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:

Deep Coral Reefs of Isla Roatan, Honduras

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

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Abstract (*in less than 150 words)*

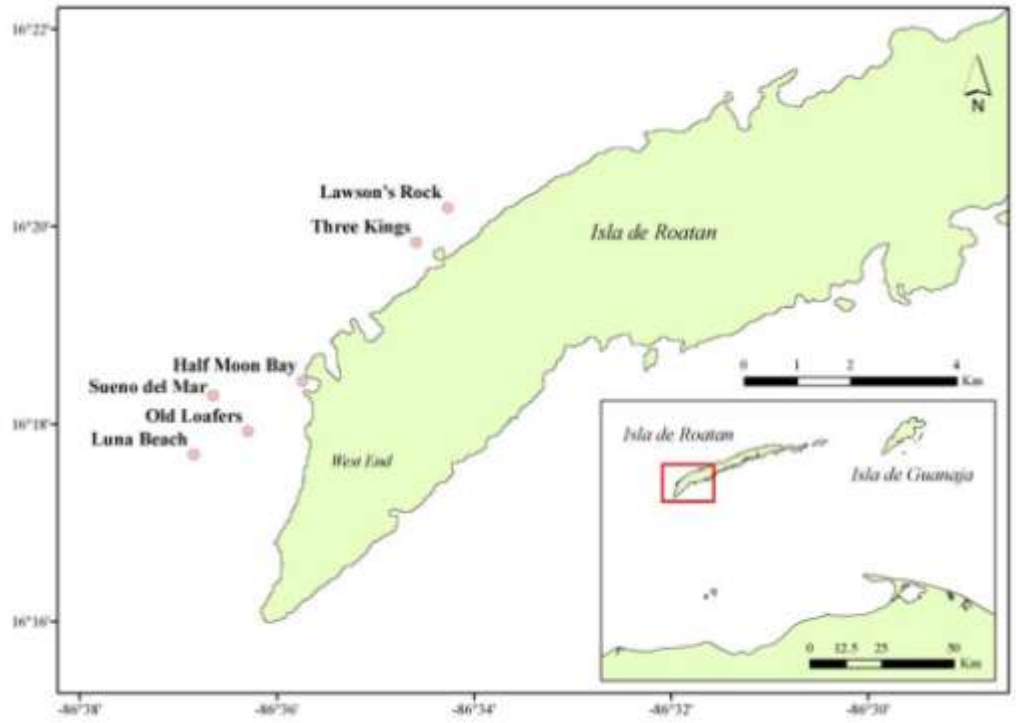
Large and abundant deep-sea coral reefs are present between 50 and 800 meters depth along the West End of Isla Roatan in Honduras in the Caribbean Sea. The reefs were explored and documented using the manned submersible *Idabel* as part of a series of expeditions called Deep-Coral and Associated Species Taxonomy and Ecology (DeepCAST) between 2010-2011. The expeditions found significant aggregations of the stony coral *Lophelia pertusa*, as well as many large (> 1 meter tall) sea fans in families Corallidae, Primnoidae, Ellisellidae, and Plexauridae. Colonies in most of these families are suspected to be several hundreds of years old. Branches of the large sea fans provide habitat for numerous associated species of shrimp, crabs, fish, and brittlestars. Habitat quality is excellent. Most sites are pristine. The deep-sea coral diversity and abundance rivals and likely exceeds well-known sites in the Gulf of Mexico.

Introduction

The feature type is a long (6-10 km) steep escarpment (> 1500 m relief) consisting of extensive basaltic hard bottom substrate of volcanic origin, with intermittent sand channels from nearby shallow bays. Large carbonate blocks punctuate the landscape, sheared the shallow coral reefs above. The depth range explored to date is 50-800 meters. Regional oceanography is characterized as drive by trade winds, with intense seasonal upwelling in winter. Data reported in the DeepCAST II Expedition Report (Etnoyer et al 2011). No models are necessary. Thousands of photos and many hours of videotape exist.

Location

The area is located along the West End of Isla Roatan in Honduras, from 50-800 meters depth. The feature lies within the jurisdiction of the Honduran government.



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)

The feature is a benthic hard-bottom feature, specifically a deep-water escarpment, which supports large and abundant deep-sea coral communities. The deep-sea corals provide habitat to numerous shrimp, crabs, brittlestars, and fish. Data to support the proposal include photographs and videos, a peer-reviewed NOAA Technical Memorandum, and preliminary statistical analyses of alpha ad beta diversity.

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?)

The current condition of the area is generally static, but there is some evidence of natural impacts from depredation by sea snails and urchins, and some evidence of human impacts from trash dumping.

A first phase of Deep-Coral and Associated Species Taxonomy and Ecology (DeepCAST) investigations is nearing completion in Spring 2012. There are some plans for multibeam mapping to determine the extent of the habitat, with subsequent remotely operated vehicle surveys to make sample collections for species identification.

