

LTBP Dive Survey Training

by *William Darwall*

In July - October of last year, the Biodiversity Special Study (BIOSS) held the first training course in diving and underwater survey techniques. The course was held in Kigoma, Tanzania and scientists participated from all four riparian countries. Fifteen individuals successfully completed the course leaving dive survey teams in place in Burundi, Democratic Republic of Congo, and Zambia. Unavoidable circumstances have unfortunately left the Tanzanian team only two strong, but additional team members will be trained in a second course this Spring.

The course was run over a three month period with five weeks of swimming and dive training to BSAC Sport Diver level, four weeks training in a range of underwater survey techniques, and two weeks of field survey. The field surveys, conducted in Gombe Stream National Park and later in Nsumbu National Park for the Zambian team, provided opportunities for the teams to plan, conduct, and analyse results from habitat and biodiversity surveys.



'No Fatalities'

The course proved a great success and the instructors, Will Darwall, Paul Tierney, and Christian Furrer, were most impressed by the determination of all participants, especially those who managed to progress from being only able to swim underwater (in a downwards direction!) to BSAC Sport Diver level. Congratulations to them all! Some members of the course were already able to dive, BUT they benefitted greatly from the additional training in diver rescue techniques and diving theory.

Following the dive training, we were able to leave the confines of Kigoma Bay—fortunately before the massive input of diesel oil from TANESCO—and training was initiated in underwater survey techniques. The survey training was divided into 'habitat mapping' and 'fish censusing' with the manta board technique ("water skiing face down") proving very effective and most enjoyable. The teams were able to map the coarse distribution of



The LTBP Dive Survey Team

underwater habitats along the entire 16km of lake shore adjacent to Gombe Stream NP in one day, using the manta board.

Three short survey expeditions were mounted to conduct preliminary surveys in Gombe and Nsumbu NP. The two Gombe surveys were a great success, despite a few dramatic storms and a few worried faces in the boats, and the results will be available shortly in a BIOSS Technical Report. Paul Tierney has just reported back from a successful preliminary survey of Nsumbu with the Zambian team with all body parts still intact despite the large numbers of crocodiles and hippos disrupting the survey. Even Reuben Shapola refused to be towed behind the boat in most areas! The results of this survey will be available shortly as a technical report to LTBP.

A second training course is planned for 1998 and will specifically target training of national park staff for underwater surveying. It is planned that those already trained will join the new trainees in conducting further survey expeditions to national parks bordering the lake. Following this additional training and experience, the teams will be more self-perpetuating with current team members able to help train new recruits as necessary in the future. These teams will be a great asset to future management and should be seen as a regional resource available to all those working on the lake.

Participants in the training course: From Zambia: Charles Lukwesa, Godfrey Milindi, Maybin Mwenda, and Reuben Shapola; From Burundi: Felix Nicayenzi, Libere Ndayisenga, Alberic Rugirabirori, and Bernard Sinunguka; From DR Congo: Constantin Amundula, Alexis Bashonga, Patrick Kukiye Buda, and Donatien Muzumani; From Tanzania: Kimambo Fadhili, Robert Wakafumbe, and Deonatus Chitamwebwa.

William Darwall is a FRONTIER dive instructor and was contracted by LTBP to teach diving and underwater survey techniques.