



**ECOTURISMO SUSTENTABLE EN LA LAGUNA DE BACALAR,
QUINTANA ROO, MEXICO**

**(SUSTAINABLE ECOTOURISM AT LAGUNA BACALAR,
QUINTANA ROO, MEXICO))**

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(The conference will be given in Spanish and paragraphs with a synthesis in English)

(First part)

It often happens that in this kind of meetings people coming from different professions have different understanding of some concepts, thus I will begin with some of them to make my participation as clear as possible for everybody. Thus, when talking about ecotourism we may understand the prefix eco in reference to ecology and tourism, a social activity

1. ECOTOURISM: it is a multidisciplinary term because it refers, as I already said, to two different fields of knowledge: natural sciences and social sciences.
2. MULTIDISCIPLINARY: it is a strategy for a better knowledge of the subject of research and it means the gathering of different points of view from various disciplines focused on that subject in order to obtain an overall idea of it. And that is the case of eco-tourism, a concept coming from ecology and tourism.
3. SUSTAINABILITY: The definition of this term in the Bruntland Report is quite well known and often cited:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." ("Our Common Future") And it was presented by the World Commission on Environment and Development (WCED) at the



Conference on Environment and Development held at Rio de Janeiro, Brazil, in the year 1992.

With this brief introduction, we need to focus our attention on Laguna Bacalar, that has been the object of many investigations thanks to the good will and interest of Jerry Kaster, who with his effort and, no doubt of many others, gathered us here today. Laguna Bacalar will be our main concern for the two days that we'll be at this wonderful place, because we know that this world class lagoon, as it has been baptized by River, is being seriously threatened by different impacts that can be classified under the next two aspects:

- a) natural
- b) social

In respect to the first ones, I am convinced that the problem is man, because global warming and climate change, although they may have an original natural cause, they have been accelerated due to the enormous amount of gasses and other polluting materials that have been thrown into the atmosphere since the Industrial Revolution and the growth of population, as the main two causes.

At this Symposium we have the opportunity to go further investigating deeper in the causes of the problem and the impacts that may affect the well being of the lagoon, and once again I'm convinced that they obey to human behavior.

**The Kentucky and Virginia Resolutions
(March 1799)**

“United we stand, divided we fall. Let us not split into factions which must destroy that union upon which our existence hangs.”



Patrick Henry

(Patrick Henry used the phrase “United we stand, divided we fall” in his last public speech, given in March 1799, in which he denounced The Kentucky and Virginia Resolutions. And he also said: “Let us not split into factions which must destroy that union upon which our existence hangs.”) And I totally agree with this idea, moreover when our planet and all sorts of life are threatened by personal interest, selfishness, lack of understanding, and many other negative attitudes.

As the “**Manifesto for life. In Favour of an Ethics for Sustainability**” establishes in its two first articles:

“1. The environmental crisis is a crisis in civilization, a crisis in the economic, technological and cultural model that has plundered nature and subjugated alternative cultures. The prevailing civilization model degrades the environment, looks down on cultural diversity and discriminates against ‘others’ (indigenous peoples, the poor, women, black people and the South), while it gives priority to an exploitative form of production and consumerist lifestyle that have become dominant in the globalization process.

2. The environmental crisis is the crisis of our times. It is not an ecological crisis, but a social crisis, the result of a mechanistic worldview which, while ignoring the biophysical limits of nature and the lifestyles of different cultures, is accelerating global warming on our planet. The cause of the environmental crisis is anthropogenic rather than natural. It is a moral crisis in political institutions, legal apparatuses of domination, unjust social relations and an instrumental rationality at odds with the fabric of life.”

This document was agreed among the 35 participants (many of them people from governments, international organizations, academic institutions, NGOs) gathered in the Symposium on Environmental Ethics and Sustainable Development, held in



Bogota, Colombia, in 2002 under the sponsorship of UNDP, ECLAC and The World Bank.

I only wanted to mention these two articles out of the 54 that the Manifesto has.

