens of thousands of *Sepia apama* will have gathered in the only known 'dense aggregation' of spawning cuttlefish in the world. One that has been called the 'premier marine attraction on the planet'.

And this all happens just off from a rocky beach, in an area of about a third of a mile, on the western side of South Australia's Spencer Gulf. Various scientific studies indicate the 'density' in that small area can reach as

high as one giant cuttlefish per one square yard!

It certainly is unique, and at a personal level, is probably my favorite marine animal aggregation in the world and this year was my sixth trip there. It is that special, after all... where else can you shore-dive in less than 26ft of water with tens of thousands of incredibly photogenic creatures all completely focused on one single thing – sexual reproduction.

The giant Australian cuttlefish

Sepia apama is the world largest cuttlefish and when fully-grown can reach up to two feet in total length and weigh in at up to 24lb. Solitary animals, they are found all around the coastline of southern Australia – from Central Queensland on the east coast, right around the bottom of the continent and up to Ningaloo Reef in Western Australia.

They are truly fascinating creatures and have an amazing ability to instantaneously change their color and skin



Here be

GIANT

texture - a skill they use to great effect as camouflage when they are hunting or being hunted, to communicate with other cuttlefish and as part of the amazing displays they use to great effect during the mating season. Giant Australian cuttlefish are also remarkably intelligent and are said to have the largest brains of all marine invertebrates. Both male and female cuttlefish have relatively short life cycles of between one and two years and interestingly, *Sepia apama* are polymorphic... Which means they have two alternate development cycles, with the first cycle using a 'growth spurt' over their initial

seven to eight months to reach maturity by the end of their first summer and be

Scuba Diver Senior Travel Editor Don Silcock ventures off South Australia in search of breeding aggregations of giant Australian cuttlefish

Photographs by Don Silcock

ready to mate at the start of winter. The second cycle involves much slower growth where they don't reach maturity and mate until they are in their second and final year.

Although not scientifically proven, the most-probable reason for the alternate cycles is that it is nature's way of hedging bets. So that if a catastrophic event occurs one year, there is a back-up population that can still breed the following year.

Nature's swingers...

Come winter, most of the cuttlefish abandon their solitary lifestyle and aggregate together to mate in small groups of up to ten individuals, with females greatly outnumbered by the males who ▶

“ They are truly fascinating creatures and have an amazing ability to instantaneously change their color and skin texture - a skill they use to great effect as camouflage when they are hunting or being hunted ”

PREVIOUS PAGE

Bull male looking for a female

TOP MIDDLE

The cuttlefish are impressive creatures

TOP RIGHT

In the midst of the action

MIDDLE

Cuttlefish eggs

BELOW

Cuttlefish mating dance

BOTTOM RIGHT

Stony Point is the best entry point

have to compete for her attention. Outside of the winter mating season the ratio of males to females is around 1:1. Why it changes so dramatically when they do mate is not known, but the end result is one of the reasons the Spencer Gulf aggregation is so spectacular. The correct term for cuttlefish mating is polyandry – which means that each female cuttlefish will have multiple male partners to ensure better genetic variability of the species.

All of which makes sense from a somewhat dry scientific perspective. But when observed in practice with so many cuttlefish gathered together and the females outnumbered by as much 11 to one, it takes on a completely different dynamic. ‘Spectacularly promiscuous’ would probably better describe the almost-wanton behaviour!

Adding to that dynamic is the fact that those mature bull males in their second year of life will be dead by the end of the aggregation. Whether they know that is not clear, but they certainly act like they do! I know you should never assign human characteristics to animals but, as a male who has much less time in front of me than is behind, I cannot help but to watch all this interaction with a deep sense of irony...



Did you know?
To initiate sex, a male cuttlefish spreads his arms around his partner's head. Once the deed is done, the female stores the deposited sperm in one of two places, either around the lining of her mouth or in a receptacle below her beak.

“ ...the young males take advantage of their similar size to the females and use the Cephalopod equivalent of cross-dressing by changing their displays to look like a female ”

