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## Orchids in the Flooded Forests of the Río Negro

Mary E. Gerritsen describes an Orchids in the Wild™ tour with the Orchid Conservation Alliance, a Zoom presentation on 4 September 2021. Photos by Mary Gerritsen

The Orchid Conservation Alliance (OCA), founded in 2004 as a not-for-profit, tax-exempt organisation, is focused on raising money to conserve land in orchid-rich regions of the world. The OCA has members from many different countries, including the USA, Canada, the UK, Australia, and Germany. Funds are raised by various means, such as direct donations, matching donations (through corporations and sometimes other non-profit organisations), sale of merchandise, and Orchids in the Wild™ trips. Since its inception, the OCA has raised over

\$500,000 to support the creation and expansion of seven orchid reserves, preserving over 3,000 acres of pristine, primary biodiverse orchid-rich habitats.

One of the most popular Orchids in the Wild™ tours is an 8–10-day trip up the Río Negro, one of the tributaries of the Amazon. The OCA has conducted this tour multiple times, usually in late May to early June. The tour begins in Manaus, where participants board the Otter, a specially-designed Amazon river-boat owned and operated by Gilberto Castro. Gilberto has been operating Río Negro tours for many years, often taking groups of botanical artists to paint the flowers of the flooded Amazon. He made some of his first trips (in a much smaller boat) with the famous botanical artist and conservationist, Margaret Mee, and some of her artwork of the flora of the Amazon forest decorates the walls of the Otter.



The Otter

The Otter can accommodate up to 17 tourists plus a crew of 4-6. All the staterooms have windows that look out on the river, and a generator provides power to recharge our camera batteries every day. There is a wonderful cook who brings aboard many provisions, but she also sources locally-grown fruits, vegetables, fish and other necessities from villages as we proceed up river. In addition to a spacious dining room, there is an upstairs lounge with tables, books about the plants (including orchids), fish, birds and mammals of the Amazon. In the afternoons and evenings, the photographers share photos, while the artists draw and paint the flowers and plants, and the birdwatchers sit on the deck with their binoculars. The lounge has a front deck with hammocks and a wonderful view of the scenery in front of the boat; in addition, there is a back deck with a wellequipped bar, where passengers can enjoy a glass of wine or a caipirinha (a Brazilian rum-like drink prepared with cachaça) in the evenings. There is no tv, no internet, no mobile coverage, no traffic, and no intrusion from the outside world, other than an occasional boat passing in the opposite direction.

The Río Negro is a blackwater (*igapó*) river, meaning that its waters are a deep brown colour, the result of organic tannins that have dissolved in the water. Despite the dark brown coloration, the water can be amazingly clear. The water is almost sterile, with a pH of between 3.5 and 6, and has minimal parasites and bacteria. The tannins and acidic pH also inhibit the proliferation of insect larvae, which translates to very few mosquitoes or other biting insects. In fact, on the tour that I joined, we did not see a single mosquito! The Río Negro floods annually, beginning usually in January and reaching peak levels

in May–June. In some areas, the depth of the water can be up to 40 feet above the forest floor. Thus, the journey of the *Otter* occurs during a time when the water levels are high above the forest floor, and the orchids, bromeliads, birds and other flora and fauna are at eye level.

At the beginning of the journey, the Otter heads downstream to where the black waters of the Río Negro meet the muddy waters of the upper Amazon, known as the Río Solimões. This striking two-toned confluence of the rivers is known locally as the Encontro das Águas. Here, the rivers do not mix readily, differing in density,



The flooded forest – the water level can be up to 40ft above the forest floor



Navigating the flooded forest in a flat-bottomed canoe

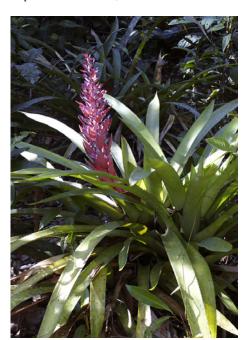
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and one can view the two colours snaking stubbornly alongside each other for up to four miles. The boundary is so striking it can be seen from space!