An rethinking about the object of our Symposium, it is important to find who are the actors that participate in this environmental degradation:

- a) authorities,
- b) inhabitants,
- c) Businessmen and
- d) Visitors.

It is important to focus the above mentioned impacts from the following

- a) social,
- b) cultural,
- c) environmental,
- d) technical and
- e) economic aspects.

(Second part)

It is also necessary to make clear if the words **environment** and **human** are different with no link within them, and obviously we'll find that one wouldn't exist without the other; moreover, one relies upon the other:





Our goal is to protect and preserve Laguna Bacalar: **What for?** The answer could be among the following:

- a) It's a beautiful place.
- b) It's a cultural and natural heritage of great value.
- c) It provides jobs and food.
- d) It contributes to the well being of **Planet Earth, Our Only Home.**

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The purpose of protecting and preserving the Laguna would be then:

- e) It's considered a wonderful landscape,
- f) It contributes to our cultural identity,
- g) It provides a way of living,
- h) It is one of the few reservoirs of sweet water on Earth and

sweet water is nowadays one of the most scarce resources necessary for survival of life on the planet.

Perhaps there may be some of you who consider one of these purposes more important and some others may consider all of them as an important. I am among the last ones, due to many reasons that I will try to explain briefly. At the end I will submit to you an alternative that seems to be adequate and feasible.

1. The scenic value of this Laguna is very important for those who live here and have no problem in solving their needs. It is also important for those visitors who become astonished with this natural beauty. Life of human beings wouldn't be the same if there were not sunsets, moonglows, lightning storms or a peaceful quiet evening in front of the lagoon. That's the way nature expresses herself.



2. But for those with no jobs and dying of starvation, which is true in many continents of our world and in some regions in Mexico and in the world, the need to have an income and survive could find the answer in fishing at the lagoon, or working in aquatic sports or ecotourism, for example.

3. Besides the ancient indigenous maya origin, that gives a cultural and social profile to Laguna Bacalar that becomes also a marketing value for ecotourism.

4. And another feature as important as the others is that, as I have already mentioned, our planet is under one of the worst environmental crisis that we have ever had, and one of the worst threats is that sweet water for the survival of humankind has diminished due to pollution and it won't be enough for all living beings in less than fifty years.

LAGUNA BACALAR

NEGATIVE ASPECTS	<u>POSITIVE ASPECTS</u>
<p data-bbox="467 1283 589 1314" style="text-align: center;"><u>IMPACT</u></p> <ul style="list-style-type: none"><li data-bbox="224 1339 367 1371">a) social,<li data-bbox="224 1392 386 1423">b) cultural,<li data-bbox="224 1444 483 1476">c) environmental,<li data-bbox="224 1497 464 1528">d) technical and<li data-bbox="224 1549 412 1581">e) economic	<ul style="list-style-type: none"><li data-bbox="854 1297 1295 1371">a) It is a beautiful place (scenic value)<li data-bbox="854 1392 1341 1644">(It belongs to a complex of lagoons in which Laguna Bacalar is an outstanding place due to its beauty, with the different shades of water that has given to this place the name Laguna of the Seven Colors, and an outstanding cenote called "Cenote Azul" with a depth that has been calculated approximately in 90 meters)<li data-bbox="854 1665 1247 1738">b) It gives us Jobs and food (socioeconomic value)<li data-bbox="854 1759 1360 1833">c) It gives us identity (cultural value)<li data-bbox="854 1854 1360 1892">d) it helps to preserve the



	environmental equilibrium on Earth (ecologic value) e) It is fresh water.
PEOPLE RESPONSIBLE	PEOPLE AFFECTED
1) inhabitants	1) inhabitants
2) businessmen	2)) businessmen
3) authorities	3) authorities
4) visitors	4) visitors

If we remain selfish and pretend to protect the Laguna and deny the Others the right to enjoy what they originally owned and what they need to satisfy their own quality of life or the means to survive, we will be planting the seed of anger with the negative consequences that may abort our goals.

But that has been the history of human beings for centuries, as it is said in the “Manifesto for Life”, we have always tried to impose a way of being or thinking on other cultures and peoples, when we naturally are heterogeneous species, with different cultural, economic, religious, etc., lifestyles.