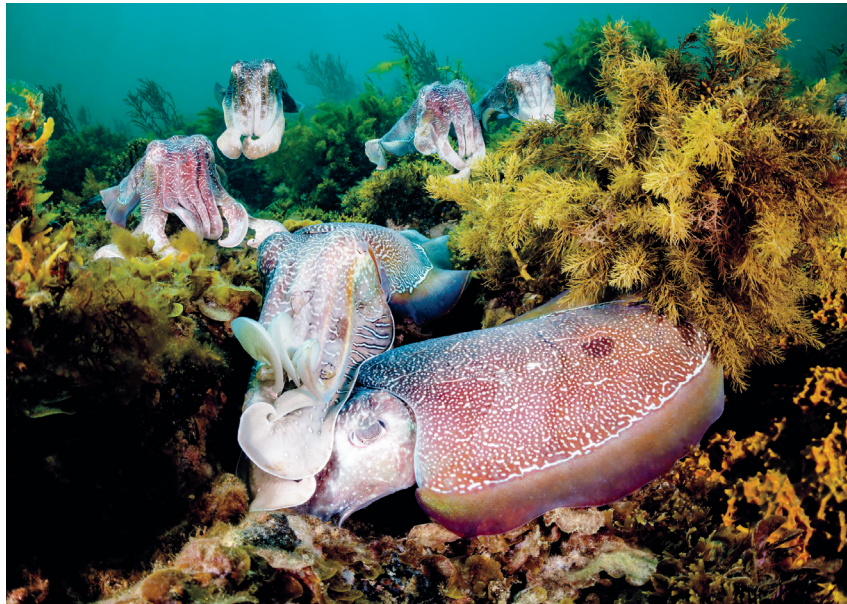
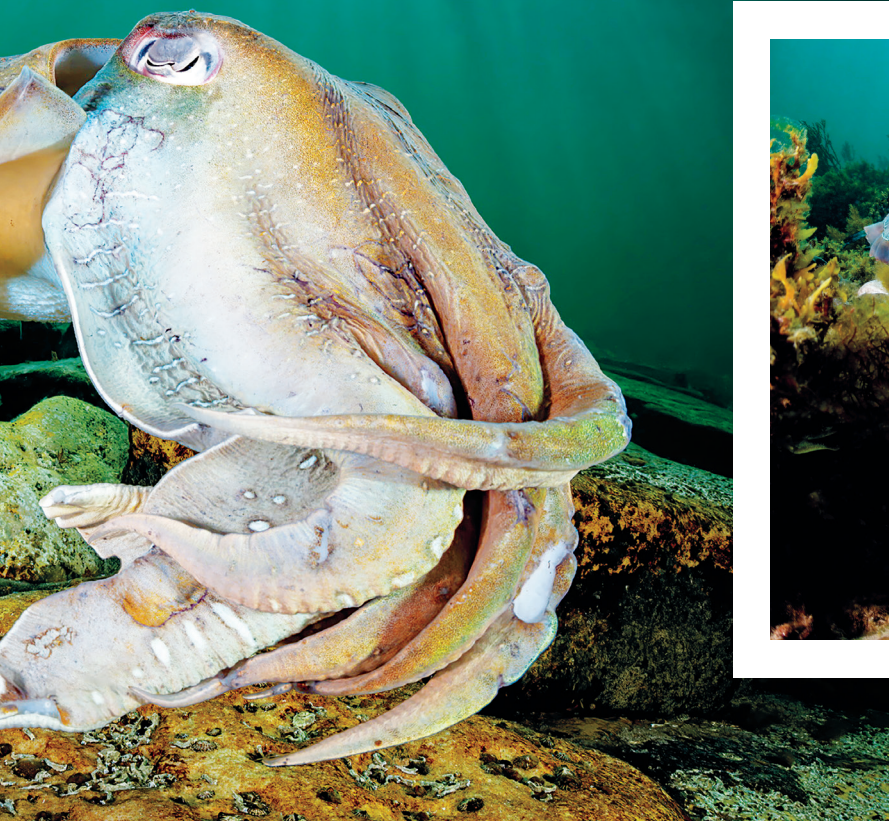


Immersion

Unless you are lucky enough to know someone locally with a boat, all dives with the cuttlefish are from the shore, which involves entering the water from the rocky beaches of the area. Typically, you will be in a drysuit, because of the cold water and long dive times - so fully weighted up... Add a big camera and the usual struggle to get your fins on can make it all a bit challenging.

But once you are in the water, all is forgotten because within 25 feet of entering you will see the first cuttlefish and by about 40 feet from shore you will feel that you have stumbled on the underwater version of Sodom and Gomorrah! *Sepia apama* seem to be everywhere and it quickly becomes very clear they all have the same thing on their minds... Settle in, get comfortable and you will soon be drawn into what is evolving in front of you. For me, the most amazing thing about it all is the way the male cuttlefish almost completely ignore you!

For the females, the somewhat-promiscuous nature of polyandry makes it all rather easy. They have their choice of the males and will often swap partners and engage in a ‘quickie’ with a new arrival!



company. But when other males do come calling, the bull has to judge the situation and respond in a way that intimidates the challenger and sends him on his way. That usually leads to both males engaging in quite spectacular ‘face-off’ displays of aggression, with rapid changes of color and body movements that are believed to send specific messages.

These ‘bouts’ can go on for up to 20 minutes or so, but while they appear hostile and violent there is rarely any real physical contact. It seems to be more like a cross between shadow boxing with a bit of mild wrestling and I sometimes wonder if the real purpose is to impress the female!

Often the confrontation will attract other mature males who will make their presence felt but rarely enter the fray and it does seem like they are just trying to catch the female’s attention. All of which brings another wry smile to my face as my memory drifts back through time to my teenage years in the northwest of England, but the less said about that the better... ►

Strategy and tactics – cuttlefish-style!

The intense competition created by up to 11 males chasing one female produces some wonderful strategies among the various cuttlefish. Being almost completely ignored, while able to observe and photograph it all so closely, is the really amazing thing about the annual aggregation.

For the older, fully mature, male cuttlefish – the bulls – their basic strategy is to impress with their size and ‘displays’. If it works and he has an interested female, the bull will try and keep her out of sight from all the other males which, when successful, makes the pair look like a bit like a happily married couple content in their own





ABOVE
HMAS Whyalla
is a land-locked
museum ship

RIGHT
Young male
cuttlefish

Where does it all happen?

The annual aggregation is concentrated along a four mile long stretch of the eastern Spencer Gulf generally called Point Lowly. However, because over a third of that area of the coast is occupied by a gas treatment plant and out of bounds, the two miles between Black Point and Stony Point is where all the encounters take place. The easiest access point is at Stony Point, which is usually referred to as the Fence Line because of the boundary fence to the gas plant. To make it all much easier for visiting divers, the local council have built a car park with a nice area to kit up and a very welcome toilet facility. They have also created a much safer pathway down into the water so there is much less chance of stumbling and falling.

The nearest town is Whyalla, which is a 25-minute drive to the south and has lots of options for food and accommodation. The local dive shop, Whyalla Diving Services, is very well equipped for tank rental and fills, plus anything else you might need. And the owner Tony Bramley has done a tremendous amount of work to raise the overall awareness of just how special the annual cuttlefish aggregation is.

Final words...

South Australia's annual aggregation of giant Australian cuttlefish is truly unique... Being able to shore dive in about 26ft of water with so many interesting, photogenic and totally committed creatures is really pretty special and something that will stay with you for a long time afterwards.

