

MAY 8/2007

MÉXICO

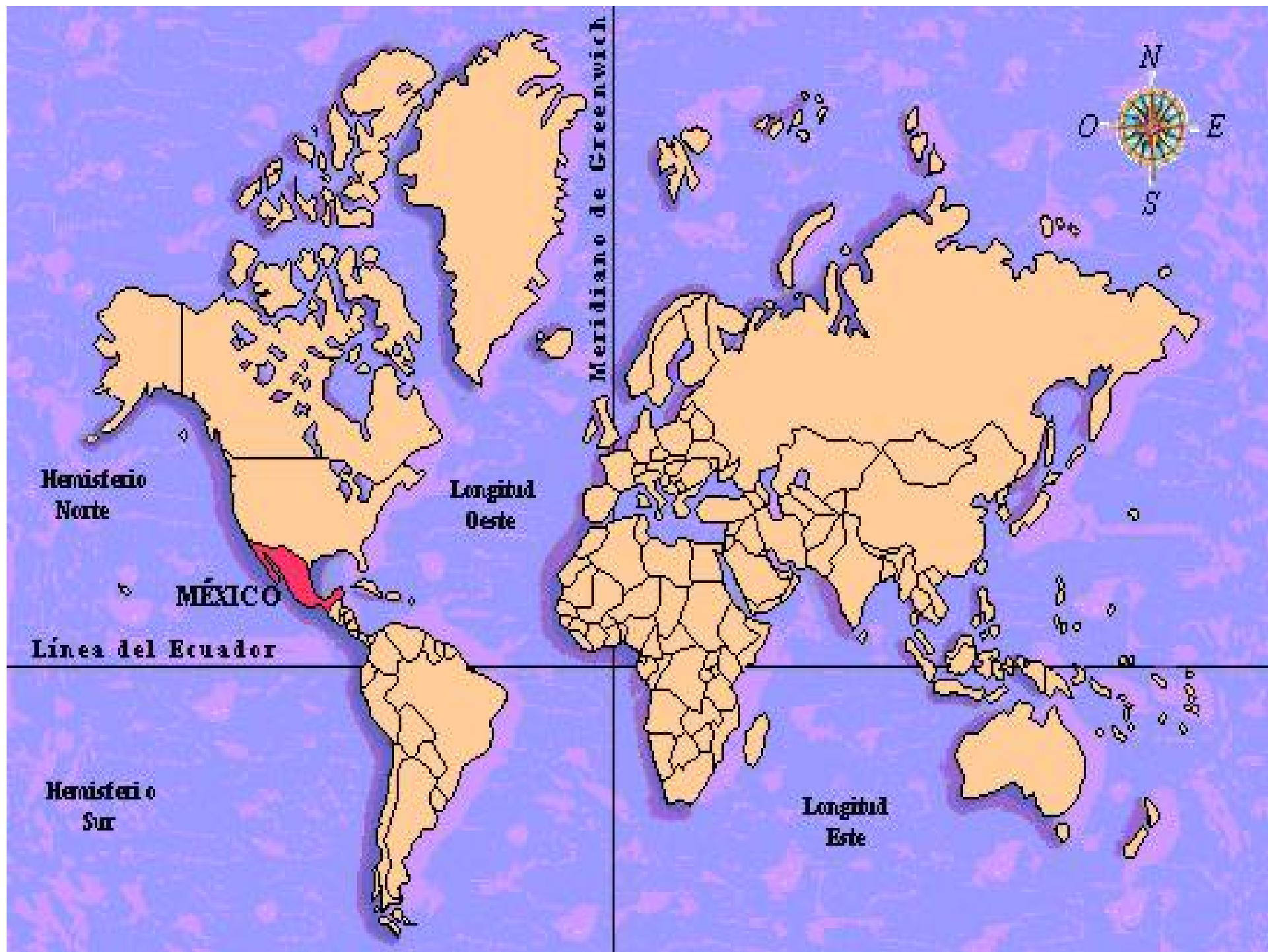


Cristopher López Paniagua
International fellow
World Forest Institute

CONTENT

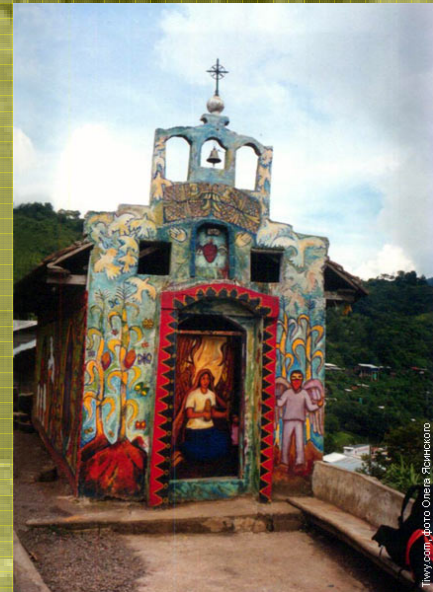
- México
- Forestry sector
- Monarch butterfly





History

- Mexico was under Spanish colonial rule for 300 years
- Mexico became an independent nation in 1910
- Before that land belonged to foreigners and church



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These days...

Official name:

Mexican United States

Area:

1,958,201 square kilometers

Situation:

North America

To border on:

North USA, East Gulf of Mexico, South Belize and Guatemala and West P.O.

Population:

108,700,000 (2006)

Capital:

Mexico City

Language:

Spanish

Currency:

Mexican Peso

Main cities :



Mexico city (8,605,239);
Guadalajara (1,646,183);
Ecatepec (1,621,827)