Unfortunately, the global crisis we are suffering in our days is the consequence of that short view, that selfishness, as if we were not on the same ship, called Planet Earth, where anything we do, no matter if we are throwing bombs on Irak or sending poisoned gasses to the atmosphere in Argentina or in Mexico, or throwing garbage in this Laguna or at the sea in Majahual, we all be affected.

But there is always hope and the recent elections in the United States of America are a worldwide example of how a people with great courage and wisdom elected a black President who REPRESENTS A CHANGE, an



alternative, with the hope that a different mentality coming from other culture, other origin, may alleviate the situation in their country and on our planet.

Why can't we follow this example and do the same in our tiny place, where many of you live and as important for others who don't live here. My proposal, then, is based on two aspects:

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- a) let's open our minds and our hearts for those who are committed with the preservation of life on Earth, protecting the Laguna Bacalar,
- b) let's chose a viable, feasible, sustainable way, that may be ecotourism, a strategy for development that has proved all over the world to be efficient in protecting natural and cultural resources and alleviate social needs.

But let's do it correctly, in a humble manner and give us the chance to hear other voices, of the people surrounding us, of the scientists who are here today and of all the ones who are willing to contribute in a way or another to achieve the same goals that have gathered us today at Laguna Bacalar and, I may insist, because the good will of Jerry Kaster. Thank you River.

And, of course, I have in mind, the:

- > native community,
- > the actual inhabitants of Bacalar,
- > the authorities,
- > businessmen,
- > academic institutions,



And all of those who, in a way or another, want to participate in the same goals.

I consider that to begin with these actions, we may choose those prior situations that are polluting the Laguna Bacalar and will affect the quality of the place and may impact its productivity, its scenic value and, at the end, the quality of life of all the living creatures that can be found around or in the neighbouring areas. And I'm not only speaking on behalf of people but animals and plants.

And my last question is: **Why ecotourism, sustainable tourism? The answer is that this discipline joins all what has been mentioned before and, because lack of time, I will present in the following resume:**

- 1) human and natural are not divorced, they rely one on the other.
- 2) to protect and enhance Laguna Bacalar.
- 3) by means of a sustainable activity as ecotourism,
- 4) because ecotourism comprehends all the sustainable requirements established for any activity,

How can we do it

First: being aware of the main components:

ENVIRONMENTAL	SOCIAL
Sweet water place	Residencial area
Flora and fauna habitat	Recreational area
Environmental services	Site for fishing