It happens at Point Lowly like it does because the substrate and sea grass provide the perfect place for the females to safely deposit their eggs. But cuttlefish are a valuable commodity and it's not that long ago that greedy fishermen almost wiped out the aggregation. It now looks like the wheel has turned and the incredible value of so many wonderful creatures gathering has been finally been recognized! ■



WHAT YOU NEED TO KNOW

Aussie Cuttlefish

South Australia



Getting there

Many US hub airports offer flights into Australia.



When to visit

You can visit Australia anytime, but June is the optimal time to catch the annual breeding aggregations of giant Australian cuttlefish.



Currency

Australian dollar (US\$1 = AUS\$1.39), and credit cards are widely accepted.



Entry Requirements

You will require a tourist visa to visit Australia, or have an ETA.



Electricity

The electric supply in Australia is 230 volt / 50 hz, with a flat three-pin socket, so you will need an adaptor.



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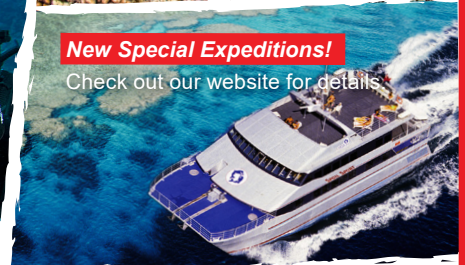


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IRRRESIS

Janez Kranjc explains the allure – and the challenges - of ice diving when he heads to Austria and Serbia on a photoshoot

Photographs by Janez Kranjc and Ivana Orlovic

Ice diving - short to pronounce, but extremely challenging. It requires a bit of adventurous spirit, a lot of knowledge, a desire to get out of your comfort zone - and a crumb of madness. However, isn't it a fact that every good diving day starts with the sentence 'WTF am I doing here?'

At the start of 2022, the year was showing all the 'charms' of a real winter. The outside temperature had been in a serious minus for days, the snow had been falling and falling, with short intervals of calm, but still cold, weather. The ideal conditions to embark on an ice-diving adventure.

Weissensee Lake, Austria

As soon as you get out of the Karavanke tunnel, you enter Austria from Slovenia. It seemed to us that after coming out of the tunnel we fell into a real winter. The heavy amount of snow on the other side of the mountain seemed like the perfect winter scenery. Lake Weissensee was the target of our journey - one of the best places for ice diving in this part of Europe.

The lake itself is of glacial origin, and is located in the province of Kärnten, 3,100 feet above sea level. The town of Techendorf is located on the shores of the lake, with only a few hundred inhabitants, most of whom live from tourism. The lake is seven miles long and half a mile at its widest part. In total, there are about 17 miles of coastline. The northern part of the lake is inhabited, while the southern part is a 'Nature Park', which is wild and untouched. It is in that part that the greatest depth of the lake is about 328ft, depending on the water level. The icy period begins in late-December and usually lasts until the first days of March. It is interesting that in that period, topside sports activities on the ice are very frequent. However, that is also the case under the icy surface...

The main person controlling the ice is the 'Ice Master'. He checks the condition of the ice sheet every day and directs activities on the lake. It is up to him to approve the opening of diving holes, but also to ban any activity if he estimates that the ice is in bad condition. However, when the ice covers the lake during the winter, it generally remains stable and solid until the end of the season. ►

TRIPLE ICE



Did you know?

Unlike most recreational diving, ice diving requires constant surface support. Don't expect to jump in all at once — only one diver per team goes in the water.

“ Right above us was a gondola from which two black holes could be seen. If I ever imagined a gateway to another world, this was pretty much in line with my fantasies ”

Below the surface of the water, the chief is Ernest Turnscek, owner of the diving centre Yacht Diver, which specializes in diving under the ice. Divers from all over Europe come to dive under the ice plate at this place and enjoy ice diving. The whole endeavor of such dives is very well organized here, including opening holes, transporting equipment on ice and security systems or access to remote parts of the lake. Sledges, quads and snowmobiles are available. That is why some specific events are being organized here, such as breaking records for freediving under ice, or days of underwater photography under ice. Ernest and his experienced team are those who make all of that possible. Interestingly, back in 1987, some scenes from the James Bond movie *The Living Daylights* were filmed on the lake.

The ice is usually eight to 10 inches thick, which enables safe movement on its surface. Holes are cut with chainsaws, which use bio-oil for lubrication. Austrians take care of nature protection in extreme detail. We had the opportunity to dive in different parts of this lake and saw flooded forests, rocky mouths of mountain streams, but also shallow areas overgrown with reeds. Visibility was always 30-50 feet, and the water was of the usual greenish colour. We had great sunny weather, with an outside temperature of mid-20s degrees F. Indeed, almost ideal conditions for diving.



Did you know?

Surface supplied equipment inherently provides a tether, and reduces the risks of regulator first stage freezing as the first stage can be managed by the surface team.



Ribnica Lake, Serbia

About 620 miles away from Weissensee, in the Balkans, in Serbia, on the mountain of Zlatibor, there is Ribnica Lake. This mountain is extremely rich in water, so the lake is fed by water from mountain streams and serves as a large reservoir of drinking water. Therefore, special permits are required to dive in it. We got them relatively quickly and found out that we were the first to dive it in the winter, when it is covered with ice. It is a mile long and is located at an altitude of 3,100ft. The maximum depth is about 80ft.

Around our dive days, meteorologists announced a cold wave, which was supposed to cover the Balkans and Serbia. On Zlatibor, the scale on the thermometer had been low for days, which was in our favor. Those were some of the coldest days during the winter of 2022. During the night, the temperature dropped to -4 degrees F. This made us happy on the one hand, because we knew that the ice would be of good

quality, and on the other hand, we were worried about the diving equipment that could freeze.

