Project Update: February 2015

The “Student training” objective, for which biology students were specifically chosen, has also been completed. Ten students attended two workshops, in which several issues were discussed, such as stream conservation, natural stream dynamics, and the risks and effects of climate change on freshwater ecosystems and the aquatic community.

The students that participated in the workshops have been separating aquatic organisms from samples collected in six streams, which vary in discharge and show natural changes in acidification. Discharge and acidification are two of the most important variables structuring aquatic macroinvertebrate assemblages in natural ecosystems, and are also the variables with highest potential of being altered by global climatic changes.

The “Project analysis” objective, which consisted of sorting macroinvertebrates and weighing organic material, is almost completed. The sample from the first period has already been sorted. A total of 56 taxa (mostly genera) of 28 families were identified, and discharge appears to be the most important variable. These results confirm the prediction that discharge has an important role on aquatic communities of tropical streams. However, if predictions of global climate change are correct, this variable is expected to present high variability over time in the tropics. The identification of the samples from the next period will continue in the coming months, to be able to make comparisons among periods.

Finally, several meetings with elementary and high school teachers have been coordinated, with the aim of clarifying the conservation issues that need to be addressed through outreach. The participation of four teachers, each with a group of at least 25 students, has been confirmed. These meetings will be conducted at the end of April 2015.

Left: View of one of the streams at La Selva, Sarapiqui Heredia. **Mid and Right**: Young enthusiastic students separating samples of aquatic macroinvertebrates.