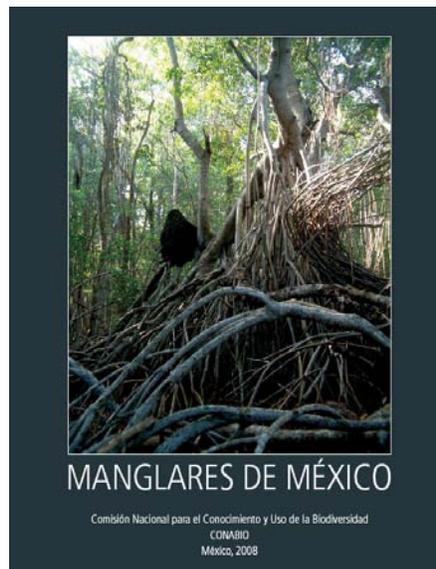


Área of shelter for different species

Cultural heritage

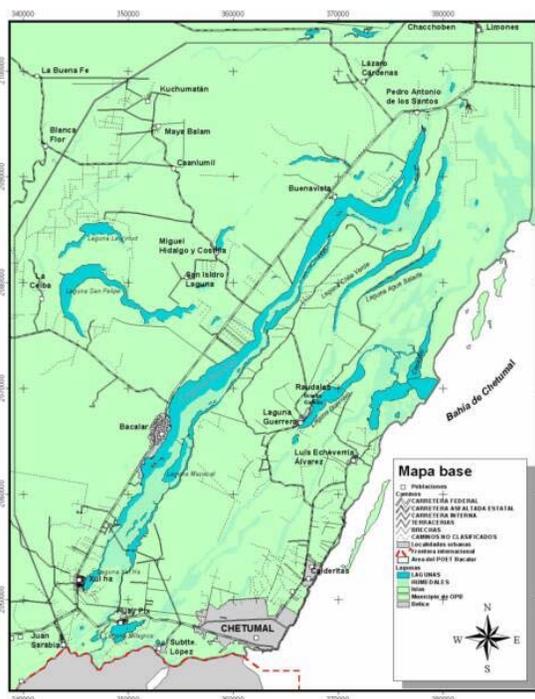
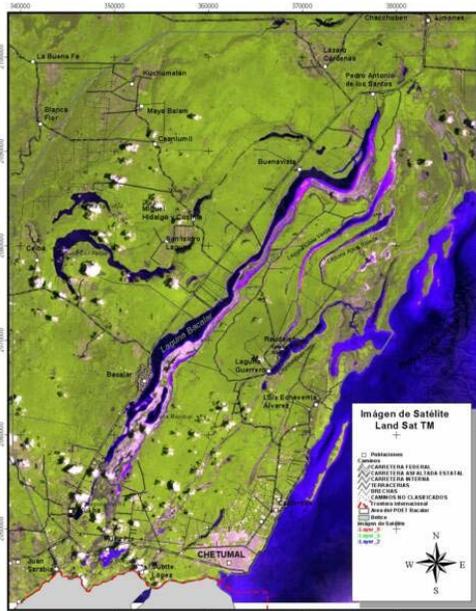
And particularly, because Laguna Bacalar is an important area for mangrove flora and for the fauna that lives there.

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Another important natural feature of this place is the quality and characteristics of the soil, because we surely know that the Peninsula de Yucatán has a calcareous soil and water permeates it, beside the bending of it to the sea.

This town, the most ancient town in Quintana Roo, has been named after the maya word **Bak halal** because was founded at the side of the laguna and the meaning of its name is “Surrounded by reeds”, and when the Spaniards arrived, they built the **Fuerte de San Felipe**, to defend themselves and the place from English pirates and of the rebel mayan population.





And another fundamental feature is the human population with maya roots, dedicated mainly to agriculture in ejidos and fishing. According to the Commission for the Development of Indigenous Peoples (CDI), the following table shows the main data:

MUNICIPALITY OF OTHÓN P. BLANCO

TOTAL POPULATION:

208,164 (or 219, 763 according to the 2005 Census) (100 %)

MAYAS: 59,355 (28.5 %)

LANGUAGES: Spanish (the majority)

INDIGENOUS LANGUAGES: 21, 940 (9.98 %)

GENDER: Men (109,059) Women (110,704)

Sources:

- 4 Enciclopedia de los Municipios de México. Estado de Quintana Roo. © 2005. Instituto Nacional para el Federalismo y el Desarrollo Municipal, Gobierno del Estado de Quintana Roo
- 5 Comisión para el Desarrollo de los Pueblos Indígenas (CDI). 2002

I have been working for the last fifteen years, after I spent twenty two years working in the Escuela Superior de Turismo del Instituto Politecnico Nacional, with the methodology of my own called Ecoturismo TAP (Tourism Environmentaly Planned) Metodología para un Turismo Ambientalmente Planificado, * which is based on the following:



1) THREE CATEGORIES:

- a) **Multidiscipline,**
- b) **Participative planning,**
- c) **Sustentability.**

2) THREE PHASES:

a) **Social**: 1) legal basis, 2) socioeconomic diagnosis, 3) environmental education (ee)

b) **anthroponatural**: 1) anthroponatural land use, 2) carrying capacity, 3) environmental impact

c) **technical**: a) technology socially fair and environmentally feasible, b) market survey.

ETHICS: moral behavior of all the participants in any Ecotourism TAP Project.

I apologize for not giving more information about this subject but, I hope that with what I said at this presentation, may give you an idea of what it takes to accomplish this goal.