On the first day of diving, we were greeted by an idyllic winter landscape of a lake surrounded by snow and ice, and Zlatibor in its full beauty. Across the lake is a tourist gondola, which climbs all the way to the ski peak Tornik. We agreed with the crew of the gondola intermediate station to clear the way through the forest that descends to the lake. With such an open driveway, our vehicles descended almost to the ice sheet without any major problems. We decided to open two holes, one circular and the other classically triangular. Soon, the sound of a chainsaw was heard across the snow-covered meadows of Zlatibor.

Our team consisted of experienced and trained divers, so the opening of the holes went smoothly. Expectations that the ice would be solid were soon confirmed. The thickness of the ice plate was five ▶

PREVIOUS PAGE

Ivana under the ice

LEFT

Divers are connected to the surface via rope

BOTTOM LEFT

Some people really love ice diving!

MIDDLE

Ivana heads off on an ice dive

BELOW TOP

The Serbian water had an eerie orange tint

BOTTOM

Austria's Weissensee

“ This made us happy on the one hand, because we knew that the ice would be of good quality, and on the other hand, we were worried about the diving equipment that could freeze ”

Did you know?

Surface ice is anywhere between eight to 10 inches thick, meaning you can move around on its surface without fear of falling through!



to eight inches, which was enough for safe movement. Right above us was a gondola from which two black holes could be seen. If I ever imagined a gateway to another world, this was pretty much in line with my fantasies. We were divided into two teams, whose tasks were to gather basic information about the conditions in the water under the ice and take photos. The water temperature of 35 degrees F. We soon noticed that the water, although dark, was extremely clear. Then came a surprise, when we realized that the surface was almost orange. Professional underwater model Ivana Orlovic has posed in various seas, oceans, lakes and rivers around the planet, where the water is usually bluish, green or sometimes completely transparent, as if it does not exist, but this was the first time she had dived in perfectly transparent, orange-yellow water – the nearest place she had encountered similar water of this color was in Mexican cenotes on the Yucatan Peninsula.

The color of the lake water is influenced by the type of sediment at the bottom (on Ribnica Lake, the bottom is made of characteristic orange dust), the amount of nutrients coming from the surrounding forests (in this case, conifers) and the presence of algae. As you descend deeper, the light almost completely disappears, but the vis becomes better and the water usually colorless. In those few dives, larger specimens of perch were noticed, and if the stories of sports fishermen are to be believed, the lake is very rich in fish. ■



ABOVE

Ivana posing on the ice

RIGHT

Ice diving requires a team of divers and handlers

BELOW LEFT

Ivana exploring beneath the Austrian ice



The challenges of ice diving

Ice diving can create all sorts of issues, and it can change from day to day. Our first diving day was sunny and cold, with an outside temperature of 2 degrees F, while the second day was slightly warmer (14 degrees F), but cloudy and moderately windy. This caused us big problems because everything started to freeze. Ropes and BCDs became stiff, and regulators began to freeze on dry land. However, with the help of a few little tricks of the trade - and upon entering the water - everything started to work correctly again. Organizing such dives is not easy. It requires precise planning and preparation of equipment. When you add photo shooting in icy conditions, things get even more complicated. Many small things can go wrong and make it difficult, or even completely impossible, for us to realize our plans. That is why it is important to plan everything well, stick to the plan, but also be ready for changes and improvisations in the field, depending on the conditions. You also need a healthy dose of good luck with the weather! During these icy adventures, the dice came together and our photoshoot went according to plan.



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BACKPLATE AND WING VS JACKET STYLE BCD

Scuba Diver Editorial Director Mark Evans looks at the pros and cons of backplate-and-wing vs jacket BCDs, and also a third variant that combines the two

Photographs by Mark Evans



A buoyancy compensating device, or BCD, is a core essential of your dive kit – without one, you’d have nothing to mount your cylinders on! However, when it comes to choosing a BCD, there are a whole host of options available out there – let me tell you, things have changed a lot from when I first started diving in a Fenzy ABLJ horse-collar with oral inflator.

I remember nearly getting excommunicated from our local dive club when my uncle and I turned up with ABLJs with power inflators. And you’d have thought we had committed some sort of cardinal sin when we progressed on to a stab jacket, or stabiliser jacket, which was the name given to what are now referred to as jacket-style BCDs. Jacket-style BCDs are still immensely popular, but backplate-and-wing set-ups, as favored by technical divers, are definitely en vogue at the moment for recreational divers, so join me as we look at the pros and cons of both systems. I’ll also be telling you about a third option which could tick all of the boxes of what you want in

a recreational BCD.

A BCD is the chassis on which your diving system is mounted. Not only does it hold your cylinder, or cylinders, but it also provides you with a means of controlling your buoyancy via its power inflator and bladder. It needs to be able to support you on the surface both before and after your dives, and underwater, it has to enable you to achieve neutral buoyancy throughout your dive. Stripped bare, those are the core functions of a BCD – things like integrated weight pockets, trim weight pockets, pull dumps, storage pockets, D-rings, etc., are all just add-ons which are nice to have, but are not essential.

Let’s talk bladder shape and location first, as this is one of the main differences between jacket-style BCDs and backplate-and-wings. With a jacket-style BCD, the bladder sits here at the back but extends around the sides, so it effectively gives you a comforting hug as you inflate it. A major benefit of this is that at the surface when it is inflated, it holds

ABOVE
Backplate-and-wing set-ups are streamlined and more minimalistic

RIGHT
Jacket-style BCDs have more features, such as dump valves and pockets



“ Stripped bare, those are the core functions of a BCD – thing like integrated weight pockets, trim weight pockets, pull dumps, storage pockets, D-rings, etc, are all just add-ons which are nice to have, but are not essential ”

you in a nice upright position, keeping your head well clear of the surface. Underwater, if you are correctly weighted, you will not have too much gas in the jacket, so when you get into a nice, flat position, what gas is in there will sit on either side of your cylinder. Throughout the dive, this gas will migrate around the bladder depending on your body position – if you turn on your side slightly, say you were looking under an overhang, for instance, the gas will move to this side of the jacket. Now, it is a delicate

balancing act maintaining this position, as if you turn too far, the weight of the cylinder will make you turn turtle on to your back, but with a bit of practice, you should be able to hold this position before going back into your normal diving position. You can usually get a feel for the gas moving around in the jacket, but beware, I have dived in some jacket-style BCDs where instead of gas movement being progressive, it will just suddenly move enmasse, and this can be quite unsettling as you try to make small adjustments to your body position.

