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: Maritine Maya

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

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Abstract (*in less than 150 words)*

The *Maritime Maya Project 2011* was conducted from May 9-27, 2011, and was focused on the ancient Maya port of *Vista Alegre*. Located at the northeast tip of the Yucatan Peninsula – where the Caribbean meets the Gulf – the site is part of a wild and largely unexplored coastline that bore witness to one of the greatest seafaring traditions of the ancient New World. Maya traders once plied these waters in massive dugout canoes filled with goods from across Mesoamerica. Each port was a link in a chain connecting people and ideas, and supporting the ambitions of city and state.

The *Maritime Maya Project* is part of the larger *Proyecto Costa Escondida (PCE),* which began in 2006 under the direction of Dominique Rissolo and me. The goal, archaeologically speaking,

is to gain a better understanding of how the Maya of the north coast of the modern Mexican state of Quintana Roo adapted to this coastal environment over the millennia and how they were linked-in to those broader circum-peninsular trade routes.

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)

Vista Alegre and in Holbox Lagoon - Located at the northeast tip of the Yucatan Peninsula – where the Caribbean meets the Gulf.

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)

While *Vista Alegre* was occupied between 800 BC and the mid 16th century AD, the occupation was not continuous. In order to understand the ebb and flow of settlement over the millennia, the project has assembled an interdisciplinary team that includes a hydrogeologist, a geoarchaeologist, a coastal ecologist, and two archaeologists. By integrating environmental and archaeological sciences, the project, the first of its kind in the area, explores basic subsistence questions: how did the ancient Maya access potable water? And, what coastal ecological niches were available for them to exploit? In addition, through a coring program the project hopes to gain insight into the coastal geomorphology, whether past storm events can be detected, and if the sediments are favorable for the preservation of organic archaeological remains.

In terms of the ecological data, detailed surveys were conducted in the ancient harbors around Vista Alegre as well as on-site. More general ecological surveys were conducted slightly further away from Vista Alegre. These data will be compared to the faunal data from the archaeological record as well as the ecological data from the cores in order to discuss environmental change through time. We are also in the process of obtaining remotely sensed data so that we can extrapolate from our survey data to better characterize the broader coastal and near-coastal region.

The Maya of Vista Alegre were faced with the extraordinarily complex and harsh coastal environment of the Laguna Holbox, which is characterized by a mosaic of non-arable zones (mangrove, estuary, flooded forest, saw grass/palmetto). These zones were not ideal for maize agriculture, and for a traditionally agricultural society to not only exist but to thrive in this marginal environment required highly specialized subsistence strategies – involving perennial access to freshwater, exploitation of marine resources, and cultivation of niche plant species. In addition, little is known about the site's shifting alliances with inland and coastal

groups, or how such a site responded to the periodic hurricanes and tropical storms that ravaged the coast. To best contextualize this complex interrelationship between human (maritime) activity and geographical and biological features and events as expressed in the material record, we have adopted Westerdahl's (1992) maritime cultural landscape approach.

The boundaries of Vista Alegre are essentially defined by its geographic setting. An estuary encircles the majority of the island. The southern portion of the site includes mangrove, *tintal* (dyewood ecosystem), and tidal flats, and to the east and west lie expansive wetlands. The island measures approximately 385 m E/W by 630 m N/S and covers 16 ha. The site itself is in a forested area of relatively "high" topographic relief (< 2 m asl), certainly a relative metric along the north coast. In general, the overall physiographic setting of Vista Alegre is ideal for a port site with sheltered bays flanking the island (FIG 2). Shelter is an issue even inside the protected Holbox Lagoon, as we ourselves have been buffeted by the *nortes*, winds that often close the small, modern port at neighboring Chiquilá.

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.				
Explanation for ranking					
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive.				
Explanation for ranking					

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.				
Explanation for ranking					
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.				
Explanation for ranking					
Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity.				
Explanation for ranking					
Biological diversity	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.				
Explanation for ranking					
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.				
Explanation for ranking					

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.)

http://oceanexplorer.noaa.gov/explorations/11maya/logs/summary/missionsummary.html

Maps and Figures

http://oceanexplorer.noaa.gov/explorations/11maya/logs/summary/media/11maya_google_map.html

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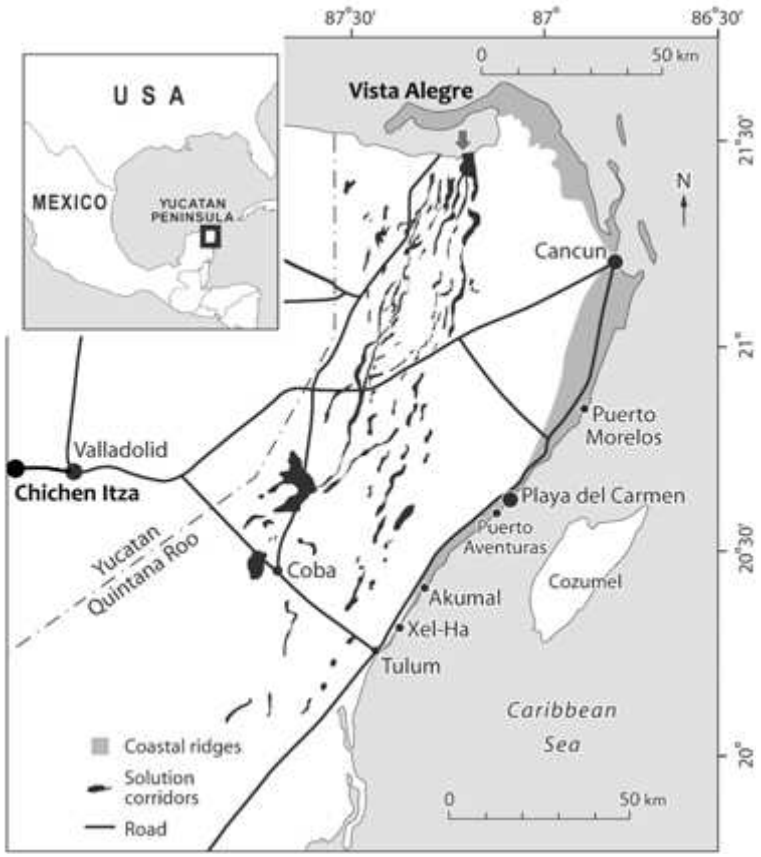

Location of Study Area in the context of the northeast Yucatan Peninsula (modified from Smart et al. 2006)

Satellite view of location of study area in the context of the northeast Yucatan Peninsula.

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