Finally, I want to insist that for preserving and protecting Laguna Bacalar, it is fundamental to work exhaustively with two main aspects:

a) natural and

b) social,

establishing a **Dialogue of Different Knowledges** including all the participants with the same rights to be heard and respected.



A discriminatory and segregationist attitude, would be a waste of time, resources and efforts and will lead us to no place.

Muchas gracias

(For more information about this and the author, you may go to [www. Ecoturismo tap.com](http://www.Ecoturismo tap.com) and to www.Jorge Chavez de la Peña.com sites)

- **Chávez de la Peña, Jorge. *Ecoturismo TAP. Metodología para un Turismo Ambientalmente Planificado*. Trillas. México. 2005. Reimpresión 2007.**
- **Chávez de la Peña, Jorge. *Diversidad cultural y ecoturismo*. Trillas. México. 2008.**

ANEXOS

(1. English, 2. Spanish)

1. Tourism is one of the world's largest and most rapidly growing industries; UNEP estimates that it generates 11% of global GDP and employs 200 million people. Wetlands are key targets for a large number of tourists - just think of the Everglades in the US, or Lake Titicaca in Bolivia/Peru, or the Great barrier Reef in Australia. But it is also true that the effects of uncontrolled tourism in natural sites, such as wetlands, can destroy the very resource base upon which it depends. And while tourism has the potential to bring great benefits to countries and play an important role in poverty reduction, it is too often the case that the economic benefits go to tour operators, leaving local communities, who depend on the natural resource base for their livelihoods, with few if any economic benefits.

The Ramsar Convention and tourism: over many years a number of projects either wholly or partly on the development of tourism/ecotourism have been funded through the Wetlands for the Future Fund and the Ramsar Small Grants Fund. More formally, the Convention has not as yet addressed tourism in



wetlands as a management issue. The first step has, however, been taken: at STRP 12 in 2005 it was agreed that considering *opportunities for development of sectoral guidance on the tourism/ecotourism sector* was an issue/sector that could be a potential focus for attention by STRP.

There is a great deal of interest within the Convention on the development of sustainable tourism in wetlands, and this Web page aims to help by taking a look at some of the many materials available on managing tourism. This page is a work in progress so please do not be surprised if it changes considerably over time.

The materials below includes a section on some of the **diverse guidelines** that have already been developed that can assist those involved in developing tourism at wetland sites in making informed decisions. There is also a section on **other publications** that provide **useful information and experiences** in sustainable tourism development. Here we also hope to **showcase tourism projects** at Ramsar sites and other wetlands. The last section identifies **useful Web sites** that are focussed on tourism.

Definitions: **tourism, sustainable tourism, nature tourism, ecotourism, and community-based tourism** are terms that abound in tourism literature and, in this quickly evolving field, what people mean when they use these terms is not always the same. Here are a few definitions/descriptions that are in circulation:

Sustainable tourism. *According to the World Tourism Organization **Sustainability principles** refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability. Thus, **Sustainable Tourism should:***

- 1) *Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural resources and biodiversity.*



2) *Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.*

2) 3) *Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.*

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Nature tourism has been simply defined by the **German Foundation for International Development** as *a form of travel to natural areas where the experience and appreciation of nature and natural phenomena is the prime motivation for visiting these places.*

Ecotourism has been defined by the **International Ecotourism Society** as *responsible travel to natural areas that conserves the environment and sustains the well-being of local people.*