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.				**X**
Explanation for ranking Only known live aggregations of the deep sea scleractinian *Lophelia pertusa*, and deep-sea octocorals *Corallium sp., Paramuriceidae and Calyptrophorinae* on Meso-American Reef. Other aggregations are likely to exist					
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.				**X**
Explanation for ranking The size (> 1m) and abundance of Paramuriceidae and Calyptrophorinae colonies suggests these contribute substantial larval resources					
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.			**X**	
Explanation for ranking *Corallium* spp. are listed as Appendix II in CITES.					
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.				**X**
Explanation for ranking Coral colonies are slow growing. Colonies observed are expected to be several hundred years old.					

Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity.				**X**
Explanation for ranking Seasonal upwelling off Honduras is fairly well documented. High biological productivity at the surface translates to enhanced rates of export of particulate organic matter to the benthos. Deep-sea corals rely on this surface derived export for food.					
Biological diversity	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.				**X**
Explanation for ranking Local diversity exceeds well-known sites in the nearby Gulf of Mexico.					
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.				**X**
Explanation for ranking Moderate coastal development, few observed fisheries impacts during surveys.					

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**
Add relevant criteria					
Explanation for ranking					

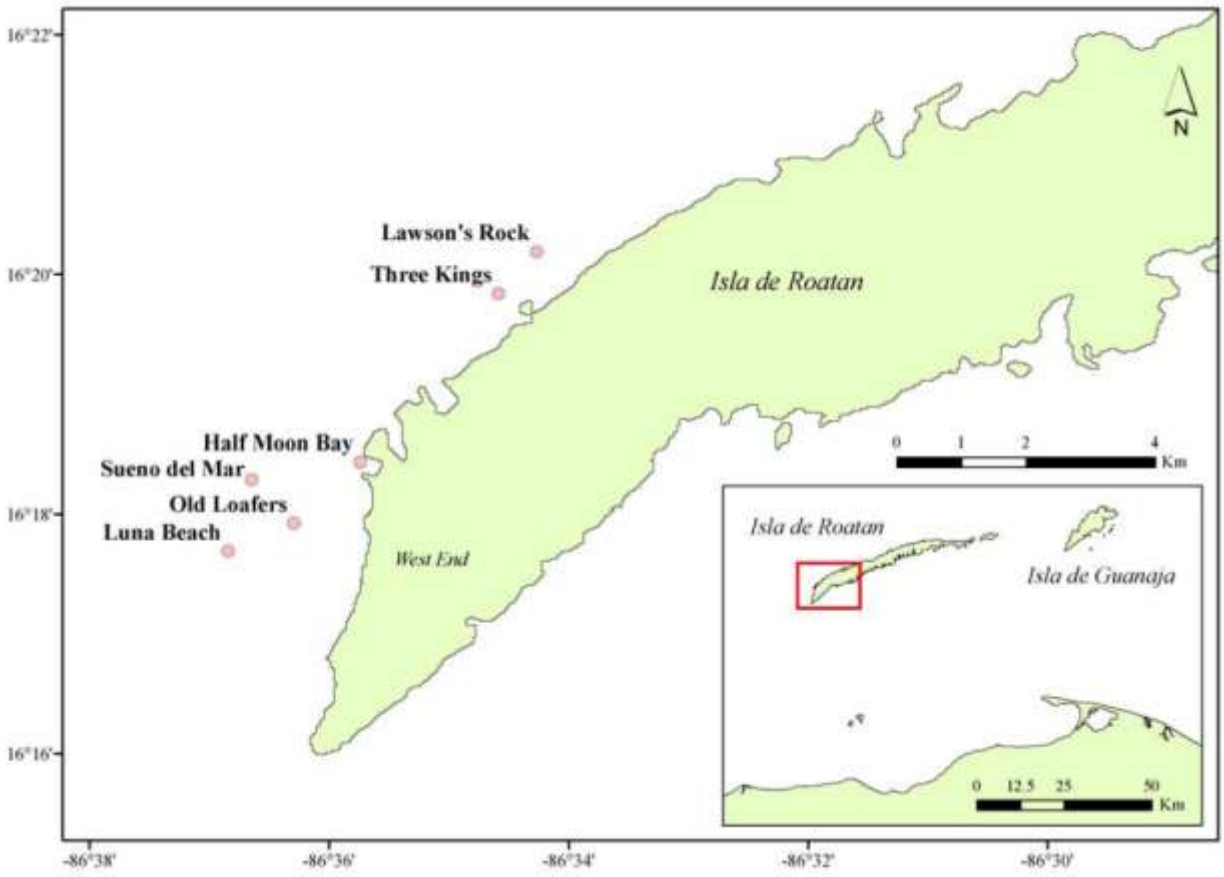
References

(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.)

Etnoyer, P.J.; T.C. Shirley; K.A. Lavelle. 2010. Deep Coral and Associated Species Taxonomy and Ecology (DeepCAST) II Expedition Report. NOAA Technical Memorandum NOS NCCOS 137. 42 pp

http://www2.coastalscience.noaa.gov/publications/ccehbr/detail.aspx?resource=vK2BK1w39BIxtj4oLrrehjLZEMzw9n4tqsmlCLVhOs8=

Maps and Figures



Photos available here:

http://www.flickr.com/photos/usoceangov/sets/72157627035721204/

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