

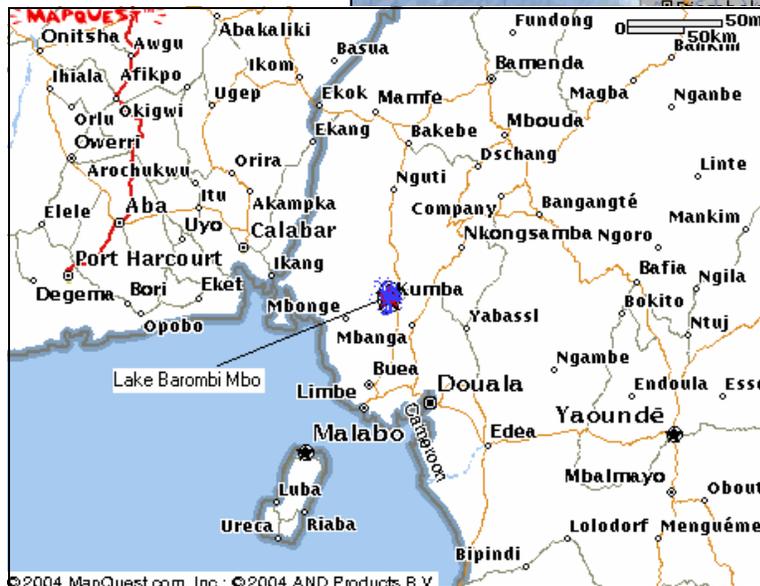
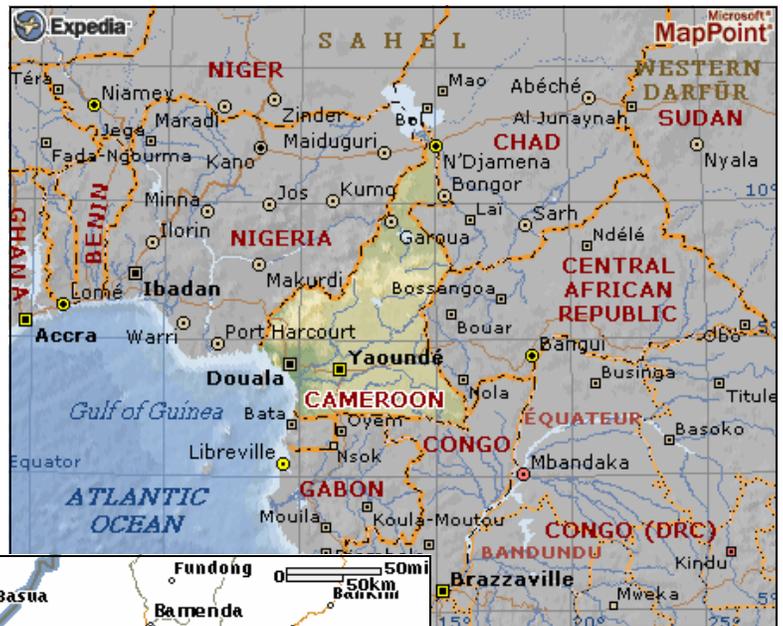
Species Profile: A Little Insight on Barombi Mbo, Cameroon

Midway up the African continent's Atlantic coast sits the country of Cameroon. Near the town of Kumba is Lake Barombi Mbo. Barombi Mbo is one of many crater lakes that dot the southern portion of Cameroon. These aptly named crater lakes are basins formed over thousands of years on what were once active volcanoes. Some of the crater lakes sit atop active faults. Over time, pockets of deadly gas form in these craters. Seismic activity releases the toxic vapor through the water and into the air. In 1986, one such toxic burst occurred in another Cameroonian crater lake, Lake Nyos. This event made headlines as mysteriously causing the deaths of 1500 people. Live stock, and native fauna that were in the

path of this killer cloud, also met a dismal fate. The native people in the area surrounding Lake Barombi Mbo are aware of this phenomenon and believe it to be a spirit they have named "Mammy Water". In years past, animal sacrifices were made to soothe Mammy Water. It is to note that the toxicity of Barombi Mbo

waters during these gas leaks must also be detrimental to aquatic life, but over the thousands of years of evolution here, life has not only survived, but thrived and diversified.

The native lake animals of Barombi Mbo are facing threats from a familiar group of menaces. Trees in the area are being harvested for lumber and to make way for agricultural operations. The small tributary that feeds from the lake is dammed up to supply water to nearby communities. Over harvesting the fish with modern netting is probably the main culprit for decreased cichlid populations as of



late. All is not bleak though. The native people are developing sustainable harvesting of the fishery, reseeding the area with native foliage, and the protection of the entire lake as a natural reserve is a step in the right direction to preserving the region.

Lake Barombi Mbo is a small lake only 2.5 kilometers wide, but 110 meters

deep. As there is no large current to turn the water, only the top portion (40 meters) contains acceptable oxygen levels to harbor vertebrate life. Still here, a rich mostly endemic group of cichlids (and other fish) have evolved.

Four endemic genera are found in Barombi Mbo. These include Konia with two species,

Species Profile: A Little Insight on Barombi Mbo, Cameroon

Myaka and Pungu with one representative each and Stomatepia with three. All of these fish are in the red list as critically endangered. The cichlids of Lake Barombi Mbo are thought to have originated from a Sarotherodon ancestor. This lineage has evolved over the past 10,000 years.

