

Paper for Consideration by SCUFN

Some Comments and Recommendations for Generic Terms' Cookbook

Submitted by:	SCUFN Members (Mike Coffin, Trent Palmer) and SCUFN Chair (Hyun-Chul Han), supported by SCUFN Secretary (Yves Guillam)
Executive Summary:	In the case of all quantitative expressions, definitions, and comments different from those specified in the existing B-6, it is necessary to state the reason or indicate a reference. As a result of the first review, 7 out of 42 generic term definitions and 2 out of 27 harmonized definitions need to be reconsidered. Many generic terms still need to be reviewed and justified, and in particular, incoming SCUFN new members are expected to have a very good opportunity to review the definition of the undersea features, requiring their active participation.
Related Documents:	SCUFN35.1/03 Decisions and Actions.
Related Projects:	N/A

Introduction / Background

1. In 2020 (SCUFN33-03.2A), Vaughan Stagpoole (former SCUFN member) and Kevin MacKay (current SCUFN member) submitted the draft of the definition of generic terms to the SCUFN.
2. Definitions used in the Cookbook covers all generic terms currently used in the SCUFN including the terms for harmonization with other gazetteers.
3. The main reason for making the cookbook is to achieve the consistency of the decision-making process of SCUFN members and to make a guideline for the proposers to submit naming proposals using the correct generic term.
4. However, after 2020, the SCUFN Chair asked the members to review the draft of the cookbook and give their opinions, but no progress was made so far.
5. Therefore, in order to understand the overall contents of the cookbook and to ensure objectivity, the review was conducted with the SCUFN members in academic side (Mike Coffin) and other naming institutes (i.e., ACUF: Advisory Committee on Undersea Features of the U.S. (Trent Palmer).

Analysis/Discussion

6. Because of the limited time, it was not possible to precisely analyze all the generic terms in the cookbook, but the generally known contents were reviewed, and the results were given in the Annex.

Recommendations

7. All SCUFN members are encouraged to review the contents outlined in the Annex and provide further comments. In particular, new members who will serve as members from 2023 are requested to thoroughly review the generic terms of the Cookbook and actively express their opinions.

Justification and Impacts

8. Through this review process, the completed Cookbook is considered to be of great help to name the exact terms not only SCUFN members but also to proposers, so it is thought that it will achieve consistency in decision-making.

9. In addition, when the Cookbook is finally completed through a thorough review process over the next three or four years, it is possible to replace the generic terms currently listed in B-6 to secure the unity and clarity of the undersea feature names that are used worldwide.

Actions required of SCUFN

10. SCUFN is invited to
 - a. Note this paper.
 - b. Discuss the validity of the review of the generic terms of the Cookbook, and in particular, active participation of new members is required.

General comments

- Introduction (page 5): SCUFN terms and definitions URL address should be changed from <http://www.kosbi2.co.kr:8080/recommended> to <https://scufn.ops-webservices.kr>
- Duplicate words (page 6): delete one of “some some”
- Review of Generic Terms:
 - Provide references in the peer-reviewed literature or reliable sources such as NIWA for all definitions for each term. If not, it is necessary to come up with a way to justify the legitimacy of the quantitative parameters used in the definition such as checking the parameters of all existing generic features in the GEBCO Gazetteer.

Generic Term comments

1) BANK

- **Cookbook Definition**
An elevation of the seafloor at depths generally less than 200 m, but sufficient for safe surface navigation, commonly found on the CONTINENTAL SHELF or near the island
- **Cookbook Comments**
BANKs are commonly found on the SHELF but may also occur at the summit of SEAMOUNT or GUYOT. The definition is only for that part of the feature less than 200 m; therefore a BANK with one name may occur on a SEAMOUNT with a different name
- **Recommend Comments**
BANKs are found throughout the global ocean, both as entire features originating at as much as abyssal depths and as features surmounting other features such as GUYOT, PLATEAU, RIDGE, SEAMOUNT, or SHELF. The definition applies to both entire and surmounting features less than 200 m
- **Recommend Definition**
An elevation, typically located on a shelf, over which the depth of water is relatively shallow but sufficient for safe navigation (ACUF)

2) GUYOT

- **Cookbook Depth:** Any water depth over 1000 m
- **Cookbook Comments:** If shallow enough the flat top may be a BANK with a separate name
- **Cookbook Definition:** A SEAMOUNT with a comparatively smooth flat top
- **Recommend:**
 - Depth:** Guyot can occur less than 1000 in many places. Therefore, it needs to change to “Any water depth over 200 m
 - Comments:** If a water depth at the top of a feature is less than 200 m, it can be called a BANK
 - Definition:** Also called Tablemount, an isolated submarine volcanic mountain with a flat summit more than 200 meters below sea level (Britannica)

3) SEAMOUNT Chain

- **Cookbook Comments**
SEAMOUNTs must form a distinct chain of more than four features
- **Recommend**
It is not clear where the number four comes from. Therefore, if there are no references, then we need to check all seamount listed in the GEBCO Gazetteer and/or other Gazetteers to establish a reasonable number

4) SHOAL

- **Cookbook Depth:** less than 30 m, but in some cases may be as deep as 50 m
 - **Recommend Depth:**
Shoal should be a hazard to surface navigation. Tankers can have drafts as great as 28 to 35 m (<https://portconomicsmanagement.org/pemp/contents/part8/ports-and-energy/tanker-size/>). Therefore, depth need to be changed to “less than 50 m”
- 5) **SLOPE**
- **Cookbook Comments:** Should not be confused with the CONTINENTAL SLOPE
 - **Recommend Comments**
The definition of a SLOPE is the sloping region that deepens from a SHELF to the point where there is a general decrease in gradient. Here, SHELF means a CONTINENTAL SHELF. That is, SLOPE means a CONTINENTAL SLOPE. Also, continental rise cannot form if the subduction angle is very high such as Mariana Trench. Therefore, it is recommended to delete the comments
- 6) **TRENCH**
- **Cookbook Depth:** Greater than 200 m and can be greater than 10,000 m water depth
 - **Cookbook Similar Features:** Distinguished from TROUGH and BASIN by a characteristic asymmetric structure. If not related to a subduction zone, consider using TROUGH definition
 - **Recommend Depth**
The proposed depth needs to be clarified. To determine a minimum depth, the bathymetry of locations where plateaus are colling with a continent or arc needs to be examined (e.g., Hikurangi, Ontong Java, Ogasawara, Sunda, and Cascadia)
- 7) **TROUGH**
- **Cookbook Depth:** Any water depth
 - **Cookbook Similar Features:** If the feature is related to subduction zone consider TRENCH definition
 - **Recommend Depth:**
TROUGHs generally occur in deep water. They also encompass active and failed rifts, e.g., Adare, Bounty, Havre, Lena, Nova Canton, Princess Elizabeth, Solander. Some troughs are only a few hundred meters deep, e.g., Labrador, Man, Möller, Norwegian. Therefore, delete Cookbook “Similar Features” and examine the bathymetry at the given locations to determine the minimum depth
- 8) **CONTINENTAL SLOPE**
- **Cookbook Definition:** See SLOPE. This is wrong as the Continental Shelf comprise.
 - **Cookbook Comments:** Should not be confused with the SLOPE
 - **Recommend Definition:**
SLOPE mentioned in B-6 is the continental SLOPE. Delete them all except “See Slope” in the definition
- 9) **SEABIGHT**
- **Cookbook Definition:** See Valley
 - **Cookbook Alternative Term:** Valley
 - **Recommend Definition:**
SCUFN Generic working group already worked on this term and submitted a report. Please refer to the report for clarification