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MEX & USA comparison



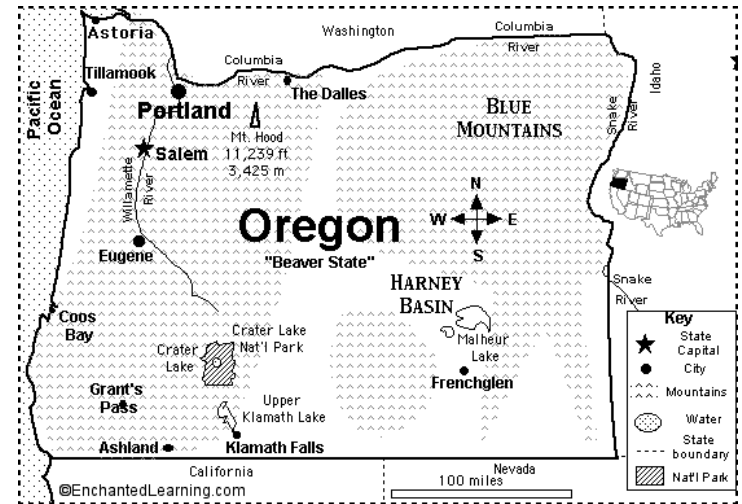
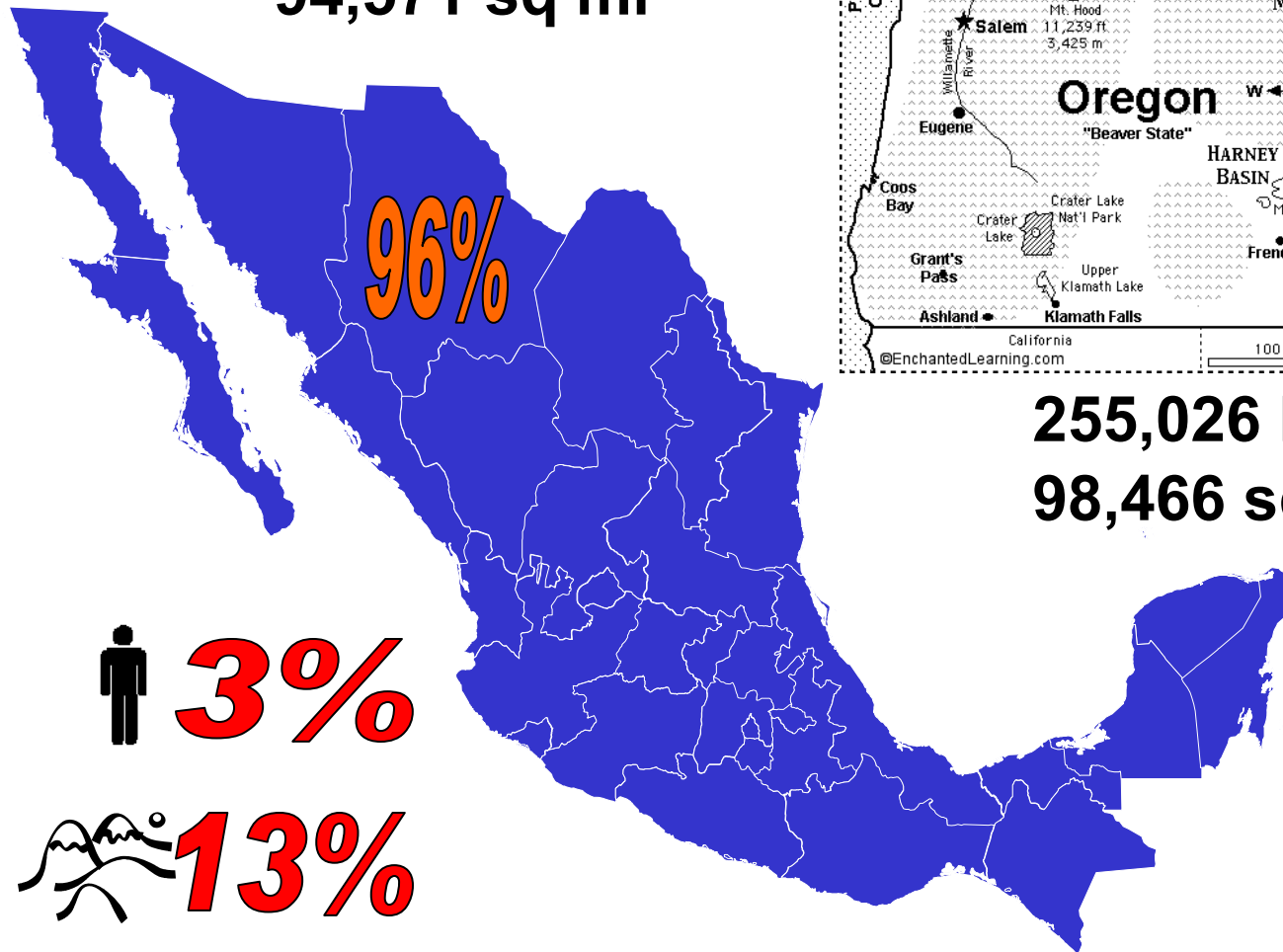
 **36%**
 **20.5%**

	Mexico	United States
Area	1,972,550 sq km 758,249 sq mi	9,631,420 sq km 3,718,695 sq mi
Population	108,700,000	301,178,000