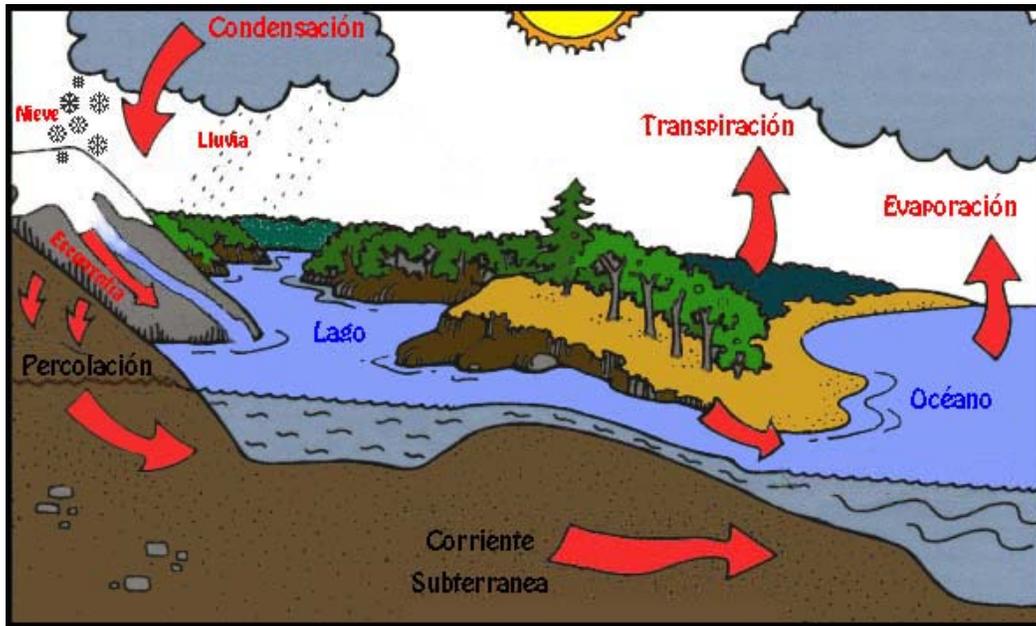
Community-based ecotourism has been defined by **WWF** as *a form of ecotourism where the local community has substantial control over, and involvement in, its development and management, and a major proportion of the benefits remain within the community.*

2. EL CICLO HIDROLÓGICO

Introducción

La circulación y conservación de agua en la Tierra se llama ciclo hidrológico, o ciclo del agua. (El agua existe en la Tierra en tres estados: sólido (hielo, nieve), líquido y gas (vapor de agua). Océanos, ríos, nubes y lluvia están en constante cambio: el agua de la superficie se evapora, el agua de las nubes precipita, la lluvia se filtra por la tierra, etc. Sin embargo, la cantidad total de agua en el planeta no cambia.)

(Cuando se formó, hace aproximadamente cuatro mil quinientos millones de años, la Tierra ya tenía en su interior vapor de agua. En un principio, era una enorme bola en constante fusión con cientos de volcanes activos en su superficie. El magma, cargado de gases con vapor de agua, emergió a la superficie gracias a las constantes erupciones. Luego la Tierra se enfrió, el vapor de agua se condensó y cayó nuevamente al suelo en forma de lluvia.)



a) El ciclo hidrológico comienza con la evaporación del agua desde la superficie del océano.

b) A medida que se eleva, el aire humedecido se enfría y el vapor se transforma en agua: es la condensación. Las gotas se juntan y forman una nube.

c) Luego, caen por su propio peso: es la precipitación. Si en la atmósfera hace mucho frío, el agua cae como nieve o granizo. Si es más cálida, caerán gotas de lluvia.

d) Una parte del agua que llega a la tierra será aprovechada por los seres vivos; otra escurrirá por el terreno hasta llegar a un río, un lago o el océano. A este fenómeno se le conoce como escorrentía. Otro poco del agua



se filtrará a través del suelo, formando capas de agua subterránea. Este proceso es la percolación.

e) Más tarde o más temprano, toda esta agua volverá nuevamente a la atmósfera, debido principalmente a la evaporación.

f) Al evaporarse, el agua deja atrás todos los elementos que la contaminan o la hacen no apta para beber (sales minerales, químicos, desechos). Por eso el ciclo del agua nos entrega un elemento puro.

g) Pero hay otro proceso que también purifica el agua, y es parte del ciclo: la transpiración de las plantas. Las raíces de las plantas absorben el agua, la cual se desplaza hacia arriba a través de los tallos o troncos, movilizandole consigo a los elementos que necesita la planta para nutrirse. Al llegar a las hojas y flores, se evapora hacia el aire en forma de vapor de agua. Este fenómeno es la transpiración.