With a backplate-and-wing, the bladder – which will either be a round doughnut, or a horseshoe-shape – is just mounted on your back. This makes it far more streamlined than a jacket-style BCD for when you are moving through the water on your dive, as there is just no bulk around the front of you. Another benefit is that the location of the bladder automatically puts you into a nice, horizontal trim ►



Did you know?

One benefit of a BP/W is that it is modular and you can swap out the bladder for different types of diving.



position, which is what all divers want to achieve anyway. You won't be able to turn on your side and hold position as easily as you would in a jacket-style BCD, as the bladder is constantly trying to get you flat again, but if you are correctly weighted, it can be done. On the surface, a backplate-and-wing can take a little getting used to, especially if you've been diving jackets before. Where a jacket-style BCD will hold you upright at the surface, a backplate-and-wing tends to push you forwards if you put too much gas into the bladder. This can be dealt with by not putting too much gas in, and then kind of leaning back slightly. It will never hold you as clear of the surface as a jacket-style BCD, but with practice you can still easily float around on the surface in a relaxed fashion.

Let's talk fit and adjustment now. A jacket-style BCD generally has a hard plastic back section which holds the cambands to secure it on to the cylinder. These often have a grab handle built into the top, which is useful for when you are lifting your gear about. However, some forgo this plastic section and rely on the cylinder to provide the strength and support. The one defining feature of jacket-style BCDs is the generous use of padding – expect a padded backpad, padding on the shoulders, and so on. This makes them extremely comfortable whether you are in a rash vest, wetsuit or drysuit. Most jacket-style BCDs then have a cummerbund, and two chest straps. Like the shoulder straps, these can be quickly and easily slackened or tightened, so you can obtain a good fit when you put it on.

A backplate-and-wing generally forgoes a lot of these elements. The core of the set-up is the backplate itself, which can be made from aluminum or stainless steel. Aluminum is lighter, so better for traveling with, but you will still need



to add weights to counteract the buoyancy of your exposure protection, whereas stainless-steel is heavy, so you will be able to reduce, or in some cases, not need, any lead. The downside is that it is heavy for traveling with.

If you are wearing a drysuit or wetsuit, a backplate can be reasonably comfortable as you have some cushioning between you and the metal, but it is nowhere near as comfy as a well-padded jacket-style BCD. However, there are some backplates now that have removeable pads that make a massive difference to the comfort level.

The backplate is then threaded with one piece of webbing, which makes up the waist strap and the shoulder straps, and a short second piece of webbing provides the crotch strap to stop the set-up riding up. Again, there are pros and cons to this one-piece webbing approach. A much-touted benefit is that apart from the waist buckle – usually in the style of an old-school weightbelt release – there are no clips or anything that can potentially break.

These so-called ‘failure points’ are avoided at all costs by tech divers, but I have to be honest,

in literally thousands of dives, I have seen maybe two pinch-clips break, and in both instances it was right at the point where the diver stood up and the weight of the cylinder and lead weights was loaded on to the clips. A couple of well-placed zip ties later to hold the pinch-clip in place and they were off into the water for their dive. The downside of this webbing set-up is that there is no quick adjustment of the shoulder straps, and you have to wriggle to get into them. With practice, this is not too much of a chore, but I still find it a royal pain in the backside, especially if I am changing between drysuit and wetsuit and have to slacken or tighten the webbing up. Some backplates allow a degree of movement when you undo the waist strap, and this helps a lot, but personally, I still like straps I can just grab hold of to pull down and tighten up, as on a jacket-style BCD. On the comfort side of things, the webbing is not as comfy as well-padded shoulder straps on a jacket-style BCD, but some backplate-and-wings now feature neoprene padding that slides over the webbing, and this does make a difference.

However, it is worth noting that there are backplate-and-wing style BCDs out there that don’t have, well, a backplate, such as my trusty Dive Rite ►

TOP LEFT

You can use back-inflate BCDs in warm and cold waters, even smaller units like this Aqualung

LEFT INSET

BP/W leave your front uncluttered

MIDDLE

Jacket BCDs have pockets, pull dumps, adjustable straps and other features

BELOW

Many divers learn in a jacket BCD

“ Let’s talk bladder shape and location first, as this is one of the main differences between jacket-style BCDs and backplate-and-wings ”





“ As with all diving equipment, whether you opt for a jacket-style BCD or a backplate-and-wing is all down to personal choice. Both do the job they were intended for, and both have their pros and cons ”

ABOVE
Jacket-style BCDs have pockets and integrated weights in many cases

TOP RIGHT
Luke started out in a jacket-style BCD

RIGHT
The back-inflate BCD is a good compromise between the BP/W and jacket

Transpac II harness, paired with a small travel wing. The Transpac II has no backplate, instead, once it is securely attached to a cylinder with its two cambands, the cylinder itself provides the rigidity.

This makes it more lightweight than a backplate-and-wing, so better for traveling with, but also, having a thick padded backpad makes it just as comfortable as a jacket-style BCD. Also, it has comfy jacket-style shoulder straps with pinch-clip adjusters. For me, it is the perfect blend of both designs.

