Project Update: August 2016

Our fieldwork continued and we managed to explore 36 caves. More than 14 new caves were discovered and described for the first time during our expeditions. We also organised two social and practical events, aiming to involve people in our project.

Workshop and Expedition "Quebrada Roman"

We organised an expedition – workshop, named "Quebrada Roman" for interested cavers. The caving expedition "Quebrada Roman" was held during the Holly week in Costa Rica – 19th-26th March 2016 in the Roman Valley near the town of Rio Claro. Fourteen people participated in the expedition with different ages, background and professions, united by the interest in speleology and the curiosity to discover the underground world.

The goals of the expedition were presentation of the fieldwork methods for the Brunca Bats Project and a practical part - discovery and scientific research of new caves. During the expedition the cavers were introduced to the activities of the "Brunca bats" project – research of the cavedwelling bats and caves. After a brief presentation, all participants in the expedition were involved in the fieldwork. Because of the different experience and skills of every participant, we gave an introduction to the methods used for scientific exploration of caves. Some of the cavers were involved in cave survey – creating maps of the discovered caves. Others were trained in climbing, rappelling and advanced rope technique. After the first period of introduction, we formed a strong research team.

During this expedition we discovered, explored and surveyed 14 caves. Most of the caves were vertical – they could be reached only with a rope and special rope access equipment. In the caves we measured the ecological parameters – temperature and humidity. Presence of bats and species diversity was marked in special data sheets. Every cave was mapped and added to the national speleological database. The most interesting cave for us was "Gran Madre" – "The mother of all caves in the area". This cave was shelter for five bat species, including the rare sword-nosed bat (*Lonchorhina aurita*).

Workshop with students in Golfito

From 30th April to 1st May 2016 we organised a workshop for introducing caves and caving activities to interested people in the town of Golfito, Brunca region. The participants of the event were 10 students from all around the country, interested in different topics, closely related to caves – geology, biology and tourism.

The workshop aimed to present speleology as activity and create interest in exploring and protecting caves. The lecturers from Anthros Speleological Group aimed to convey the knowledge and the techniques of caving so the participants could safely cope with the challenges that exist in the cave exploring. Another important aim was to inspire people to collect valuable

information for scientific research and to pay attention to the protection of biological and geological richness that exists in the karst areas.

The event contained three parts – theoretical, practical and a caving trip. The first two parts were held on Saturday, and Sunday was reserved for the caving trip. During the theoretical part the most important aspects of the science about caves, speleology, were presented. Presentations about cave genesis, geology, caving history in Costa Rica, topography, bats and rope access techniques were held. Special attention was paid to the karst conservation. The project "Brunca Bats" and the ways to join the activities were presented during the workshop.

The practical part of the workshop was held in the town of Rio Claro. The participants in the workshop were introduced to the equipment and techniques for vertical progressing in caves. All of the participants trained single rope technique ascending and rappelling.

On Sunday the group had the chance to visit one of the most complex and interesting cave systems in the southern region – the Corredores cave. During the 1 hour hike up to the picturesque Corredores River, the participants looked through different rock formations and learned about the types of karst forms. Inside the cave the group observed various species of bats, cave fish, underground river and secondary karst formations (stalactites and stalagmites). As a result of the workshop, five of the participants were involved in the next field expeditions as volunteers.

Our next steps will be to maintain informational campaign among local people. We will also continue our field work and try to include as many caves as we can in the final report. We will prepare our final report and share it with the local authorities.



Left: The team during one of the days of the Expedition Quebrada Roman. Photo by Scott Trescott. Right: Researchers visiting a new cave. Photo by Cristian Castillo Salazar.



Left: Students visiting the Coredores cave during the Workshop. Photo by Karen Miranda Gamboa. Right: Sword-nosed bat, captured during the Expedition Quebrada Roman. Photo by Stanimira Deleva.



Left: Gustavo Quesada is making a presentation during workshop. Photo by Angel Ivanov. Right: Vertical practice with students during the workshop. Photo by Paula Ituralde Polit.