The cichlids:

Konia dikume (the local name for this



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species) is unique species in that when caught it hemorrhages due to high hemoglobin concentrations in its blood. Growing to a length of 12 cm, Konia dikume is a silver colored mouth brooder with faint vertical barring. This invertebrate feeder is one of the rarer cichlids to find of the Barombi Mbo species flock. It has the deepest range of the endemic cichlids able to enter depths low in oxygen to feed.



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Konia eisentrauti is also an invertebrate feeder native to Barombi Mbo. Known as "konye" to the Native people, Konia eisentrauti exhibits a differing adolescent vs. adult coloration and body shape. A broken black line runs from the gill plate to the tail

Myaka myaka is the only species from this region that I have personal experience with. Myakamyaka is the native name of this most unusual cichlid and the only fish in the genus. In the wild Myaka myaka is a pelagic planktivore. In captivity, the myaka greedily accepts anything that enters the water surface. Although the Myaka myaka only reaches 8 cm, the fish has a nasty disposition with it's



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Species Profile: A Little Insight on Barombi Mbo, Cameroon

own kind. I have housed my small colony of five animals with a variety of Victorian and Tanganyikan cichlids, as well as catfish. Aggression seems to be inter-specific. Myaka is somewhat molly shaped with sub-dominant fish sporting a silver body coloration. Dominant males will turn jet black in the posterior portion of the body and retain the gleaming silver in the head past the gill plates. The eye socket of Myaka myaka is red orange and really stands out against the body coloration. This fish is, in my opinion, the most attractive of the cichlids of Barombi Mbo. I have had my dominant male stake out breeding territory and shimmer to prospective females in the typical mouthbrooder manner.



Pungu, like Myaka, is another monotypic genus containing the lone species, *maclareni*. The unique characteristic of *Pungu maclareni* is that this cichlid is a sponge eater feeding on an endemic species of sponge (*Corvospongilla thysi*). The *Pungu maclareni* is abundant near shore and can reach 10 cm in length. This is another attractive cichlid in that the bright yellow body coloration contrasts nicely with the black blotched thorax and mid body line. Bright blue lips and edge tinge on the fins add the appeal of this mouth brooder.

Sarotherodon caroli grows to 18 cm. One of four *Sarotherodon* species from Lake Barombi Mbo, *caroli* exhibits differing feeding habits in its juvenile and adult forms. Young *Sarotherodon caroli* are carnivorous cichlids while the adult forms feeds mainly on suspended phytoplankton.

Another of Barombi Mbo's larger cichlids is *Sarotherodon*

linnellii. It too can reach in excess of 18cm. This species is characterized by a disproportionately large head. Males take on a metallic green hue, especially around the region of the head, while females are typically silver with mostly colorless fins. The Native people of the region refer to *S. linnellii* as "kippe".

Pungu maclareni

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Sarotherodon lohbergeri is a bi-parental mouthbrooder from Lake Barombi Mbo. The base coloration is a grey hue

with a black blotched mid-lateral line extending the length of the body. A slight yellow blaze runs



from the forehead along the base of the dorsal. The lips and caudal fin are tinged blue. *Sarotherodon lohbergeri* grows to

Sarotherodon

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Species Profile: A Little Insight on Barombi Mbo, Cameroon

around 11 cm and feeds mainly on filamentous algae and the minute life forms that inhabit within. This cichlid is known as leka keppe by the native fisherman of Barombi Mbo. Feeding strategy is similar to the mbuna of Lake Malawi and the Tropheus of Tanganyika.

Sarotherodon steinbachi is a light, nearly solid yellow cichlid reaching 11 cm. This schooling fish is a sand sifter, plunging the substrate for organic morsels. Known to the people of the region as "kululu", this is a rather unattractive fish in that it exhibits no bright coloration that make the family cichlidae so popular.

Stomatepia mariae is a substrate spawning egg layer from Barombi Mbo. At 12 cm *S. mariae* sports a copper flank divided by a solid black horizontal band, and a silver belly. Breeding males exhibit bright yellow fins. *S. mariae* is a predator on other species.

Stomatepia mongo is another mouth brooding cichlid from Barombi Mbo and recognizable by its long snout. *S. mongo*, which grows to 10 cm, is a tanned copper color turning bright silver when in breeding coloration. The elon-

gated shape of the *Stomatepia mongo* resembles some of the detritus feeders of Lake Malawi. I cannot confirm this feeding strategy as I have also seen this

body profile with piscivores as well. There are also conflicting reports of this cichlid being extinct in the wild however it appears that *S. mongo* is rare due to its habit of living in deeper waters and not extinct as some reports have suggested.

Stomatepia pindu is probably the most abundant cichlid from Lake Barombi Mbo we see in the aquarium hobby. Reaching 9 cm, this little mouthbrooder sports a solid jet black coloration when in good condition. Coloration at times range from this beautiful black, to dark purple, to a dull grey hue. *Stomatepia*



Stomatepia pindu
Oliver Lucanus
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Stomatepia mongo
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Species Profile: A Little Insight on Barombi Mbo, Cameroon

pindu is a piscivore. Young *S. pindu* exhibit a tilapia spot on their dorsal that vanishes upon adulthood.

Recently some of these cichlid species have been made available to the hobbyist for the first time. There is much to learn concerning husbandry associated with these animals. Lake Barombi Mbo and many of the crater lakes are small ecosystems especially susceptible to man's interference. It is hoped that by careful analysis and conservation measures, Barombi Mbo and the other crater lakes of Cameroon, can be preserved and the unique ecosystems be held intact for many years to come.

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