MEX & OR comparison

244,938 km²
94,571 sq mi



255,026 km²
98,466 sq mi

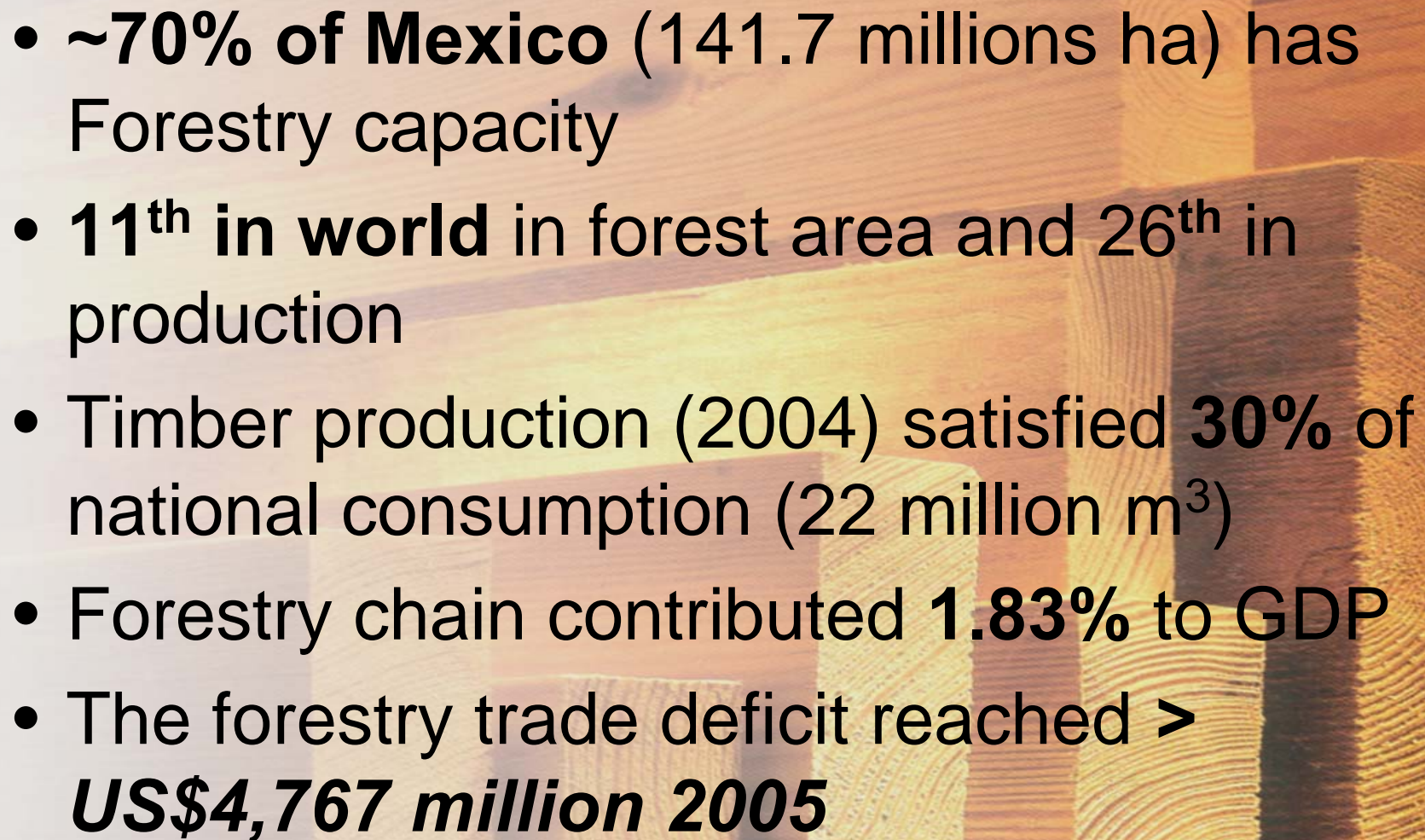
Forestry Sector



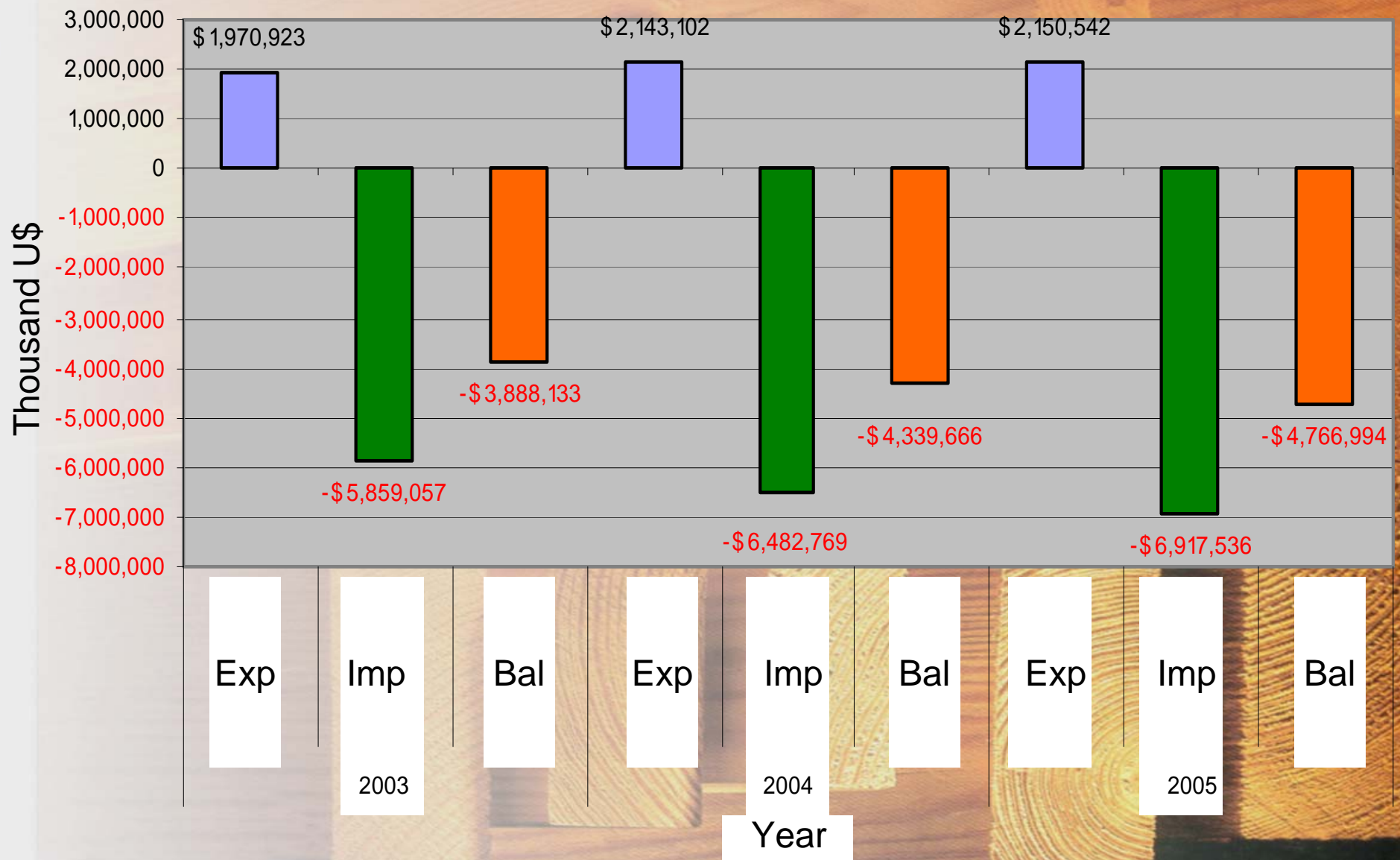
Secretariat of Natural Resources



COMISIÓN NACIONAL FORESTAL
National Bureau of Forestry

- 
- **~70% of Mexico** (141.7 millions ha) has Forestry capacity
 - **11th in world** in forest area and 26th in production
 - Timber production (2004) satisfied **30%** of national consumption (22 million m³)
 - Forestry chain contributed **1.83%** to GDP
 - The forestry trade deficit reached **> US\$4,767 million 2005**

Forestry Trade Balance (2003-05)



- 
- 12 million people live in forest regions
 - 80% of forest area is ejidal and/or comunal

(15 + 5)

