

## **Reef Check Italia Celebrates International Day for Biological Diversity**

*Divers of Subtridente Pesaro, scientists of Reef Check Italia Onlus and public institutions came together in June for the protection and conservation of biodiversity of the northern Adriatic Coastal Marine Environment.*

The northern Adriatic Sea gives the Mediterranean basin one of the highest rates of biodiversity on the entire planet. Promoting this fact and involving the public is crucial so that the legacy of this sea will be conserved and protected for our own well-being, and so that future generations can learn that it is a duty of every institution from the highest level to single citizens to keep this ecosystem healthy.

For these reasons Subtridente Pesaro, Province of Pesaro-Urbino, Natural Park of S. Bartolo and Reef Check Italia Onlus organized an event on June 8th & 9th, 2012, included in the activities promoted by the United Nations, to celebrate the International Day for Biological Diversity. During these two days, scientific reports and monitoring activities took place, involving a great number of citizens.

Prof. Roberto Danovaro, Director of the Department of Science of Life and Environment (DiSVA) at the Polytechnic University of Marche (UNIVPM), has summarized the results of more than ten years of research concerning the Census of Marine Life project. These data show that the number of species present in the Mediterranean basin is about 17,000, but this is surely an incomplete number. The diversity of microbial species is certainly underestimated and the deepest areas of the sea are still unknown.

As a whole, unfortunately, we are witnessing a decrease in biodiversity throughout the area. Nearly all major species belonging to the macrofauna, and best known by people in general, are in progressive decline. On the contrary the number of alien species, coming in particular from the eastern part of the basin, is constantly increasing.

These species are rapidly spreading westward because of the warming of Mediterranean waters and constitute a real threat to the biodiversity throughout the area. Throughout the Mediterranean there are clear and visible signs of overfishing, pollution, loss of habitat and biodiversity, primarily coming from impacts of anthropic origin. Along with climate change, these are the main threats against these unique ecosystems.

Following these assumptions dott. Carlo Cerrano, researcher at DISVA, and president of Reef Check Italia Onlus, has focused his attention on what constitutes a biodiversity "hot spot" inside the main "hot spot" of the entire Mediterranean basin. He has discovered that the northern Adriatic Sea, namely that portion of the northern basin enclosed north of the line joining the cities of Ancona and Zadar, fits within the criteria.

The current knowledge of the biodiversity of the whole Mediterranean region dates back to the distant past, to Greek and Roman times with Aristotle and Pliny. It continues through the findings of Linnaeus to the recent discoveries of J. Jacques Cousteau. Ecological research and the discovery of species in the Adriatic region come from detailed studies by various authors starting from the famous manual of R. Riedl. Several publications in recent years have tried to focus the interest of researchers and people in general on the northern Adriatic Sea. This change has produced very important scientific results because only through a deeper understanding of the biodiversity and dynamics that characterize this particular kind of habitat will it be possible to start the most useful initiatives to increase the value of an environment as precious as it is misunderstood and underestimated.

The day after this event was the start of the monitoring activities of the sea bottom and the beach in front of the natural park of San Bartolo. With the help of many volunteer scuba divers of Subtridente Pesaro and students at the high school Liceo Scientifico G. Marconi of Pesaro, began the first monitoring activity using the Marine Coastal Environment protocol of Reef Check Italia Onlus.

This activity has been very helpful in designing a map of this area that will be a useful baseline for future monitoring. Increased and regular monitoring in subsequent years will help us to collect a greater number of data. Free access of data on RCI's database for agencies will be a useful tool for conserving and protecting the resources of this area and ultimately of the entire Mediterranean basin.

For more information, visit the [Check Italia website](#).