

Project Update: January 2018

Activities

After the authorisation has been approved by the mayor and village's leader in September 2017, data collections were carried out in October and November 2017 during the rainy season and in December 2017 and January 2018 during the dry season.

During the first field trip in October 2017, the study area was subdivided into 13 different parts. Six of these parts represented the shores surrounding the lake and were typically characterised by trees creating shade in these area and the other six are in the middle of each shore. The 13th transect is representing the catchment. These different transects were named from Zone 1 to Zone 13 and their GPS coordinates, physico-chemical parameters (turbidity, total of dissolved solids, conductivity, salinity, temperature, pH), habitats (specifically shoreline vegetation) were recorded.

On the first fishing day, fish were caught using an echo sounder and small mesh gillnets as for research purpose; weighed, measured, marked and then immediately released in the transect. On the second fishing day of the same month the same action has been repeated and data were recorded in a printed excel data base. The following results have been founded:

- GPS coordinate for each transect was: **zone 1** (N:4°66.160'; E: 09°41.234'); **zone 2** (); zone 3 (N:4°34.101'; E:09°24.019'); zone 4 (N:04°39.260'; E: 09°24.627'); zone 5 (N:4°39.709'; E: 9°24.737'); zone 6 (N:04°40.171'; E:9°23.686'); zone 7 (N:4°65.298'; E:09°40.288'); zone 8 (N:4°65.275'; E:09°40.701'); zone 9 (4°65.282'; E:09°40.845'); zone 10 (N:4°66.836'; E:09°39.750'); zone 11 (N:4°66.238'; E:09°41.845039'); zone 12 (N:4°65.517'; E:09°41.016'); zone 13 (N:4°40.168'; E:09°23.684').

During the Large rainy season (October and November 2017)

All 12 endemic species known have been reported (*Sarotherodon gallilaeus*, *Sarotherodon steinbachi*, *Sarotherodon lohbergeri*, *Sarotherodon linelli*, *Sarotherodon caroli*, *Stomatepia mariae*, *Stomatepia pindu*, *Stomatepia mongo*, *Konia eisentrauti*, *Konia dikume*, *Pungu maclareni*, *Myaka myaka*) and one *Labeo barbatus* sp. has been found.

A total of 682 fish have been caught, *Sarotherodon steinbachi* was the most abundant (429) following by *S. gallilaeus* (143), *S. mariae* (50), *S. linelli* (18), *S. lohbergeri* (11), *P. maclareni* (11), *K. eisentrauti* (5), *M. myaka* (5), *S. mongo* (3), *S. pindu* (2), *K. dikume* (2), and *Sarotherodon caroli* the less abundant (1).

S. gallilaeus was majority predominant in Zone 1; *S. steinbachi* was predominant in Zones 4 to 13 and *Stomatepia mariae* was predominant in Zone 3.

Zones 1 and 5 were where fish were most abundant.

Physico-Chemical parameters of the lake (temperature (t°C), Conductivity (μS), Salinity (mg/l), Total Dissolved Solids (ppms), turbidity (m)

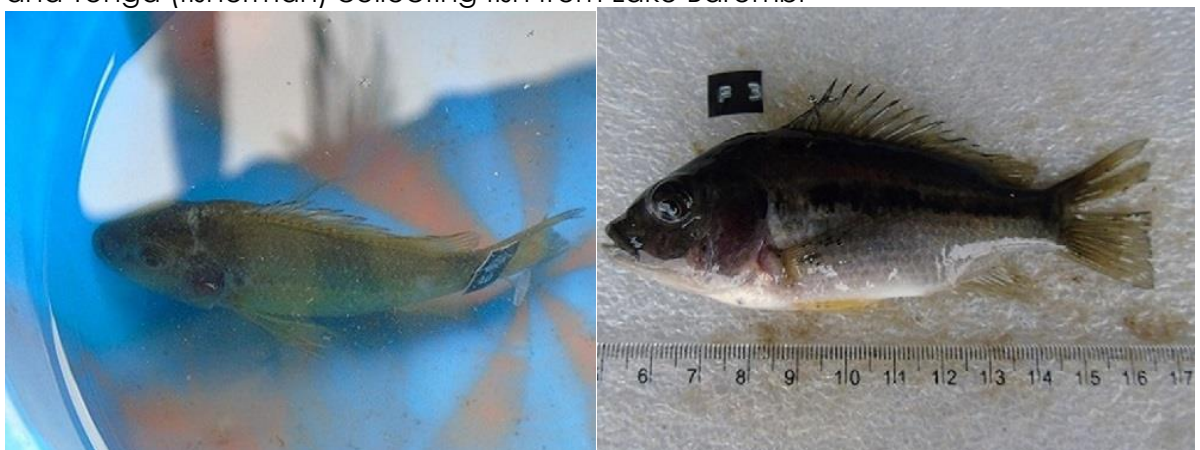
zone	pH:	t°C:	μS:	mg/l:	ppms:	turbidity:
1	7.78	27.65	47.75	33.5	23.6	1.5m
2	8.1	29.15	49.35	35.05	23.6	3.44m
3	7.92	29.95	49.7	35.2	23.6	3.35m
4	8.1	29.1	50.05	34.9	23.45	2.88m
5	8.16	29.15	49.95	34.85	23.45	2.82m
6	8.3	29.9	50.8	35.45	23.95	1.78m
7	7.55	27.8	50	35.2	23.5	3.13m
8	7.34	28.8	49.9	35	23.6	4.1m
9	7.34	29.1	50.1	35.5	23.6	4.81m
10	7.68	31.7	48.7	33	22	4.98m
11	7.61	30.8	48.9	34	23.6	4.95m
12	7.54	28.5	50.4	35.9	24	4.7m
13	7.86	27.8	50.6	35.7	23.6	0.5m

Five species of plants have been sent to the national herbarium for identification

In the next report, results obtained in December 2017 and January 2018 (dry season) will be given and compared to those in the rainy season even if field trips have been already carried out in the dry season.



Left: Fisherman putting net in the lake for fish collection. Right: Dominique Miegum and Tonga (fisherman) collecting fish from Lake Barombi



Left: Tagged fish from Lake Barombi. Right: Saratheroden lahbergeri.