Right, so that's bladders, backplates and straps covered. Let's move on to pockets and other accessories. With a jacket-style BCD, you usually get at least two pockets, either zipper or Velcro closing, for storing things like back-up torches, mesh bags for collecting rubbish you find on your dive, or a DSMB and spool. When selecting a jacket-style BCD, put it on, inflate it fully and then see if you can still access the pockets – it is amazing how many out there have crappy little pockets that you just cannot get into when the jacket has any gas in it. Ridiculous. You'll also have a number of D-rings, either metal or plastic, that you can attach things to, but beware

you don't end up with too much dangling off you, otherwise you look like a Christmas tree.

On a backplate-and-wing, they are spartan to say the least when it comes to extras. You are not going to find any accessory pockets, let's put it that way. There will be an array of metal D-rings, but as I said, you can then end up looking a right mess with stuff hanging everywhere. Yes, you can bungee and fasten torches and DSMBs on to your webbing, but frankly this is bit of a Heath Robinson solution. I've mentioned them before, but you might want to consider a pair of tech shorts, such as those by Apeks, Scubapro or Fourth Element. These have pockets so you can stash your DSMB and spool, your torch, back-up mask and so on, safely away. You are streamlined, nothing is dangling, job done.

Let's talk weights. Thankfully, weightbelts are going the way of the dodo, and most jacket-style BCDs have integrated weight pockets, and in some instances non-dumpable trim pockets on the back.

While a basic backplate-and-wing has none of these, most companies offer weight pouches and pockets that can be retro-fitted, and these make

a backplate-and-wing far more user-friendly in my opinion. The manufacturers obviously think so too, as many line-ups now feature a backplate-and-wing already decked out with these pockets from the get-go.

One big difference between a jacket-style BCD and a backplate-and-wing is how they can grow with you as your diving progresses – or not, as the case may be. A jacket-style BCD is ideal for what it is intended for, but that's it. Apart from rare cases, such as AP Diving's Commando, for instance, which is capable of holding doubles, a jacket-style BCD is for single-cylinder recreational diving only. If you head into technical diving down the line, you are going to have to buy a whole new rig. With a backplate-and-wing, you can get one for your recreational diving to start with, but if you are then tempted by tech, as it is a modular system, it can grow with you. In a matter of minutes, you can replace the single-cylinder wing with a larger wing designed to support a twinset and stage cylinders, but retain your existing backplate and harness set-up.

The other benefit of a backplate-and-wing is that it can grow with you as you, well, grow. Children grow at a prodigious rate these days, and rather than go through several jacket-style BCDs as they move through their teens and into adulthood, get them a backplate-and-wing and all you need to do is adjust the webbing harness as they get bigger. Sorted. My son Luke started in an Aqua Lung Pro QD BCD, and while this extra-small adult jacket still fits him at the moment, he has already progressed on to a Mares backplate-and-wing, which should see him right for many years to come. As with all diving equipment, whether you opt for a jacket-style BCD or a backplate-and-wing is all down to personal choice. Both do the job they were intended for, and both have their pros and cons.

But, for recreational divers, there is a third option that sits between the two. The back-inflate BCD, such as the Aqua Lung Rogue, Scubapro Hydros Pro, Atomic Aquatics BC2, Dive Rite Hydro Lite and Apeks Exotec. These have adjustable shoulder and chest straps, integrated weights and even pockets in some cases, much the same as a jacket-style BCD, but the difference is that the bladder is only on the back, so more like a backplate-and-wing. You get the buoyancy benefits underwater of a BP/W, but the ease of adjustment and fit of a jacket-style BCD, plus, they are quite lightweight, so ideal for the traveling diver. If you are diving on a single cylinder, and not planning on venturing down the tech route, then a back-inflate BCD could be just what you are looking for. ■



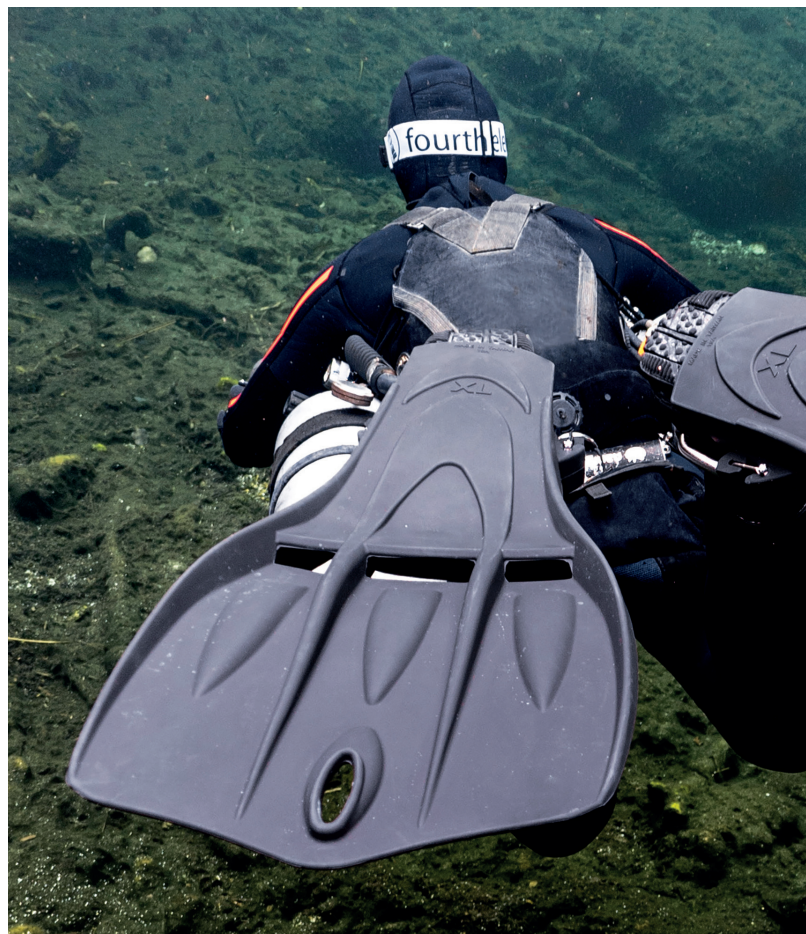


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FOURTH ELEMENT TECH FINS | SRP: \$195



Mark Evans: Broad, vented 'jet-fin-style' fins are all the rage at the moment, not just with the technical diving fraternity, but also with recreational divers wanting to have power, control and manoeuvrability. Alongside their Rec Fins, Fourth Element has now launched their Tech Fins, but being Fourth Element, these are not just your normal run-of-the-mill dive fins.

