



LERNZ newsletter

Learn about our research and recent happenings around our lakes and rivers

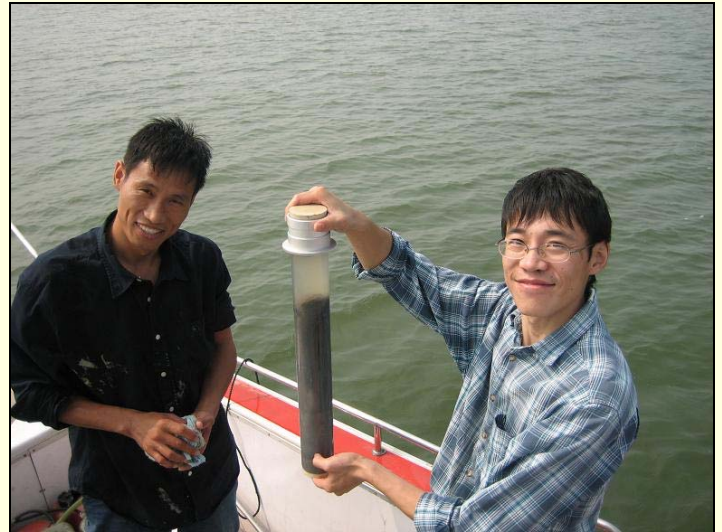
ASIAN EXPEDITION

As part of the commitment to the Global Lake Ecological Observatory Network (GLEON), David Hamilton, Chris McBride and Dennis Trolle attended the 3rd joint GLEON/CREON (CREON, Coral Reef Ecological Observatory Network) meeting in Taiwan. At this workshop they exchanged experiences with scientists from around the world - all with the common goal of building and deploying high-frequency monitoring buoys in lakes and coral reefs. As part of the LERNZ project, the University of Waikato plans to deploy a monitoring buoy in Lake Rotorua by the end of 2006. Monitoring data from this buoy, and other lake buoys that will follow, will eventually be available for viewing in real-time through the LERNZ webpage.



The GLEON team.

After staying one week in Taiwan, their journey continued to Nanjing, China. Here, David Hamilton gave several lectures at Nanjing University, and a workshop with Nanjing Institute of Geography & Limnology, Chinese Academy of Sciences (NIGLAS) focused on setting up an ecological model for Lake Tarawera. At the same time, plans were made for future collaboration between NIGLAS and the University of Waikato. While staying in China, Dennis Trolle and Chris McBride seized the opportunity to collect sediment cores from Lake Taihu (a lake with a surface area about 4 times greater than Lake Taupo). The samples will be analyzed for nutrient and metal content and the results will be part of Dennis' Ph.D. study, as well as a basis for a joint paper by University of Waikato and NIGLAS.



Associate Professor Guangwei Zhu (left) and Assistant Professor Zhang Lu from NIGLAS holding a sediment core from Lake Taihu

ANNOUNCEMENT

The New Zealand Freshwater Sciences Society Conference: Keeping it Fresh, will be held in Rotorua from the 27th to 30th November 2006.

This conference challenges you to seek fresh ways of maintaining and enhancing the value of freshwater environments. It is therefore a conference for scientists, resource managers and anyone who places value on our freshwater ecosystems. Papers will span a broad range of topics on all aspects of freshwater environments. 180 delegates are expected to attend the meeting from a wide range of backgrounds including local government, universities, science providers, iwi, DoC, MfE, consultants and environmental agencies.

Further information and an online registration form are available under:

http://freshwater.rsnz.org/conf%2006/conference_06.htm



New Zealand Freshwater Sciences Society

UPCOMING EVENT

Collecting Koi Carp at Classic Competition 4-5 November 2006

The World Koi Carp Classic is run by the New Zealand Bowhunters Society (NZBS) and is held over the first weekend in November. Up to sixty teams spend two days stalking the lakes, streams and rivers of the lower Waikato Region with bows in an effort to bring in as many koi carp as possible. In previous years up to 8.5 tons of koi carp have been shot in the two days. While the number of koi carp shot can vary depending on the weather conditions, it is still easily the single largest koi removal event in New Zealand.

The University of Waikato CBER group has been collecting length-weight data from fish brought in since 2000 and length-weight, gonad weight and sex data since 2002. In addition to this, there is a bounty of twenty dollars for each tagged koi carp brought in. Of the 1300 koi carp tagged in the Waikato River from 2002 to 2005, nearly sixty have been recovered to date.



Photo: Grant Tempero
Last years catch

The purpose of collecting this data is to monitor ongoing changes in population condition when koi carp are spawning, and the movements of koi carp. "Stormin Normin" also comes in - a tractor-mounted mincing machine - able to turn a 5 kg koi into mincemeat in about 3 seconds. This mincemeat is then supplied to the long queue of keen anglers who use it for fish burly. It's not unusual to see these anglers taking home 40 kg bins of the stuff.



Photo: Grant Tempero
"Stormin Normin" in action

Recent events:

Fish & Game 2006-07 Opening Day Angling Survey at Lakes Rotoiti, Okataina & Tarawera

October 1st was a very busy and successful day for both the 1073 anglers and a 26 member team of Fish & Game and the University of Waikato. The Opening Day surveys have been going on for up to 40 years on some lakes. The earliest records started in 1966 on Lake Rotoiti, and Tarawera followed in 1967. There are very few data-sets in the world that cover such a long time period, which makes these surveys increasingly valuable. On this year's opening day 1063 fish were caught, weighed and measured. The results of the survey show that the average catch rate as well as the size of fish was better than it was for the last three years, which points to a good start of the season.

The LERNZ website is online

The LERNZ website went online in August. It includes outlines of some of the research projects and their progress, profiles of the researches, practical information on lake restoration, cyanobacterial species and toxin lists, upcoming events involving LERNZ, and the beginnings of a lake restoration database. The lake restoration database will link to existing databases constructed by NIWA, Environment Waikato and the Ministry for the Environment and should provide a historic record of lake attributes, restoration activities completed, restoration activities underway and future restoration objectives. The website will still be extended within the next few months and this newsletter will be used to inform you about the changes.

Recent Publications

Duggan, I.C., Green, J.D. & Burger, D.F. (2006). *First New Zealand records of three non-indigenous zooplankton species: Skistodiaptomus pallidus, Sinodiaptomus valkanovi and Daphnia dentifera*. New Zealand Journal of Marine and Freshwater Research 40: 561-569.

Hamilton, D., Hamilton, M. & McBride, C. (2006). *Nutrient and water budget for Lake Tarawera*. CBER Contract Report 46.

Ryan, E.F., Duggan, I.C., Hamilton, D.P. & Burger, D.F. (2006). *Phytoplankton community composition in lakes: is trophic state or mixing more important?* New Zealand Journal of Marine and Freshwater Research 40: 389-398.

Photo: Deniz Özkundakci

For more information:
www.lernz.co.nz

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