PRESENTATION OF THE "STE BIODIVERSITY" PROJECT IN SHARM JULY 1-8th 2006

The project for monitoring the biodiversity of the Red Sea, called STE, or Scuba Tourism for the Environment, will start January 1st, 2007. A date that still seems far off, but six months is not so long, above all when there are so many small things to do that revolve around and are an integral part of the project.

The people running STE, which was started by the Marine Science Group, a research group of the Department of Experimental Evolutionistic Biology of Bologna University, within the preceding phase the beginning of the project itself, arranged a series of meetings with the leaders of dive training organizations SNSI and SSI, the environment support association Underwater Life Project, and Project Aware Foundation, that joined the initiative as supporting Partners. These four organizations will be the only reference for the diving centers that will want to collaborate.

In the week, $1^{st} - 8^{th}$ July, four meetings were held in Sharm el Sheikh dedicated to the operators of the sector working in that area. The meetings were arranged to explain the objectives of the project and the method for collecting data to those people who will be involved personally, or rather the diving centers and their staffs.

The first appointment, arranged by SNSI and the Underwater Life Project, took place on Sunday 2nd July at the college SNSI Holiday Service inside the Hilton Sharm Dreams. On the large patio in front of the reception of the college, the President of SNSI, Fulvia Lami and the President of ULP, Umberto Pepoli, welcomed the President of the Egyptian Underwater and Lifesaving Federation, Dr Mohammed Saleh, who, expressed his heart-felt compliments for the initiative, and guaranteed the support of the Federation for the project. The representatives of the diving centers WernerLau, Ventadiving, Mister Diver, Scubadreamer, Diving & Discovery, Goredsea, Aquamarine, Grand Bleu, Divex, the director of Geodia publishers, and the full staff of Holiday Service were also introduced.

The scientific leader of the project, Dr Stefano Goffredo, with help from Dr Patrizia Neri responsible for the statistical analysis of the Marine Science Group, explained the goals of the project and the role the diving centers will have to play in collecting data. After illustrating the questionnaire that will be given to divers, with his typical clarity, Goffredo went on to express the expectations of the university. The aim, he said, was to involve underwater tourists in the collection of data on sea biodiversity in the area of Sharm el Sheik, this will provide us with information on the state of the biodiversity and to give indications on the health of the reef in the diving points monitored by an environmental quality index. Furthermore, he added, these data will be useful for making a databank for the institutions and organizations in charge of the study, management, and maintenance of the Red Sea area resources.

The diving centers that decide to adhere to the project will have to choose, from among the diving points that they usually use, five/ten that will become "survey stations." For every survey station the diving centers, have to fill in the "questionnaire number zero", which is a technical questionnaire that includes the name of the dive, the geographical coordinates, the description of the underwater route, the profile of the dive, an estimate of the number of scuba divers that frequent that point in one year and at least one outside photo showing the selected place. If within the four years of monitoring, variations do not occur, such as the construction of a hotel or any other cause for environmental change, it will not be necessary to produce new photos; if, on the other hand there are changes, a new photo will be useful.

SNSI, SSI, Project Aware Foundation, Underwater Life Project and ASTOI will be responsible for supplying the scuba divers with the survey questionnaires, while Quark and Tuttoturismo will publish the questionnaire inside their magazines, as well as supplying updates during the four years of research.

Then Dr Goffredo went on to illustrate how to send the questionnaires to the university. "We have thought of two ways," he said, "the first one consists of a monthly pick-up at the diving centers by

an SNSI or ULP operator, who will collect the questionnaires and send them by co-mail, arranged by ASTOI. The second option involves the complete independence of the diving center that can send the questionnaires directly to the university, by courier, or take advantage of the turnover of their own staff."

"Taking part in this project," Goffredo concluded, "not only offers the customers and the diving center staff the possibility to know, by observing carefully, the extraordinary environment of the reef, but makes those less spectacular dives, generally called local dives, which are done when sea conditions are adverse, more exciting, thus providing a further incentive for the customers."

The diving centers that decide to participate, will also have their logo and name inserted in the official site of the project (www.steproject.org), in the newsletters that the university regularly sends to over 4,000 scuba divers, in the web sites of the partners and, as in the previous research, ASTOI, the association of Italian tours operators, will offer holiday prizes for those who have collected the greatest number of questionnaires.

A debate with those present, who asked for explanations and expressed opinions, concluded the first of the four evenings.

