



TENTACLE FESTIVAL 2017

FULL REPORT



"I have managed the largest and most diverse collection of cephalopods in the world, BUT I have only had the opportunity to see a few in their natural environment. This expedition will allow me to observe many more species in the wild".

- Bret Grasse -

Professional aquarist and marine biologist



8 REASONS TO LOVE LEMBEH RESORT

This week is our first ever “Tentacle Festival” with cephalopod expert Bret Grasse in house, so to be in keeping we are talking about all things in 8’s!

Here are 8 reasons to love Lembeh Resort.

1. Cliffside Suite

The newest addition to accommodation at Lembeh Resort is our stunning Cliffside Suite, which offers 180 degree views of the Lembeh Strait, private pool, butler service and spacious living area.



2. A La Minute Cooking Stations

Lunchtimes are always an event to look forward to at Lembeh Resort with an extensive buffet selection plus our “a la minute” cooking station which prepares fresh dishes to order.



3. Marine Biologists and In-House Photo Pro

Two on-site Marine Biologists (Dimpy and Agus) are here to help you with critter identification and answer your marine life questions plus we have Photo Pro Sascha Janson on hand to give photography advice and camera assistance.



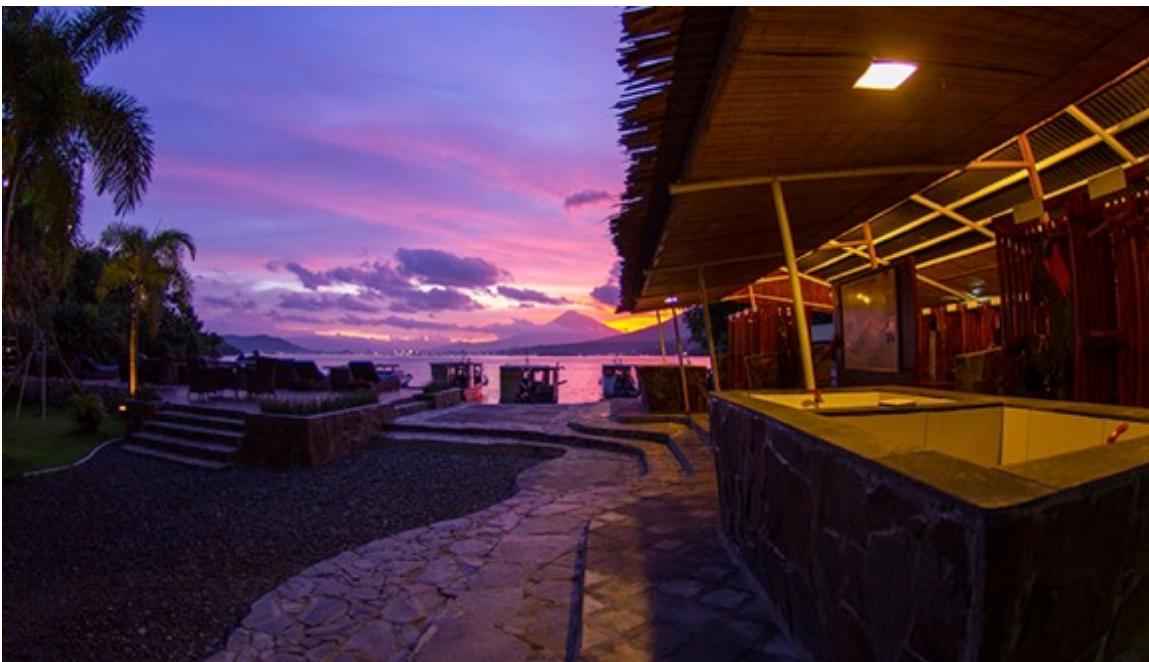
4. Lembbeh Resort Spa

After a great day of diving in the Lembbeh Strait there is no better way to relax than in our Spa with a choice of massages to relieve tired muscles and leave you feeling rejuvenated for the next day.



5. Stunning Views and Sunsets

The peak of Lembbeh Resort offers stunning views over the Strait and the poolside deck is the perfect place to enjoy a sun downer while watching the sky turn red with mount Klabat in the distance.



6. Service

Our team of Lembbeh Resort staff love nothing more than making sure every guest's stay exceeds their expectations. You'll find that your room is turned down every evening when you are at dinner, your lights are turned on, curtains closed and your room is prepared for a comfortable nights sleep. Oh, and did we mention we have three different pillow types so you can choose what suits you best?