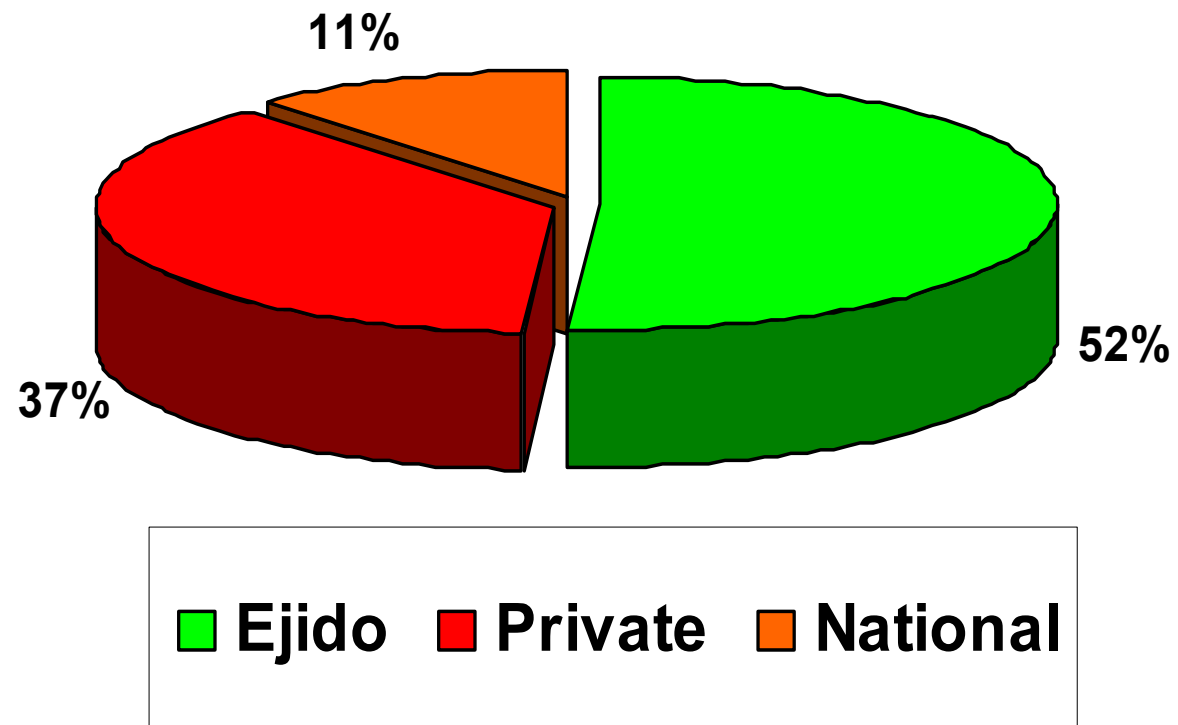
- Every year thousands Ha of Forest (temperate and tropical) are lost
- Forestry resources and water are considered NATIONAL SECURITY PRIORITIES

- **Ejido is collectively owned land**
- **The right to the land was the result of the social movement by Mexican farmers who revolted in the beginning of 20th century**
- **During more than 80 years almost 249 millions of acres were given to farmers, collectively**
- **Now there are 27,390 ejidos and 2,340 communities**