Scuba Schools International managed the second appointment that was held on Monday 3rd July at the Sprindiving club in the Sprinclub Tower village. Besides the representatives of Project Aware Foundation, Luigi Trevisi (coordinator) and Thomas Sobotta (regional manager Padi Europe), of SNSI, Fulvia Lami (president), of SSI, Stefano Stolfa (training manager) and of Underwater Life Project, Umberto Pepoli (president), who took part in all four the evenings, the following diving centers were present: Subex, Diving One, Sinai Divers, Sinai College, SSI Egypt and Sprindiving. Stefano Stolfa, representing SSI Italia, after having greeted the people present, called upon Dr Goffredo to speak, who, having concluded his report, answered the questions of the audience.

The last two evenings were arranged by Project Aware Foundation, the first one took place on Thursday 6th July in the conference room of the Mövenpick Hotel, while the second was on Friday 7th July in the Scubadreamer Diving College at the Dreams Beach Resort village. Both evenings were opened by an introduction from Luigi Trevisi, coordinator of Project Aware. Unlike the two previous ones, the reports in these last evenings were in English, considering that the majority of the operators were English, German and Egyptian. Numerous copies of the presentation, in English, were made available to all the people present.

Bolstered by the presence, in both evenings, of the instructors and guides belonging to the diving centers: Scubadreamer, Camel Dive Club, Diving World, Diving Discovery, Red Sea Diving College, Ocean College and Sinai Divers, Dr Goffredo answered numerous questions, which was a positive sign of the interest aroused. Several suggestions and requests for further explanations were put to the biologists during the lively debate that followed the presentation. Some proposed a certificate of thanks for the scuba divers that participate in the project, while the technical manager of Sinai Divers, Tony Le Voguer, suggested inserting a box in the questionnaire to tick if during the dive there are signs that people have touched the corals with their hands. The latter suggestion was judged to be very interesting by Dr Goffredo.

The Questionnaire

The questionnaire for collecting the data is not a just a questionnaire but a useful memo to store and consult at the moment of need. Let's take a look at it.

First of all, the classical A4 format, therefore large and easy to read. On the cover is a vertical picture of a turtle feeding off alcyonaria growing on the remains of a wreck in Jolanda Reef, one of the more coveted diving points. At the top of the picture appear the logos of the Egyptian Ministry of Tourism and the Egyptian Tourist Authority, the Ministry of the Italian Environment and the University of Bologna. On the middle left hand side is the Marine Science Group logo, while on that right are those of: Project Aware Foundation, SNSI, SSI and Underwater Life Project. On the bottom left there are the names of the two magazines that sponsor the project: Tuttoturismo and Quark, while in the middle we find that of ASTOI. Opening the first page we find something new

with respect to the questionnaire of the previous project, Diving for the Environment. This takes up two sides of a page, not only devoted to the scuba divers, but to all those people who want spend a vacation in the Red Sea, although, to tell the truth, the indications that appear here should be applied always and everywhere. As you will have realized we speak of environmental education; nine cartoons illustrate things to avoid, such as feeding the fish, using excessive weights, picking up shells or other souvenirs, etc, and they also invite people to inquire about the place and the customs of the country to visit, to avoid tour operators that do not comply with certain standards, to minimize the use of fresh water, and not to use boats and crews that fail to observe the rules on safeguarding the environment. A careful read of these small but important suggestions is certainly useful to all of us. The centrefold is entirely devoted to the pictures of the organisms to be monitored, over sixty different species, from sponges, to madrepores, echinoderms, molluscs, crustaceans, and so on up to sea mammals. A small, but very important, part is devoted to negative situations that we would never want to see, but that unfortunately exist, that is to say, broken, dead, silted up, bleached corals, in short, situations in which humans often play a negative role. Collecting data on the stress of the reef will be useful to monitor over time possible signs of recovery, and to study necessary protective measures. The next page is the scientific questionnaire, after the initial part, devoted to personal data and information about the dive (name of the point, depth, temperature, type of environment etc), we find the names, common and scientific, of the species to be identified. A series of boxes allow the presence and the abundance of the organisms to be signalled; for instance: "the moray, how many have you seen? One, three, or more than three." This information will be useful to estimate with a certain precision, in a determined diving point, by tracing all the sightings, the likely presence and abundance of this or another organism. On the back we find a page with all the names of the tour operators associated with ASTOI. The part to be sent to the university is obviously only the page regarding the scientific questionnaire, which can also be photocopied, while all the other parts, environmental education and photos, are useful to keep for consultation. The questionnaires will be available in Italian and in English.

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