7. Workshops

We are proud to host a number of underwater photography, videography and marine life workshops throughout the year which feature world-class photographers and famous marine biologists which this year alone has included: Bret Grasse (this week), Alex Mustard, Saeed Rashid, Maarten de Brauwier, Hergen Spalink, Kerri Bingham, Steve Fish, Andrew Raak, Tobias Friedrich and Mark Erdmann.



8. Camera Facilities

Our camera facilities are unsurpassed. Our camera room provides each guest with a personal bench, plug sockets for charging, space for accessories, towels and drying tanks. A visit to our cameras@Lembeh facility gives you access to our in-house Photo Pro Sascha Janson, a wide range of accessories and strobes available for hire and of course Sascha's expert advice and guidance.





Today Bret started the Tentacle Festival with an introduction to cephalopods and why they are such amazing critters. Here's a couple of interesting facts from Bret which might surprise you...

1. Octopus have 3 hearts, 9 brains and blue blood.
2. All cephalopods are invertebrates and mollusks which makes them more closely related to clams than they are to fish.
3. The name cephalopod is derived from Greek with "Cephalo" meaning head and "Pod" meaning foot. This is because all cephalopods have large heads which house their brains and organs and it is connected directly to their feet (known now as arms / tentacles).
4. Cephalopods have the largest brain to body size ratio in the entire animal kingdom.

TENTACLE OF THE DAY: BLUE RING OCTOPUS (*HAPALOCHLAENA SP.*)



Did you know that there is more than one species of blue ring octopus? It's true! Scientists have now noticed differences among blue ring octopus and here in Lembbeh we have found two distinct species of these little guys. The blue ring might be small but don't be deceived as they are recognized as one of the world's most venomous marine animals. Blue ring octopus in Lembbeh measure just 4 to 8 cm (1.5 to 3 in) and despite their relatively docile nature they can be incredibly dangerous (even deadly) to humans if provoked. They can be identified by their characteristic blue and black rings and brown to yellowish skin. When the octopus is agitated the brown patches darken and iridescent blue rings appear and pulsate. Blue ring octopus are hunters which feed mainly on small crabs including hermit crabs and shrimp. The best dive sites in Lembbeh for finding blue rings are Sarena Besar, Pintu Colada, Critter Hunt, and Nudi Falls.

Our marine biology and underwater photography trained Dive Guides are experts at finding even the smallest of marine species here in the Lembbeh Strait so we are hoping for some excellent encounters this week to share with cephalopod expert Bret.



Tentacle Update – Cephalopod Species of the Lembeh Strait – 12 July

Tentacle Festival 2017 is off to a great start here at Lembeh Resort with cephalopod expert Bret Grasse. Bret has been blown away by the different species that we have here in North Sulawesi and the frequency with which we see them.

On Bret's dives this morning he was treated to seeing two blue ring octopus mating, Bret commented, "It was such a special experience to that gorgeous animal in its natural environment. To see two mating was incredible. We are only allowed to stay in their world for short periods of time. I feel ultimately very privileged. Cephalopods are certainly a massive highlight of Sulawesi diving".

Bret's presentation today included an overview of all the species we have here in Lembeh including many of our favorites: Blue ring octopus, coconut octopus, mimic and wonderpus, flamboyant cuttlefish, pygmy and bobtail squids and many more!



Our in house Marine Biologists and our Dive Guides are also taking part in presentations and learning more about various species of cephalopods and their behaviour. Marine Biologist Dimpy says “We are all excited about having Bret here at Lembeh Resort, I already gained a lot of interesting facts about cephalopods which makes me keen to learn even more from him. I have always been intrigued by octopus and I am looking forward to hearing more facts about the different species he works with”.

Featured Tentacle of the Day: Mimic Octopus – (*Thaumoctopus mimicus*)



Is it a sea snake? Is it a flounder? No, it's the mimic octopus! This species is famous for its ability (as its name suggests) to mimic other marine life species and when it's in action it's a show-stopping sight. This elaborate form of mimicry is designed to ward off predators by imitating other poisonous and venomous marine species. The mimic is a relatively small octopus which grows to a length of around 60cm – including its arms which it can stretch out or appear to make shorter. Mimics are naturally a light brown to beige color but when they become defensive they display more noticeable white and brown bands. Our Dive Guides here in Lembeh are experts at spotting the mimic – even when only its eyes are visible peering out of an almost indistinguishable hole in the sand.

The best dive sites to visit for mimic octopus in the Lembeh Strait are Rojos and Aer Prang which we will be visiting this week!



Tentacle Festival Update – Let's Get Kraken!

