

## Report from Marine biology workshop 2012, Marsa Shagra, Egypt

Together with marine biologists Martina Balzarova and Stephan Moldzio we have prepared an interesting biological program. Participants learned the basics of ecology and conservation of coral reefs, followed by lectures on marine life, including the identification of essential fish families and groups of invertebrates. During the course there was biologically oriented dives or snorkeling where we observe sea life in its natural environment. Each member of a team had to perform individual research tasks. This was followed by a workshop where we told each other experiences and conclusions from observations. In our research missions were also included the extraordinary observations in the form of turtles, dolphins and sharks. These meetings are an unforgettable experience; the local reefs are in excellent health.

Marine biology is not just about diving and observation, but also about exploration. Therefore, we set off at night in the moonlight to catch plankton in the sea. Armed with lamps, nets and buckets we went into deeper water. Along the way we met nocturnal animals such as various kinds of crabs, fish or night predators. We lure plankton with light close to the surface. Surely you have noticed during night dives or night snorkelling that in no time the light is surrounded by clusters and large variety of worms and other tiny "particles". While we were taking samples we experience occasional yellowish or blue fluorescence made by planktonic organisms, these flashes are used to intimidate potential predators.

However, the true surprise was awaiting us. You had to inspect the plankton under a microscope. Unlike freshwater plankton, which is composed mainly with 3 groups of planktonic animals – water fleas (Cladocera), copepods (Copepoda) and rotifers (Rotifera), marine zooplankton is much richer. Various developmental stages of crustaceans, molluscs, tunicates, ctenophores, Cnidarians, worms and other animal groups, are looking up at you from every dish. Really lovely sight on these marine aliens, their shapes and colours are really incredible. And do not forget the phytoplankton - in the sea lives a great many small algae and cyanobacteria. And these tiny organisms are at the origin of the food chain and are extremely important for the healthy development of the marine life. Some participants was surprisingly shocked what lives in just small amount of water.

In Egypt there are several differently oriented marine research projects. We had the opportunity to participate during the course as well in the project of organization HEPCA - Turtle Watch. This project deals with the monitoring of sea turtles. These reports of individual turtles and their observations are so important and help researchers to obtain data that is used to evaluate existing turtle populations, their occurrence, migration and later assists with the determination of protective measures. After meeting with the sea turtle it is important to fill out a simple form where you enter the name of the location, depth, size of turtle, special characters, sex and as well what the animal was doing during observation.

To know the exact species is not difficult, the form contains a clear identification key. If you have photographic documentation, it is absolutely great because you can use it to identify specific individual. Using the newly made catalog of sea turtles, you can learn the exact name of a turtle you have met underwater. The catalogues consists of other interested information's about gender, observations on the occurrence recorded by other people and also tips for easy identification. The project runs for two years now, we were able to add data on 15 new individual turtles.

To protect the fragile and beautiful underwater world, it is important for people to understand the interconnectedness of the various components of the entire ecosystem. This is the main objective of the marine biology course. To save the oceans and their inhabitants, we all need to care about it, and we need to educate people about what threatens these wonderful places. Become an active guardian of our underwater friends.

