



World Heritage / Patrimoine Mondial

Name: Maria Paula

Surname: Alvarez echeverri

Nationality of author: Colombian

Language of thesis: English

Title of thesis: Carrying capacity for archaeological sites. Case study: La Chaquira, San Agustin, Colombia

Type of thesis: Master

Supervisor of thesis: Giulio Mondini

Institution of Supervisor: Politecnico di Torino / ITC I-LO

■ Please provide a 500 words abstract outlining your thesis; you may wish to attach a table of contents or any other relevant material:

The new developments of cultural tourism and the recognition of Archaeological sites as interesting touristic destinations have exposed them more and more to the pressure caused by touristic activity. Some of the effects produced by this activity accumulate imperceptibly, others are more evident, but all of them should be identified, evaluated, monitored and managed. In fact, cultural and particularly archaeological sites are fragile, plenty of non renewal values that should be protected. Preserving those sites requires technical expertise, economical investments, socio political support and management strategies based on sustainability.

Sustainable management is possible when all the dimensions of a site are taken into consideration, moreover, is achievable when systematic tools of management are used. Carrying Capacity Assessment (CCA) has been used as a systematic tool for evaluating the impact of tourism, specially in natural protected and coastal areas.

This assessment has rarely been applied to archaeological sites, this work contribute with the development of a carrying capacity methodology for archaeological sites and allows a better understanding of this flexible and complex management tool

In presenting carrying capacity concept and some of its applications to cultural sites, this document shows the utility of Carrying Capacity Assessment for evaluate and improve visitor management, establish managing strategies that regulate the sustainable use and contribute with the conservation of the values of a site.

The application of the methodology in La Chaquira which is located in the archaeological area of San Agustin (World heritage Site), in the south of Colombia, allows to have an integral comprehension of the conditions and situations that are affecting the site and diminishing the quality of visitor experience. It gives the opportunity for understanding the importance of involving stakeholders in the evaluation, defining indicators and standars and setting recommendations that can improve management effectiveness.

In order to understand how the assessment works, the first chapter presents an extended revision of the concept, how it evolated, the models and methodologies that has been developed about it and the process that it is required for its application.

The second chapter presents how the carrying capacity evaluation was applied in cultural sites like La Alhambra in Spain, and the archaeological sites of Copan in Honduras and Guayabo in Costa Rica through methodologies like Visitor Impact Evaluation and Limited Acceptable Change.

Finally the third chapter develops the CCA in La Chaquira which is an important rock art located in the south of Colombia, in the archaeological area of San Agustín. It presents the site and its situation, the indicators and standards used for the evaluation, the visitor assessment, the calculation of the carrying capacity and the recommendations.

■ Thematic Structure (max. 5)

<input checked="" type="checkbox"/>	Archaeological Heritage	<input type="checkbox"/>	Cultural Routes and Itineraries, Linear Heritage (Routes, Canals, Railways, Rivers, etc.)
<input type="checkbox"/>	Built Heritage	<input type="checkbox"/>	Natural Heritage and Environment
<input type="checkbox"/>	Earthen Architecture	<input type="checkbox"/>	Geological Heritage
<input type="checkbox"/>	Historic Centres and Cities, Historic Urban Landscapes	<input type="checkbox"/>	Forests
<input type="checkbox"/>	Military / Defence & Maritime Heritage	<input type="checkbox"/>	Deserts
<input type="checkbox"/>	Industrial, Technological, Astronomical & Scientific Heritage	<input type="checkbox"/>	Biodiversity
<input type="checkbox"/>	Vernacular Heritage	<input type="checkbox"/>	Marine and Coastal Heritage

<input type="checkbox"/>	Modern and Contemporary Heritage	<input type="checkbox"/>	Mountain Heritage
<input type="checkbox"/>	Cultural Landscapes	<input type="checkbox"/>	Rock-Art
<input type="checkbox"/>	Underwater Heritage / Archaeology	<input type="checkbox"/>	Research on Materials Conservation and Mechanics
<input type="checkbox"/>	Museums, Museology & Moveable Heritage	<input type="checkbox"/>	Education, Training, Youth and Volunteers
<input type="checkbox"/>	Documentary	<input checked="" type="checkbox"/>	Cultural Tourism & Ecotourism
<input type="checkbox"/>	Oral & Intangible Heritage	<input type="checkbox"/>	Heritage Legislation (National and International), Conventions, Charters and Declarations
<input type="checkbox"/>	Languages and Toponymy	<input type="checkbox"/>	Climate Change Impacts on Heritage
<input type="checkbox"/>	Genealogy and Heraldry	<input type="checkbox"/>	Restoration
<input checked="" type="checkbox"/>	Other: Site Management		