Today our guests joined cephalopod expert Bret Grasse's daily presentation to hear about the "Largest Cephalopod Show in the World", which Bret designed, opened and managed at the Monterey Bay Aquarium in California.

Guests were treated to a virtual walk through of the facility, the species that can be seen there and heard about how Bret raised many species from eggs to adulthood as part of his role.

It's not an easy task conceptualising a facility that will hold the biggest cephalopod collection on the planet – especially when they can be tricky to contain. You may have heard of AI (meaning Artificial Intelligence) but have you heard of OI? Octopus Intelligence! These amazing critters are one of the most intelligent marine life families on the planet and can detect different individual humans just by smell, unscrew jars to find food hidden inside and "talk" to each other through color changes.

Featured Tentacle of the Day: Coconut Octopus (*Amphioctopus marginatus*)



When it comes to the most intelligent species of octopus, the coconut octopus has to be a serious contender. This smart cephalopod is one of only a few species in the world which is able to use “tools” and is capable of forward planning. Also referred to as the veined octopus, it has a sturdy looking brown body detailed with fine darker lines. It is one of the smaller octopus species with arms growing up to 30cm. Coconut octopus are brown to match the shade of the sand they live on but become darker to almost black if agitated and the suckers develop a slight bluish tinge.

Coconut octopus lodge themselves inside empty bi-valve shells to shelter but when shells are in short supply they will substitute them for more readily available coconut husks – hence their name. If no husks or shells are present they will even use other natural debris or even trash, including beer bottles. When moving around they carry their shelter underneath their mantle whilst they walk on extended arms as if on stilts. Watching a coconut octopus making himself a “house” or moving house can be extremely entertaining. Once inside their chosen shelter, the octopus uses its suckered arms to hold itself inside and pull the other half of the shell or piece of debris over the top creating a tightly sealed trap door!



Coconut octopus are seen at many Lembeh Strait dive sites but our favorites for this species include Jahir and Aer Bajo.

Are you a critter fan? A muck diving aficionado? Underwater photographer? Join us at Lembeh Resort for the undisputed best muck diving in the world and experience the Lembeh Strait with a touch of luxury.

Bret, who is now based at the Marine Biological Laboratory, also operates his own cephalopod consultancy firm, "8 Arm Assistance" which provides advice and services to marine laboratories, aquariums and other cephalopod related industries and individuals. <http://8armassistance.com/>



Tentacle Festival Update – Building a Cephalopod Empire

Being asked to build a “Cephalopod Empire” is not a request many of us will ever hear but that’s exactly what the Marine Biological Laboratory in Woods Hole, Massachusetts, asked of our guest speaker Bret Grasse.

Bret jumped at the opportunity to undertake the challenge and even relocated across the United States from the Monterey Bay Aquarium in California where he was previously based.

As part of his Empire building, Bret is studying several cephalopod species to identify optimal aquarium conditions for them and to identify and compare breeding habits, behavioural and physical characteristics.

Bret’s empire is in its initial stages with plans to scale up over the next three years. Guests were given a glimpse into the process of designing a world-class facility at a world-renowned institution - which included everything from designing tanks to acquiring species and even the plumbing!

Featured Tentacle of the Day: Flamboyant Cuttlefish: (*Metasepia pfefferi*)



This colorful little critter is a firm favorite with muck diving underwater photographers here in Lembeh. As Bret explained to us earlier in the week, cephalopods can change skin color and texture faster than any other species on the planet – and this cuttlefish is the perfect example. When agitated the aptly named flamboyant will flash from bright purple to red, to orange, to bright white in a matter of seconds.

That's not the only unique characteristic of this species, they also have a distinctive method of getting around. Unlike other cuttlefish they will use their lower arms to walk along the sea floor while at the same time flashing hypnotic bands of color to ward off any approaching predators.

When the flamboyant is in a relaxed state it is a dark brown color and as a small species (up to 12cm, but usually between 5 – 8cm) they can be tricky to spot. This species is active during the day when they are hunting for their favorite prey, which includes small fish and crustaceans.

Our most famous muck diving sites in the Lembeh Strait for finding flamboyants are Aer Bajo, Tanjung Kusu-Kusu and TK where they are often spotted on the sand.