You can spend an hour or two photographing the mixing of the waters, before the Otter turns around and begins the peaceful journey up the Río Negro. Soon, the outskirts of Manaus disappear and the incredible flooded forest opens up before us. The boat continues upriver until the late evening, when it ties up next to some very tall trees. We can hear the calls of the birds, monkeys and other animals, and the incredible black sky with millions of stars twinkling above makes the evening unforgettable.

Each day starts out similarly. The passengers wake up early, have a quick cup of coffee or tea, then board one of



A large, handsome bromeliad

two flat-bottomed canoes. Each canoe has a specially equipped motor with a very long shaft and small propeller to facilitate navigation between the trees of the flood forest. We 'drive' in between the trees and look for orchids and other plants and animals. After several hours in our floating botanical garden, we return for breakfast. Often, the boat lifts anchor and heads to another part of the flooded forest. We sit on the upper decks, watching the forest float by, spotting toucans, macaws, parrots, weaver-bird nests, and gigantic bromeliads. Pink dolphins often follow in the boat's wake. Sometimes we stop in an area and many of the group go for a swim. The water is incredibly warm (probably 32°C) and no worries, no piranhas! Most days, we have lunch aboard the boat and continue upstream, although on a few days we disembark and explore small villages along the banks of the river. As evening approaches, we board the canoes again, and look for more orchids. Often, the black waters of the river are sprinkled with pink flower petals. As the sun sets, the views are unforgettable, and we make our way back to the boat for drinks and dinner. The entire trip is devoid of any stress whatsoever, and most find it one of most relaxing and visually pleasing vacations they have ever taken. Indeed, there are many participants who come back for a second, or even third tour.

We see hundreds of orchids, some of which, not unexpectedly, are not in flower. However, we find enormous clumps of Sobralia sessilis in full bloom, right at eye level. We spot the bright pink flowers of Cattleya violacea from the Otter several times on the trip, and manoeuvre the boat

> One of many large clumps of Sobralia sessilis, almost at eve level



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Polystachya concreta often covered the tree trunks

closer to get photographs. Nearly every day we spot large clumps of Prosthechea fragrans and Psh. vespa, large elegant flowers of Epidendrum nocturnum, and tree trunks covered with Polystachya concreta. Less common were unidentified Brassavola, Catasetum, Dichaea, Epidendrum, Maxillaria, Rudolfiella and Schomburgkia. Other species we only spot a few times, such as Epidendrum schlechterianum, Eríopsis altissimum, Maxillaria lutescens, and Scuticaria steelei. One of the most memorable evenings of the trip was to an area with tall, bare tree trunks, nearly every one bearing at least one, and often several, blooming plants of the spectacular Galeandra devoniana.

Not long before Margaret Mee's untimely death in a car accident, she travelled with Gilberto Castro with one specific objective: to paint the moonflower



Prosthechea fragrans



Epidendrum nocturnum



Eriopsis altissima

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Prosthechea vespa



The miniature Epidendrum schlechterianum

(Selenicereus wittii), a night flowering cactus. Each bud only blooms once in the early evening, and by the following morning, has closed. She stayed in a small cabin that Gilberto owned along the river, and there is a plaque there commemorating her last birthday held at the cabin. Plants of the elusive moonflower are not far from the cabin, and we make a journey specifically to see the plants, which were, not surprisingly, out of bloom.

Other lasting memories of the trip include afternoons where we fed squirrel monkeys bananas (they climbed right into the canoes), spotted sloths high up in the trees, photographed large green iguanas sunning on tree branches directly opposite the upper decks of the Otter. We had the opportunity to visit a small houseboat where wild pink dolphins come up to eat out of your hand, and to feed pirarucu housed in a large tank, a monstrous fish found in this part of the Río Negro. Towards the end of the tour, we visited a museum on the site of an old rubber plantation, which was an interesting educational interlude, giving once more the feel of what life might have been like in those times.

All too soon, our trip was over, but the memories will last a lifetime.

More about the OCA can be found on the website: orchidconservationalliance.org

The spectacular Galeandra devoniana