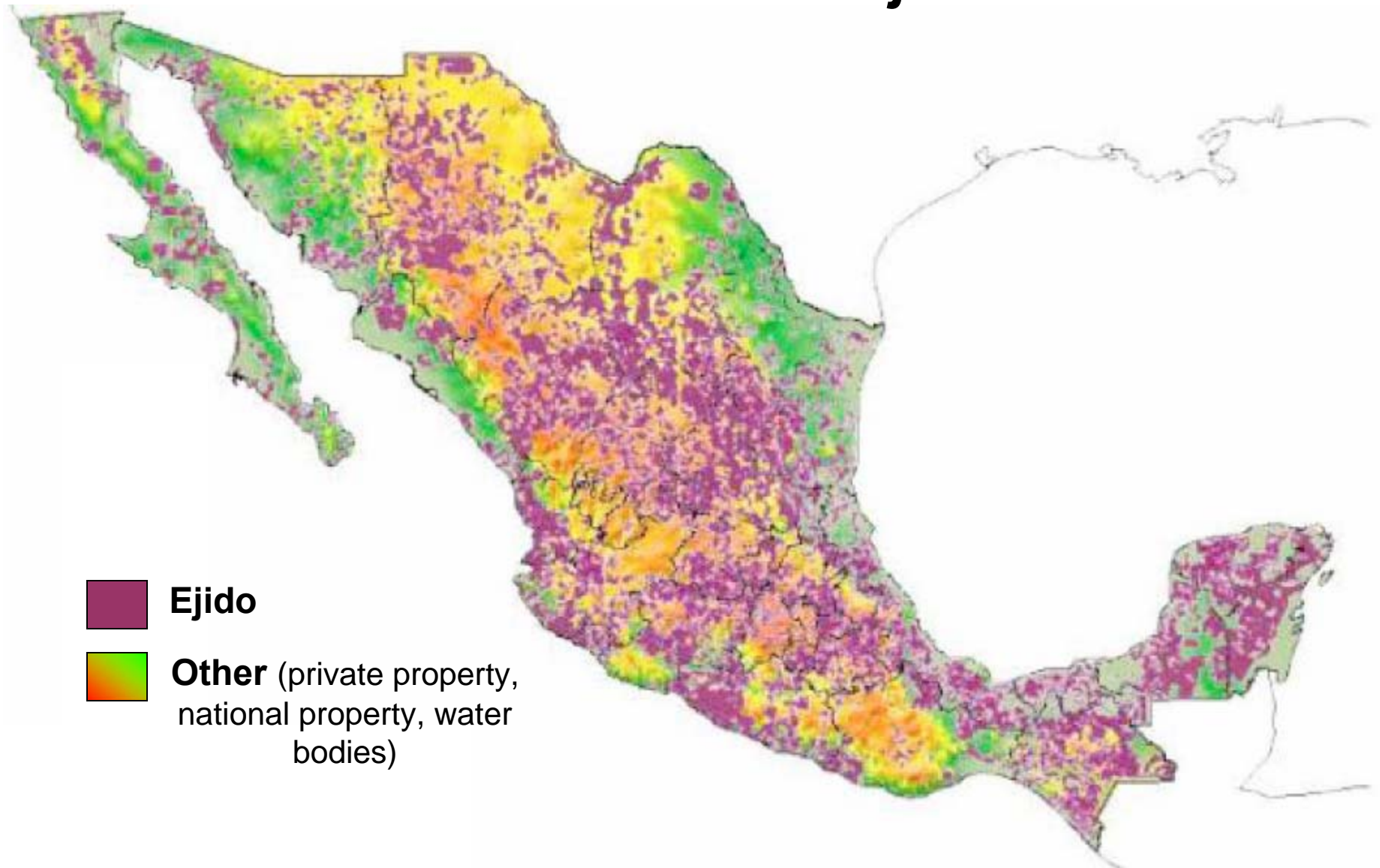




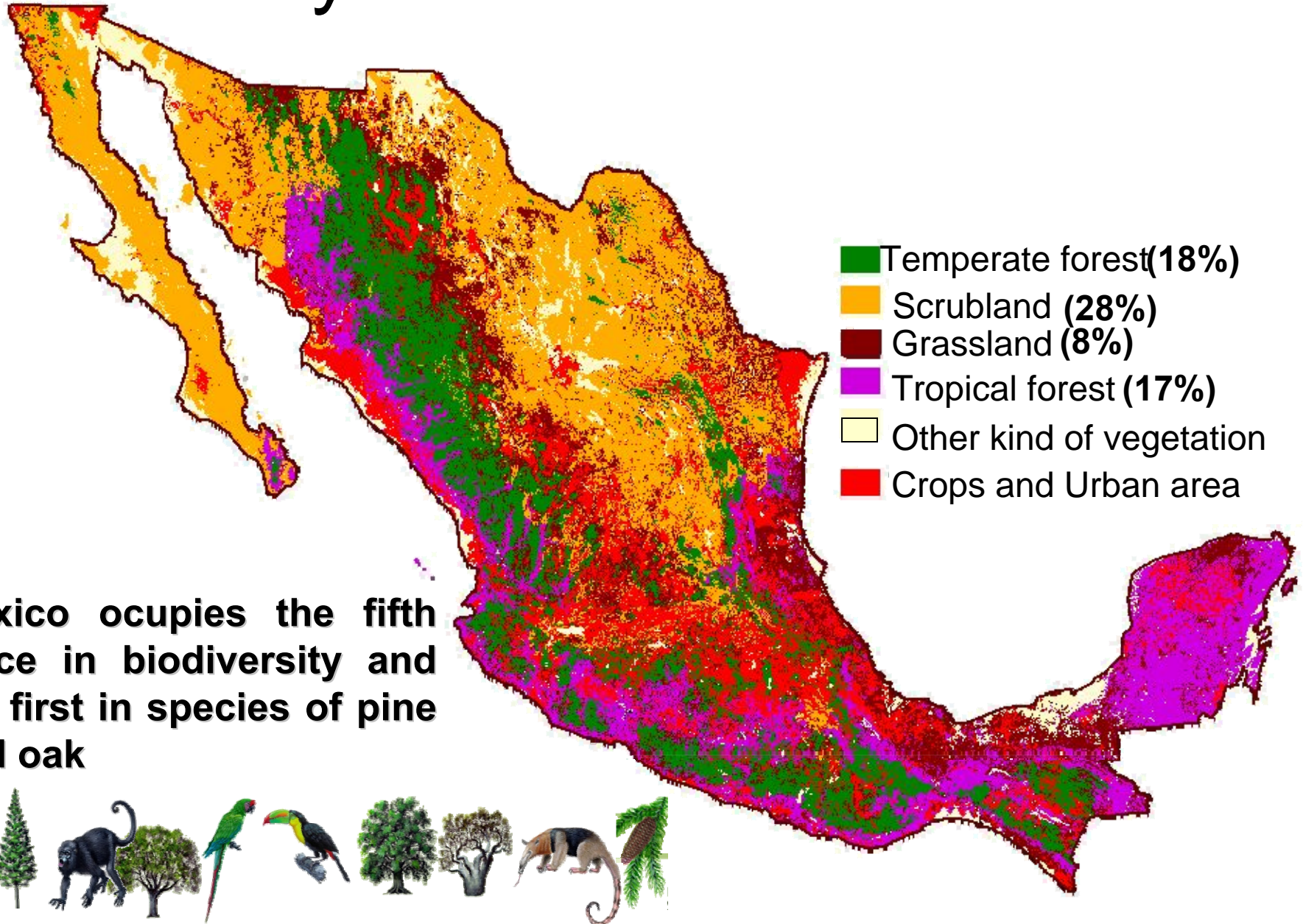
Land tenure in Mexico



Where are the ejidos?



Forestry resources distribution



México occupies the fifth place in biodiversity and the first in species of pine and oak



Additional Data

- Forest surface: 141.7 million ha
- Temperate forest: 30.4 million ha
- Tropical forest: 26.4 million ha
- Other kind of vegetation: 84.9 million ha
- Temperate forest represents 1,831 million m³ of timber mainly in Durango, Chihuahua, Jalisco, Michoacán, Guerrero and Oaxaca states
- Tropical forest represents 972.5 million m³ of timber mainly in Chiapas, Oaxaca, Quintana Roo and Campeche states

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 **Durango, Chihuahua, Jalisco, Michoacán, Guerrero and Oaxaca states**



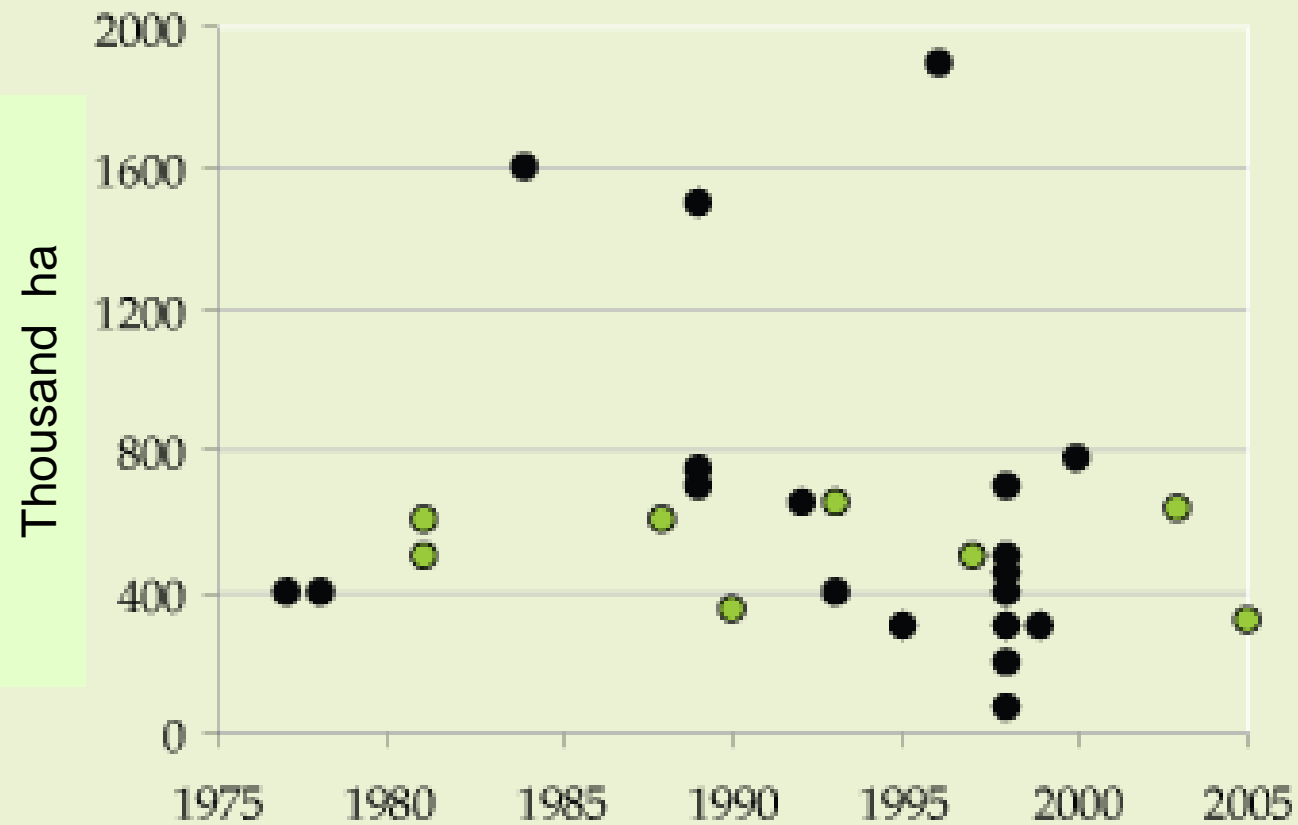
 **Chiapas, Oaxaca, Quintana Roo and Campeche states**

