

## EDITORIAL

**A tribute to Lucia Mazzella (1947–1999)**

On June 25 of 1995 Lucia Mazzella passed away in Ischia (Naples) after a long illness at the age of 52. Lucia was born in Ischia and for her entire life she was deeply tied to her native island and to the sea that she loved far beyond her professional involvement and attitude.

Up to her very last days she was heading the Laboratory of Benthic Ecology of the Stazione Zoologica 'A. Dohrn', which she coordinated since 1986, as well as acting as Editor-in-chief of *Marine Ecology*, that she held since 1989.

Lucia headed for many years a group of young scientists, as well as undergraduates, PhD students and Post-doc fellows who moved their first paths into science thanks to her encouragement, advice and supervision. The three of us, Editors of this special issue, belong to that group and would like to pay a tribute to Lucia with this dedicated *Marine Ecology* issue on 'Advances in seagrass research' and remember her with an introduction to her scientific and human profile.

Lucia's relationships with the Stazione Zoologica of Naples dated back to 1973, when she got a position as researcher at the Benthic Ecology Laboratory, located in the island of Ischia. The staff of the Benthic Ecology Lab at that time was composed of few young scientists, and since the beginning Lucia, together with her colleagues Francesco Cinelli and Eugenio Fresi, started to develop pioneering ecological studies focusing on structure and zonation pattern of benthic communities along environmental gradients (mainly light and hydrodynamics) in hard bottoms and seagrasses (Cinelli *et al.* 1977). She initiated in those first years a series of important international collaborations with several Italian and foreign scientists, such as F. Boero, M. Pansini, R. Pronzato, J. Ott, C.F. Bourdoursque, G. Giraud, in the framework of the so called 'Posidonia project' which lasted for a long time and had a topical moment in the organization of the Second International Workshop on *Posidonia oceanica* beds held in 1985 at the Ischia Laboratory.

In the Benthic Ecology team Lucia initially developed an expertise on benthic diatoms and macroalgae, with special attention to seagrass epiphytes (Mazzella & Ott 1984), a research interest that she continued to pursue up to the last years of her professional life (Mazzella *et al.* 1994; Mazzella 1999; De Stefano *et al.* 2000). Seagrasses soon became the research field in which she concentrated her efforts and received a wide international recognition, organizing a multidisciplinary research approach and considering different hierarchical levels. Of great importance,



**Fig. 1.** A portrait of Lucia Mazzella in 1980 during her first visit to the Marine Biological Laboratory of Wood Hole (MA, USA).

for her initial impetus on seagrass research, was the participation to an international research team, headed by Randall Alberte, during various summers at the Marine Biology Laboratory in Woods Hole (MA, USA) (Mazzella *et al.* 1981) (Fig. 1). Randy also became one of her best friends and scientific collaborator.

As coordinator of the Ischia Benthic Ecology Lab, Lucia promoted the participation of the Lab's team to the first research projects on seagrass ecology funded at European level (ENVIRONMENT and STEP frameworks). The most relevant scientific contributions of those very active and creative professional years were mainly on the dynamics and production of the plant (Buia & Mazzella 1991; Buia *et al.* 1992; Zupo *et al.* 1997), on the structure and functioning of the associated communities (Mazzella & Russo 1989; Mazzella *et al.* 1989, 1992), and on seagrass eco-physiology (Mazzella & Alberte 1986; Kraemer *et al.* 1997; Modigh *et al.* 1998).

These studies, often conducted on a long time scale, led to the identification of the most appropriate biological

tracers for long-term monitoring of natural and human-mediated changes in seagrass ecosystems, which are nowadays still pursued in our Lab.

Lucia recognized, before many other ecologists, the importance and the potential role of the molecular biology approaches for the study of ecology and conservation of seagrass systems. In her last years she endorsed this new research line and approach at the Stazione Zoologica, focusing on population genetics and molecular phylogeny of seagrass species (Procaccini *et al.* 1996; Procaccini & Mazzella 1998; Procaccini *et al.* 1999), building up new lab facilities in Ischia for molecular ecology, and organizing a highly echoed international course held in Ischia in 1992 on 'Biology of seagrasses: from molecule to the ecosystem' co-directed with R. Alberte (Fig. 2) and also with the participation of the world's seagrass leading authority, Prof. Cornelis Den Hartog (Fig. 3).