Made from natural rubber, the body and blade of the Tech Fins has a different density gradient – what this means is that the blade portion, equipped with stiffening lateral rails and strengthening ribs, has the optimal stiffness for thrust and 'snap', while the foot pocket, especially the leading edge where it meets the top of your foot, is exceptionally soft and supple. This is unbelievably comfortable, and means you can even get away with wearing thinner booties with the fins.

Fourth Element have managed to achieve this feat by making the Tech Fins via compression moulding, as opposed to the more-normal injection moulding method. Compression moulding has enabled Fourth Element to give these different





areas different densities. Clever stuff. And the innovation continues. The usual three large vents allow water to flow easily along the blade, which is said to reduce drag and fatigue, while so-called 'turbulence disruptors' on the blade beneath the vents give the fins a distinctive look and make them stand out from other 'jet-fin-style' fins. These are apparently inspired by the nodules on the leading edge of the pectoral fins on a humpback whale and are designed to allow the fins to move through the water more efficiently.

What this means underwater is that you get an immense amount of thrust from the fins. They deliver a terrific frogkick, but work with modified flutter, helicopter turns, and so on as well. Diving in my drysuit, these provided huge amounts of power, and I could make small adjustments to my positioning as I was taking photographs with ease. The short, stumpy



nature of the fin blade also means they are excellent in tight, confined areas, like inside wrecks or cave systems.

The Tech Fins are slightly negatively buoyant, but not massively so, which means they are not too heavy for the travelling diver. Medium tip the scales at around 2kg, XX-Large take this up to 3.5kg. Stainless-steel spring straps with a large heel pad, complete with big thumb loop, keep the fins securely in place and are easy to pull on and pull off, regardless of exposure protection on your hands.

A handy webbing and stainless-steel hanging/carrying strap comes with the fins, and goes through the hole in the tip of the blade. This can be used for storage of the fins on the hook in your dive lock up, when you are walking to and from the dive site, or even for when you are negotiating a dodgy exit and need both hands free. While the Tech Fins are robustly constructed, and natural rubber is inherently tough and durable, it is reassuring to know that all the components are recyclable when the fins reach their 'end of life'.

The Tech Fins comes in four sizes (Medium, Large, X-Large and XX-Large) and three color-ways – all-black for the traditionalists, gray with an orange heel-pad for those who want a bit of color, and an eye-catching aqua turquoise blue for those who really want to stand out.

www.fourthelement.com



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SCUBAPRO HYDROS PRO | SRP: \$999



Mark Evans: Scubapro have had back-inflate BCDs in their line-up for many years, ranging from larger units like the Knighthawk to more travel-orientated BCDs like the Glide Tec Pro, but the Hydros Pro treads a different path to its predecessors and, in fact, won the 2016 Red Dot award for product design.

At first glance, it is more reminiscent of the Glide Tec Pro, which was a stripped-back, lightweight BCD that was ideal for travel. However, once you get over that initial overview, it is clear that the Hydros Pro is a completely different animal.

The back pad and the straps are all made of injection-molded Monprene, the same material that the innovative Seawing Nova fins are constructed from. This stuff is extremely resistant to UV, chemicals and abrasion, but perhaps more importantly, it is also virtually instantly dry when you exit the water – the water literally just sheds off it. Having had padded backpads balanced on top of doors to be in front of air-conditioning units, desperately trying to get them dry before a flight home, I really appreciate this development!

With swiveling shoulder clips and a chest strap, the harness has a great fit, and snugly and comfortably hugs your body, reducing any cylinder movement both topside and underwater. The Hydros Pro has neat integrated weight pockets that slot into almost skeletal mounts, which not only



cuts down on weight and looks cool, but as they are also made of Monprene, they don't retain any water either. These can be removed quickly and easily, so if you were traveling somewhere where weight allowance was extremely tight, you can strip down the Hydros Pro to basically a harness and wing. You can also get these weight holders in different colors, so you can switch up your jacket to match your other kit, or just add a bit of vibrancy into your equipment. The weight 'pockets' are held in place with the tried-and-tested pinch-clip system – there is no way they will fall out accidentally once they are clipped securely in place, but on the flipside they are very easy to remove when you need to get them out, such as to hand up into a RIB. All this use of Monprene also has another benefit – the BCD is virtually neutrally buoyant, which means you will need less lead to get below the surface. However, for when you are diving in a thicker neoprene suit or a drysuit, and you need additional weight, there are also two non-dumpable trim pockets.

Ah, the wing, let's talk about that. It is streamlined and quite compact, and this is further enhanced by the use of a tri-bungee system which controls air distribution to maintain this compact shape underwater, and allow high lift at the surface. It has a pull dump at the bottom left side, and there is a pull dump on the right shoulder, so anyone coming from a Scubapro jacket-style BCD will instantly feel comfortable with where everything falls. These pull dumps are very efficient, and I like the large toggle, which is easy to locate even wearing thick neoprene or drygloves.