How much forest is lost every year?

- Late in 70's Mexico began to measure deforestation
- Very wide range estimate 75,000-2,000,000 ha/year
- FAO estimations have been consistent 350-650 thousand ha/year



Deforestation in Mexico



● FAO estimations

In perspective

29,765 km² of forest were lost between 1976 to 1993. This is equivalent to the area of Guanajuato state.

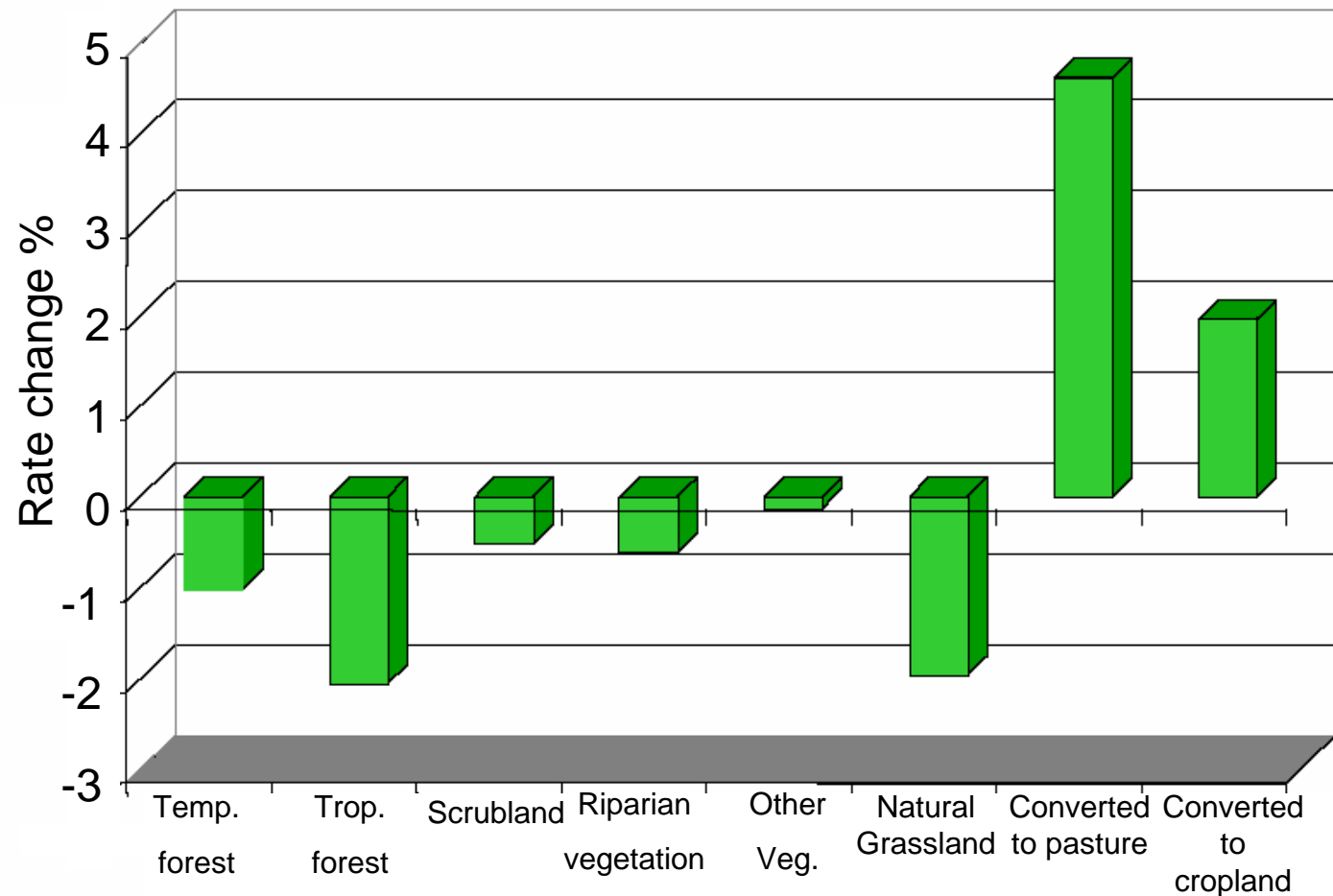
54,306 km² of forest were lost between 1993 to 2000. This is equivalent to the area of Campeche state.

Deforestation rates changed from 175,000 ha/year to 319,000 ha/year in this periods. From 2000-2005 the estimated rate is 314,000 ha/Y.



Where are those forests?