As a well known expert on biodiversity at different hierarchical levels, Lucia was designated in 1992 as Italian representative of the European network on marine biodiversity (MARS).

Lucia was also very concerned about the social role of ecologists and of the economic implications of their research, and she was one of the promoters of marine protected areas, both in the island of Ischia, as well as in Antarctica, at the Italian base off Terra Nova Bay, where she had the opportunity to work within the Italian Antarctic Programme (PNRA) in the austral summer 1993–1994 (Gambi *et al.* 2000) (Fig. 4).

Lucia's professional activity was not only devoted to research improvement and international exchange but also to education and training, both at national and inter-



**Fig. 2.** A group photo of participants at the course 'Biology of Seagrasses: from molecule to ecosystem' at Ischia in 1992. Lucia is in the right corner; seated in front of her is Prof. R. Zimmermann (USA), next to her Prof. S.A. Shepherd (Australia), and behind her Prof. R. Alberte (USA) and Prof. J. Romero (Spain). Most of the students are, today, well known scientists on seagrass biology and ecology.



**Fig. 3.** Lucia Mazzella and Prof. Cornelis Den Hartog at Ischia in 1992 in occasion of the course 'Biology of seagrasses: from molecule to ecosystem'.

national levels. This resulted in the training of a number of undergraduate and PhD students, in the organization of several courses and workshops in coastal benthic systems and seagrasses. As one of the senior scientists of the Stazione Zoologica, Lucia was also involved in the life of our Institution acting as a staff representative within the Scientific Advisory Board.

Last but not least Lucia was deeply dedicated in the conduction of the Journal of the Stazione Zoologica, *Marine Ecology*, as Associate Editor and then as Editor-in-chief. She was well aware of the need for the Journal to undergo a renewal and restructuring process, and she was willing to promote the process (and knowing her strong determination, we are sure she would have succeeded), but the illness prevented her desires and greatly reduced her energies and priorities in her last years.

Lucia was a very reserved and sincere person with a strong and charismatic personality. Her firm determination was proverbial among colleagues, as well as her uncommon willingness to overcome any kind of apparent difficulty at work and in life, conveying such energy and



**Fig. 4.** Lucia Mazzella together with Roberto Cervellati, head of the Italian Antarctic Expedition, at Terra Nova Bay (Ross Sea, Antarctica) during the austral summer 1993–1994.

feeling to colleagues and friends. It is with this spirit that Lucia faced the illness.

Each one of us was strongly related to Lucia, both professionally and personally. Her encounter has primed our scientific careers and oriented in a large extent our professional lives, and still today we are continuing on the path she outlined. The contribution that she gave to the knowledge of biology and ecology of seagrass systems is well recognized by the participation of many renown scientists to this special issue, many of whom have been collaborators and good friends of Lucia.

It has been a pleasure and a privilege to edit this special volume of *Marine Ecology* and we would like to warmly thank all the Authors for their contributions which cover various topics related to Lucia's scientific interests and skills. This issue, in fact, collates studies on long-term monitoring of seagrasses (Ardizzone *et al.*), on

spatial pattern of seagrass distribution and features at large (Short *et al.*; Kuo *et al.*) and small scales (Scardi *et al.*; Zupo *et al.*; Borg *et al.*), as well as studies on *P. oceanica* threatening and impact (Pergent-Martini *et al.*). Contributions on basic biological and ecological problems, such as modeling of plant production (Calvo *et al.*), eco-physiology (Elliott *et al.*; Martinez-Crego *et al.*, Sasil-Orbita & Mukai), and role of seagrasses for the environment and the associated organisms, with special attention to epiphytes (Mannino & Sarà; Pardi *et al.*, Richardson, del Carmen Arroyo *et al.*), were also included as these topics were within the broad scientific interests of Lucia.

The far reaching nature of the scientific contributions of Lucia and the fact that they have been largely cited and considered in most of the papers included in this special volume, testify her broad influence on this field and it is the best example of the long lasting implications of the scientific imprint of Lucia, which is still inspiring our research group.

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*The Editors*

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