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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 45058-2024

**Technical specification for survey and assessment of biological
resources in island and reef waters**

岛礁水域生物资源调查评估技术规范

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Table of Contents

1	Scope
2	Normative references
3	Terms and definitions
4	General requirements
6	Marine Biological Survey
6.1	Site Layout
6.2	Investigation Time
6.3	Survey Methods
8.1	Acoustic Investigation
8.2	Gillnet Survey
8.4	Fishing gear survey
9	Resource Assessment
9.1	Chlorophyll a and primary productivity
9.2	Phytoplankton
9.5	Intertidal organisms
9.6	Seaweed or seaweed
9.7	Fish eggs, larvae and juveniles
9.8	Swimming Animals

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the Ministry of Agriculture and Rural Affairs of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee on Aquatic Products Standardization (SAC/TC 156). This document was drafted by: South China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Guangdong Ocean University, South China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences Shenzhen Experimental Base of the Institute of Fisheries, Sanya Tropical Fisheries Research Institute. The main drafters of this document are. Liu Yong, Xiao Yayuan,

Wang Teng, Wang Xuefeng, Li Chunhou, Lin Lin, Wu Peng, Chen Guobao, Liu Yu, Ma Zhenhua, Zou Jian, Huang Xiaolin. Technical specifications for survey and assessment of biological resources in island and reef waters

1 Scope

GB/T 45058-2024 is the Chinese technical specification for surveying and assessing the biological resources of island and reef waters. The waters around islands and reefs are ecologically distinct from open sea and from coastal shelf: they are shallow, structurally complex, dominated by seagrass, macroalgae and coral, and they hold a disproportionate share of the biodiversity and of the fishery, while being the hardest environment in which to sample consistently. The standard sets the general requirements and then the survey methods by component: the marine ecological survey covering the physical and chemical environment, the seaweed and seagrass survey with its site layout and in-situ methods, the coral and benthic surveys, the plankton and nekton surveys and the fishery resource assessment, each with the station layout, the sampling gear and procedure, the sample handling and the analysis; and then the data processing, the assessment of the resources and their status, and the survey report. It takes effect on 1 July 2025.

This document stipulates the general requirements for the investigation of biological resources in island and reef waters, including marine ecology, seaweed or seagrass, fish eggs, larvae and juveniles, and swimming. The technical requirements for investigation and evaluation of animals and other items as well as data archiving describe the corresponding verification methods. This document is applicable to the survey and assessment of biological resources in island and reef waters such as sea islands, coral reefs and rocky reefs.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 12763.1 Specification for marine surveys Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 island and reef Land surrounded by water and exposed above the water in the ocean, or rocks that are exposed above the water due to the tides.

Note. A general term for islands and reefs.

3.2 Island and reef waters The waters with relatively independent ecosystem characteristics within a certain range around islands and reefs (3.1).

3.3 biological resource in island and reef waters A general term for animals and plants in island and reef waters (3.2) that have development and utilization value.

4 General requirements

The biological resource survey of island and reef waters should include marine ecological survey, seaweed or seagrass survey, fish eggs, larvae and juvenile fish survey and swimming animals survey. investigation. The basic procedures, survey quality control, survey plan preparation, survey personnel and marine operations for the survey of biological resources in island and reef waters shall be in accordance with GB/T 12763.1 Regulations shall be implemented. The general provisions of the investigation shall be implemented in accordance with GB/T 12763.6. Underwater video surveys should be conducted by professionals with relevant diving qualifications, who should strictly follow the procedures during the operation. Safety.

6 Marine Biological Survey

GB/T 12763.10 Marine Survey Specification Part

10.Seabed Topography and Geomorphology Survey HY/T 082-2005 Technical regulations for coral reef ecological monitoring SC/T 9403-2012 Specification for marine fishery resources survey