Rate change in land use in Mexico (1993-2000)



Forestry Policy & Instruments

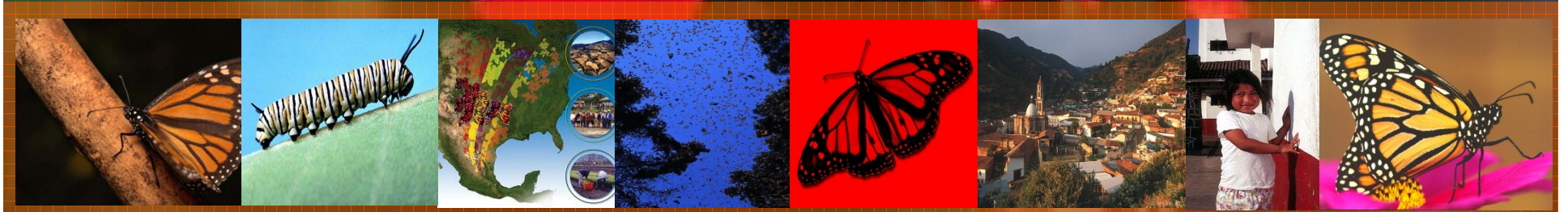
- **National Plan of Development (2001 – 2006)** (Federal Government)
- **CONAFOR (Presidential decree 2001)**—controls permits and forest plans
- **Forestry Strategic Program (2000-2025)**
- **Forestry National Program (2001 – 2006)**
- **General Law of Sustainable Forestry Development (2003)**
- **Regulation of GLSFD (2005)**

Objectives of this Reform

- ❑ Stop illegal cutting
- ❑ *To encourage a sense of ownership over forests to improve management, social participation and forest enterprise*
- ❑ To link *Water–Soil–Forest–Biodiversity*
- ❑ *Encourage Forestry Sector to improve livelihoods of forest-dependent communities*



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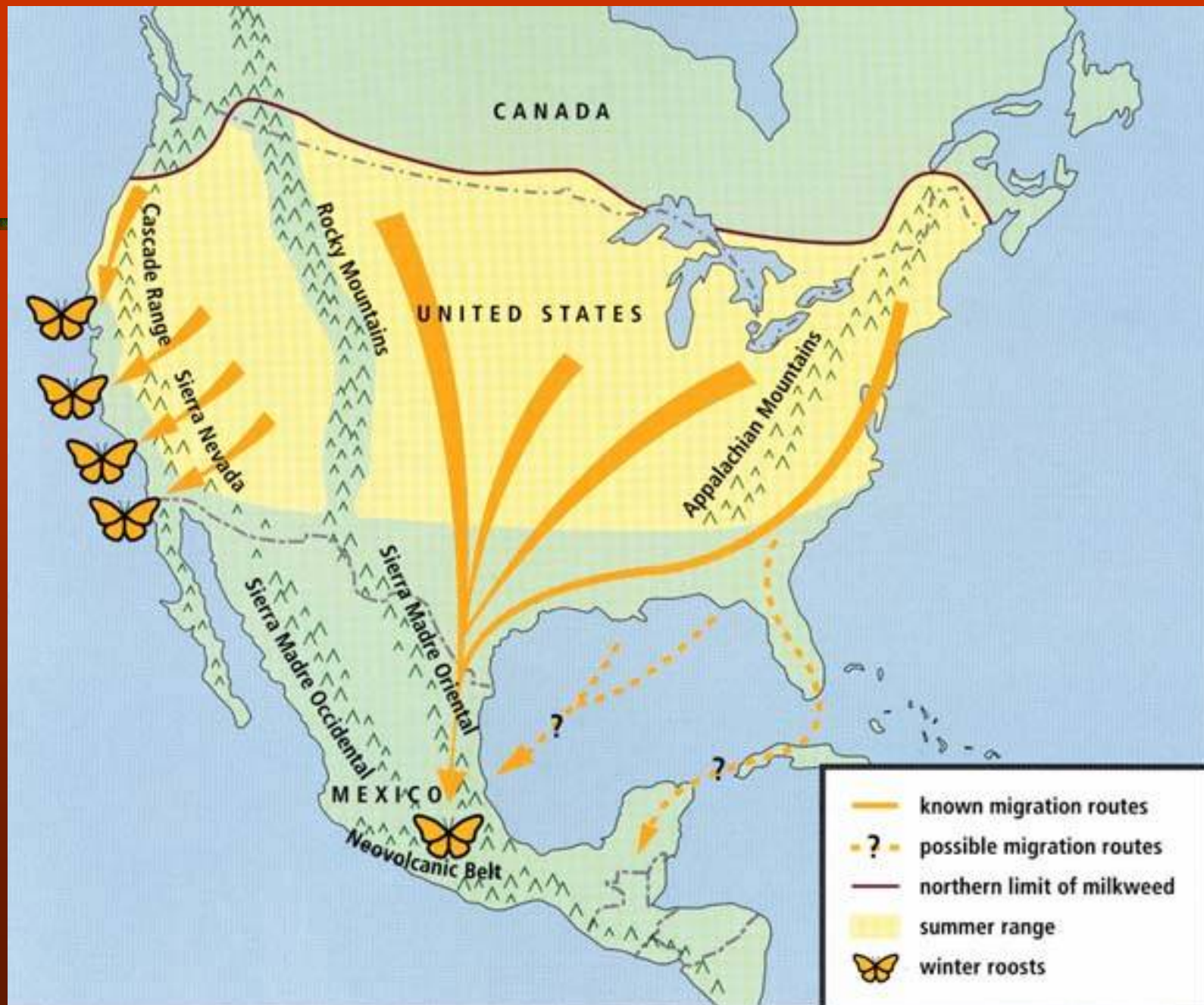


INTRODUCTION

- ***Mexico ~10% animals & plants***
- ***Unfortunately 1st places ↓ N.R.***
- ***Danaus plexippus***

- Three migration routes
 - West of Rocky Mountains to California coasts
 - **East of Rocky Mountains to Mexico**
 - USA (Florida) to Las Antillas—by the gulf of Mexico.





