



What are Marine Stations?

The first marine stations were established in the middle of the 19th century (the first is generally accepted as being the “Dune laboratory” built at Ostend In 1843¹). The term “Marine stations” was coined by Anton Dornh, the first director in 1872 of the research station in Naples, Italy. He used this term as he saw each individual site as analogous to a railway station, where a scientist could visit before returning or moving on to the next station².

Despite the long history and wide distribution of marine stations, there is no single agreed definition of a ‘Marine Station’. A range of definitions is provided below:

Facility	Definition	Source
Field Station	<i>A field station is a center of scientific research, conservation, education, and outreach that is embedded in the environment in a location that is usually protected and that serves both the local community and the larger scientific community. The research conducted at a field station is often focused on local environmental regions, but national and international scientific projects are common</i>	US National Research Council ³ .
Marine Station	<i>Marine stations.....are research and educational infrastructures for studying marine organisms and their environments, providing research support, field access and a wide variety of laboratory facilities, including instrumentation and climate control rooms</i>	Inaba (2015) ⁴

¹ Breyne, M & Seys, Jan & Lescauwae, Ann-Katrien & Debergh, Heidi & Haspeslagh, Jan & Lust, H & Mees, Jan. (2010). The world’s very first marine research station in Ostend (Belgium).

² Fantini, B. (2000). The "Stazione Zoologica Anton Dornh" and the History of Embryology. The International Journal of Developmental Biology. 44: 523-535.

³ National Research Council. (2014) Enhancing the Value and Sustainability of Field Stations and Marine Laboratories in the 21st Century. Washington, DC: The National Academies Press.
<https://doi.org/10.17226/18806>.

⁴ Inaba, K. (2015) Japanese marine biological stations: Preface to the special issue. Regional Studies in Marine Science. 2: 154-157. <https://doi.org/10.1016/j.rsma.2015.09.005>.



Facility	Definition	Source
Field stations and marine laboratories (FSMLs)	We define FSMLs as facilities or institutions that facilitate a significant amount of research (1) with a geographic focus, although the geographic focus may be very complex and involve access to widely distributed sites in addition to core areas; (2) on environmental processes, though we recognize that similar institutions may exist to serve other scientific disciplines; and (3) by multiple research groups, over sustained periods of time. Field stations and marine labs serve as platforms for multiple scientists and are not solely a vehicle for the research efforts of a single research team. They also support a range of activities leveraging that research such as education, outreach, and stewardship.	Billick et al (2013) ⁵
Marine Stations	“Marine field stations and laboratories provide access to a range of environments, including coral reefs, estuaries, kelp forests, marshes, mangroves and urban coastlines. These facilities are valuable platforms that support research and provide opportunities for educational outreach, such as graduate and undergraduate training, public education and citizen science. Many marine research institutions also support long-term observational studies that provide vital baseline data for understanding natural systems, such as natural variations and human impacts on ecosystem processes, enabling comparative studies that provide broad insights into ecological processes”	GOSR, 2017

⁵ Billick, I., I. Babb, B. Kloeppel, J. C. Leong, J. Hodder, J. Sanders, and H. Swain. (2013) Field Stations and Marine Laboratories of the Future: A Strategic Vision. National Association of Marine Laboratories and Organization of Biological Field Stations. Available at <http://www.obfs.org/fsml-future>.