Tentacle Festival Update – Cephalopods of the Deep

Did you know that cephalopods are one of the most difficult creatures to keep in aquariums? They are only beaten to this title by deep-sea creatures, which pose even greater challenges. Our guest cephalopod expert Bret Grasse is at the forefront of groundbreaking techniques, which will allow deep-sea cephalopods to be viewed and studied in aquariums – not an easy feat. Bret commented that, “Many deep sea creatures float freely in the depths and have never come into contact with a hard surface or seen light before. Bringing creatures like this into a lit area where they are surrounded by surfaces is not without its challenges and has never been done before. Some species have only ever been seen by a couple of people and we hope to be able to share them with many more to promote cephalopod awareness and ocean conservation. Some of the species we hope to work with include the vampire squid, dumbo octopus and the flapjack octopus”.

Bret has been exploring the Lembeh Strait this week with our team and on his first night dive he was treated to an array of some of Lembeh’s most famous “cephs” including a group of long-arm octopus, numerous bigfin reef squid, flamboyant cuttlefish eggs, a starry night and a coconut octopus!

That wasn’t the only night time entertainment for Bret and our guests. Last night we enjoyed a wonderful dance and singing performance by the children from our local villages, many of whom we support through our [social and environmental commitment](#) initiatives.

Featured Tentacle of the Day: Bigfin Reef Squid (*Sepioteuthis lessoniana*)



This is one of the most frequently seen species of squid here in Lembeh despite the fact that they only live for around 6 months. During their short life spans they spend most of their time at our dive sites that have sand and sea grass areas and they are often close to boat mooring lines on which they will lay their eggs.

They are small to medium-sized squids growing up to 33 cm in length and they have the fastest recorded growth rate of any large marine invertebrate, reaching 600 g (1.3 lb) in just four months.

When night diving in the Lembeh Strait the bigfin reef squid can be quite curious and seems to be attracted to dive lights – which gives underwater photographers a perfect photographic opportunity!

We learned from Bret this week how species such as this, that have such large nerves, (10 – 100 times bigger than ours) are becoming increasingly useful in neurological studies in humans. Amazingly, squid nerves have now even been used to re-attach a human hand during reconstructive surgery.

Our favorite Lembbeh Strait dive sites for sightings of the bigfin are Nudi Falls and Nudi Retreat where our Dive Guides are experts at spotting them in the shallows.

What's your favorite cephalopod? Let us know and we'll post about it! For all of the amazing critters that we see here in Lembbeh please remember we have searchable species information on our [Critter Log](#).



Tentacle Festival Update - The missing Ink - Innovations into cuttlefish and squid husbandry

Looking after squid and cuttlefish is not an easy task – would you know where to start?

Cephalopod expert Bret Grasse has looked after numerous species from egg stage through to adulthood. Bret's presentation today revealed to guests some of the challenges of looking after these amazing critters and the ground breaking, creative prototypes which he has developed to overcome them. Guests were fascinated by Bret's insights as well as by the advancements that Bret revealed have been made in "cephalopod care" in recent times.

Bret has been making more dives with us in the Lembeh Strait and comments, "I've been so impressed with the knowledge and experience of all the diving guides and staff. I've seen more amazing cephalopod species in the field during these few days that I've seen throughout my career. We've seen a smorgasbord of various cephalopod species exhibiting a wide variety of behaviors". Wow!

Featured Tentacle of the Day: Broadclub Cuttlefish (*Sepia latimanus*)



The broadclub cuttlefish is one of the most common cuttlefish species in North Sulawesi but that doesn't mean it isn't special. This species lives in depths that range from shallow reef tops up to 30 meters. The broad club can grow up to 50cm in length and can weigh up to 10 kilograms.

The broadclub is an amazing species to watch as it changes through several color variations and patterns (brown, white, green, yellow and banded) in a matter of seconds. Like other cephalopods it is also able to change the appearance of its skin texture from smooth to spikey to blend into the surroundings.

The broadclub is an excellent videography subject, particularly when it is stretching out its tentacles, feeding, mating or depositing eggs. This species preys on crustaceans and fish using a hunting technique which is unique to cephalopods. Bret explained to guests this week that cuttlefish flash their

colors in a hypnotic rhythmic pattern to draw the attention of their prey away from the imminent danger they are in!

Here in the Lembbeh Strait the best dive sites for spotting broadclabs are Pante Parigi, Aer Prang, Makawide and Nudi Retreat.

Tune in tomorrow for a complete event round up, lots more interesting “ceph” species information and facts from our guest speaker Bret.

If you’d like to join us at Lembbeh Resort or join one of our [upcoming events](#) contact us on: Reservations@LembbehResort.com

We look forward to welcoming you to our beautiful Indonesian resort and enjoying some incredible Lembbeh Strait muck diving with you soon.