

Please note that this template is provided to facilitate information submission on a voluntary basis, only when the information provider finds this template appropriate. If the available information does not fit the format of this template, information can be submitted in another format, in consultation with the Secretariat.

Appendix

Template for Submission of Scientific Information to Describe Ecologically or Biologically Significant Marine Areas

*Note: Please **DO NOT** embed tables, graphs, figures, photos, or other artwork within the text manuscript, but please send these as separate files. Captions for figures should be included at the end of the text file, however.*

Title/Name of the area:

Kick'em Jenny Volcano

Presented by (names, affiliations, title, contact details)

Catalina Martinez, NOAA OER
RI Regional Manager, Narragansett, RI
(401) 874-6250
Catalina.martinez@noaa.gov

Main contacts:

Dr. Haraldur Sigurdsson, Professor Emeritus
URI Graduate School of Oceanography
(401) 874-6596
haraldur@gso.uri.edu

Dr. Steven Carey, Professor
URI Graduate School of Oceanography
(401) 874-6209
scarey@gso.uri.edu

Dr. John B. Shepherd
Seismic Research Unit
The University of the West Indies
St. Augustine,
Trinidad and Tobago
West Indies
(868) 662-4659
johnbshepherd@uwiseismic.com

Doug Wilson, NOAA Chesapeake Bay Office
(410) 267-5648
Doug.Wilson@noaa.gov

Abstract *(in less than 150 words)*

Kick 'em Jenny is a submarine volcano located 8km north of Grenada. The volcano is about 1300m high, and its summit is currently thought to be about 180m below the surface of the sea. As far as we know, Kick 'em Jenny is the only 'live' (likely to erupt again) submarine volcano in the Eastern Caribbean. It is also the most frequently active volcano in the region, erupting at least 12 times since it was discovered in 1939. The last eruption of Kick 'em Jenny occurred in December 2001. The volcano is currently at [Alert Level](#) YELLOW and there is 1.5km exclusion zone around the volcano.

Kick 'em Jenny is also a modern day demonstration of how the volcanic islands in this region were formed. With each submarine eruption deposits of volcanic material accumulate around the summit. All of the volcanic islands of the Lesser Antilles began as submarine volcanoes.

Source: <http://www.uwiseismic.com/General.aspx?id=27>

Introduction

(To include: feature type(s) presented, geographic description, depth range, oceanography, general information data reported, availability of models)

Location

(Indicate the geographic location of the area/feature. This should include a location map. It should state if the area is within or outside national jurisdiction, or straddling both. It should also state if the area is wholly or partly in an area that is subject to a submission to the Commission on the Limits of the Continental Shelf)

Kick'em Jenny is five nautical miles north of Grenada at latitude 12°17.96'North and Longitude 61°03.25'West.

Source: <http://oceanexplorer.noaa.gov/explorations/03kickem/welcome.html>

Feature description of the proposed area

(This should include information about the characteristics of the feature to be proposed, e.g. in terms of physical description (water column feature, benthic feature, or both), biological communities, role in ecosystem function, and then refer to the data/information that is available to support the proposal and whether models are available in the absence of data. This needs to be supported where possible with maps, models, reference to analysis, or the level of research in the area)

Between the 1960's and the late 1970's the depth to the summit of the volcano was approximately 180-190m. In the 1970's and early 1980's the depth to the summit of the volcano decreased to approximately 150m, reflecting the growth of a dome within the crater. This dome was destroyed during eruptions in the late 1980's and a survey conducted by the U.S.-based NOAA in March, 2002 revealed that the summit is currently 180m below the surface of the sea.

Until recently it was thought that Kick 'em Jenny had grown 46m (from 236m to 190m below sea level) between the surveys of 1962 and 1966. However, data collected from the two most recent cruises (March 2002 and March 2003) and a careful re-examination of data collected on even earlier cruises make it clear that the crater rim of Kick 'em Jenny has remained at the same depth below the surface (180-190m, within measurement uncertainty) since at least 1966. The major sequence of changes over the past forty years has been that a dome grew in the crater between 1976 and 1978. This dome collapsed in either 1988 or 1990

and there is now no trace of it left. There is in fact a new interior crater about 30 metres deep on the site where the dome used to be so it is more accurate to say that the active vent area of Kick 'em Jenny has in fact become deeper. Kick 'em Jenny has, therefore, NOT grown closer to the surface between 1962-2003.

Source: <http://www.uwiseismic.com/General.aspx?id=27>

Feature condition and future outlook of the proposed area

(Description of the current condition of the area – is this static, declining, improving, what are the particular vulnerabilities? Any planned research/programmes/investigations?)

Assessment of the area against CBD EBSA Criteria

(Discuss the area in relation to each of the CBD criteria and relate the best available science. Note that a candidate EBSA may qualify on the basis of one or more of the criteria, and that the boundaries of the EBSA need not be defined with exact precision. And modeling may be used to estimate the presence of EBSA attributes. Please note where there are significant information gaps)

CBD EBSA Criteria (Annex I to decision IX/20)	Description (Annex I to decision IX/20)	Ranking of criterion relevance (please mark one column with an X)			
		Don't Know	Low	Some	High
Uniqueness or rarity	Area contains either (i) unique (“the only one of its kind”), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features.				
<i>Explanation for ranking</i>					
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.				
<i>Explanation for ranking</i>					
Importance for threatened, endangered or declining species and/or habitats	Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.				

<i>Explanation for ranking</i>					
Vulnerability, fragility, sensitivity, or slow recovery	Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.				
<i>Explanation for ranking</i>					
Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity.				
<i>Explanation for ranking</i>					
Biological diversity	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.				
<i>Explanation for ranking</i>					
Naturalness	Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.				
<i>Explanation for ranking</i>					

Sharing experiences and information applying other criteria (Optional)

Other Criteria	Description	Ranking of criterion relevance (please mark one column with an X)			
		Don't Know	Low	Some	High
<i>Add relevant criteria</i>					
<i>Explanation for ranking</i>					

References

(e.g. relevant documents and publications, including URL where available; relevant data sets, including where these are located; information pertaining to relevant audio/visual material, video, models, etc.)

<http://www.uwiseismic.com/General.aspx?id=56>

<http://oceanexplorer.noaa.gov/explorations/03kickem/welcome.html>

<http://www.volcano.si.edu/world/volcano.cfm?vnum=1600-16=>

http://volcano.oregonstate.edu/vwdocs/volc_images/north_america/kick.html

<http://www.uwiseismic.com/General.aspx?id=27>

Maps and Figures

<http://www.uwiseismic.com/General.aspx?id=27>

<http://www.volcano.si.edu/world/volcano.cfm?vnum=1600-16=>

Rights and permissions

(Indicate if there are any known issues with giving permission to share or publish these data and what any conditions of publication might be; provide contact details for a contact person for this issue)