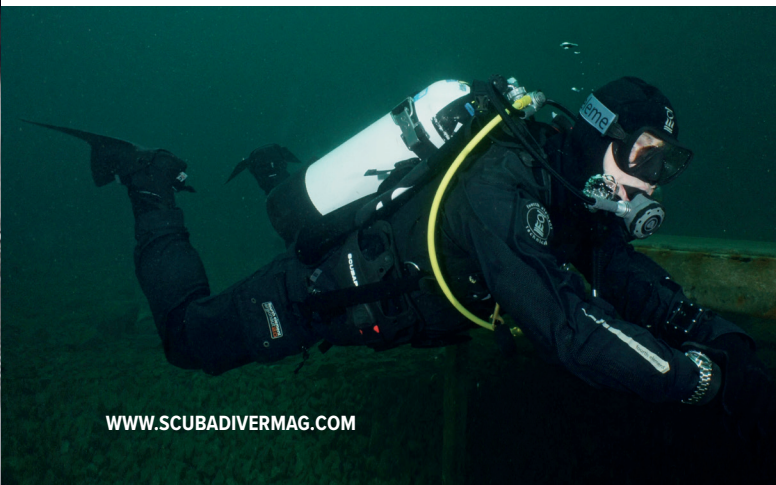
I was very impressed with the Hydros Pro when I took it



diving. It is very comfy indeed, and the Monprene straps conform to your body shape extremely well. Once I had adjusted all of the shoulder and chest/waist straps, there was virtually no movement and the jacket felt almost adhered to my back.

All of the controls – power inflator and pull dumps – fell easily to hand. It gave me plenty of lift on the surface and held my head well above the water, but underwater it offered plenty of stable support in a comfy horizontal trim position. Now it comes in at \$999, which is a fairly hefty price tag, but you do get what you pay for. The Monprene construction means it will take a lot of abuse before showing any wear at all. There is no fabric, Velcro or zippers on the harness, and virtually every component can be replaced without stitching, so you really have got a BCD for life, as if you ever do manage to wear out or damage an element, it can be quickly and easily fixed or replaced. The Hydros Pro comes with a carry-on backpack for storage and travel, and it is amazing how small this BCD will actually go once you strap it all up together.

www.scubapro.com





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SEALIFE SPORT DIVER HOUSING | SRP: \$349.95



Nigel Marsh: Underwater photography is extremely rewarding, but it can also be very frustrating. Wouldn't it be great if underwater photography was as simply as using your smartphone? Well, it can be with the SeaLife Sportdiver smartphone housing. SeaLife is an American company formed in the early 1990s, with their goal being, as stated on their website – 'to offer an easy and fun way to capture undersea wildlife and underwater memories in an easy, uncomplicated way'. And they have certainly achieved their goal with this smartphone housing.

When I first heard about this housing, I can honestly say I was a little dubious. I questioned who would want to risk losing their data and contacts if you had a flood and also how would a smartphone even work in a housing with its limited buttons? I soon discovered how SeaLife solved these problems when I was sent a Sport Diver smartphone housing by their Australian distributor Underwater.com to give it a test run. Straight out of the box I was very impressed with the simple and smart design of the housing. It is rated to 130ft, made of a tough polycarbonate and feels solid in the hand. And best of all, the one housing fits almost any make of smartphone.

The housing has only one O-ring, only four buttons to control the phone and a simply lever shutter release. Opening it up, via the locking mechanism on the door latch, inside I found an adjustable cradle for the phone, and very importantly, a vacuum seal system. This vacuum seal, along

with a moisture detector, keeps your phone safe from a potential flood. Issue one solved.

So how do you control the phone in the housing? SeaLife solved this issue with an app, that is downloaded in seconds. Once downloaded, the app takes control of your phone, making sure it doesn't shutdown while in the housing. It also tells you its time to load it into the housing and do the vacuum seal. Three pumps, and three minutes later, the housing was ready to be used, with a green LED indicating the housing was watertight. A blue LED also told me the housing and phone were connected via Bluetooth.

The housing was now ready to go, displaying four icons on the left (photo, video, settings and preview/playback) and five on the right (phone power, housing power, video mode, zoom and Bluetooth). These are controlled by the four buttons on the back of the housing – mode, up-arrow, down-arrow and OK. Very simple.





I had a quick play and found the buttons easy to use and camera settings simple to navigate. In the settings I was very surprised by the amount of control the system gives you. You can simply use auto, but the app allows you to set shutter speed, ISO, exposure, white balance, photo resolution, video resolution and a few other functions. The shutter release works smoothly and is used for both photos and video. The only thing the Sport Diver app doesn't allow you to use is the phone's flash. This is actually a smart move by SeaLife, as it forces you to use an external light source, meaning less chance of backscatter and better images.

For my test dive I joined Scuba World for a double dive on HMAS Brisbane, off Mooloolaba, Queensland with the Sealife housing set-up with a small video light. Once underwater I

quickly had the housing and smartphone running through its paces, snapping off images of stationary reef fish. With these subjects it performed well. It didn't work quite as well with moving fish subjects, due to the slight shutter delay on the phone. But I still managed to get some acceptable images. I also found the zoom function worked smoothly and switching between photo and video mode was simple.

I avoided the auto settings and played with the shutter speed to control the light, and found it worked perfect with excellent exposure. The good thing with this set-up is the display shows you exactly what you will get, adjusting as you change the shutter speed, getting lighter or darker.

The main issue I found was due to the smartphone, not the housing, with the focusing a little out at times and not great on macro subjects. Downloading the images, I found around 20% were out of focus. I think this was more a case of me not giving it enough time to focus, and I am sure this would improve with practise.

I only found two minor issues with the housing. For an old diver like me the display was a little small and hard to read, and holding the housing I found my palm pushed the rear buttons by accident. Both these things are easily solved - by me getting a prescription mask, and with a handle on the right to hold the housing.

I got some great images on my test dive that surprised even me. I found the SeaLife Sport Diver smartphone housing easy to use and would recommend it to any diver looking for a simple and cost-effective underwater camera.

www.sealife-cameras.com



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