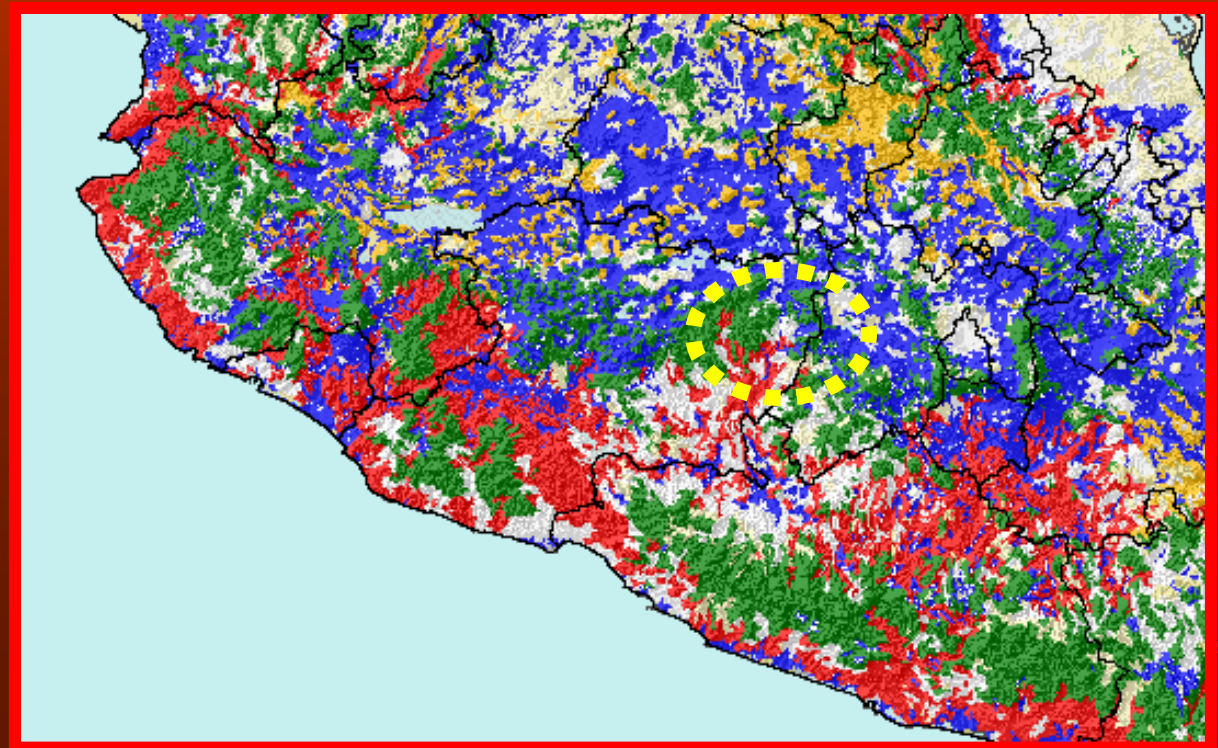
Michoacán State



Capital	Morelia
Area	59,928 km ² Ranked 16th
Population (2005 census)	3,966,073 Ranked 7th



ANGANGUEO



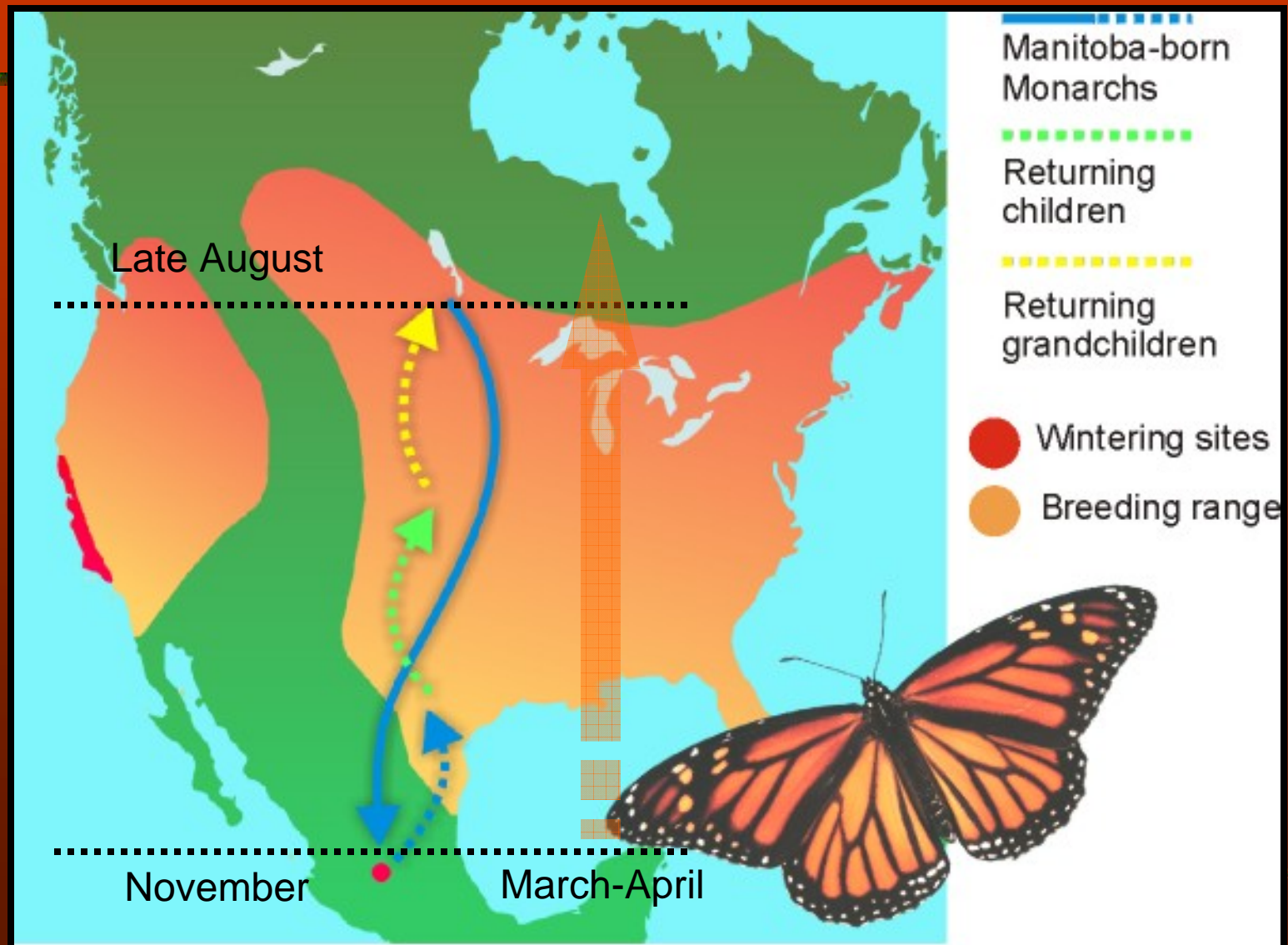
Why this is amazing?

- Less than 1/2 gram
- To overwinter, millions travel 4,500 km each way
- Each butterfly lives 4-5 weeks but there is a “Matusalen generation” that live 7-8 months



Average 75 yr → 525 Years!

Migration





When did everything start?

- **1976:** Dr Urquhart publicly presented overwintering sites
- **1980:** Reserve zone and wild refuge is established. These are the places where monarch butterfly overwinters
- **1986:** Five independent sanctuaries were decreed like PNA (16, 110 ha) "Special Reserve of the Biosphere of Monarch Butterfly"
- **2000:** Reserve of the Biosphere of Monarch Butterfly (56,259 ha) was established

Has it worked?

Despite the diversity of investments at the Monarch Butterfly overwintering sites in Mexico during the last 20 years
The deforestation continues.



Intersectorial Coordination

It is necessary to catalyze the regional and international conservation initiatives of

- Government agencies,
- Non-governmental agencies,
- Academic Institutions and,
- Local Communities

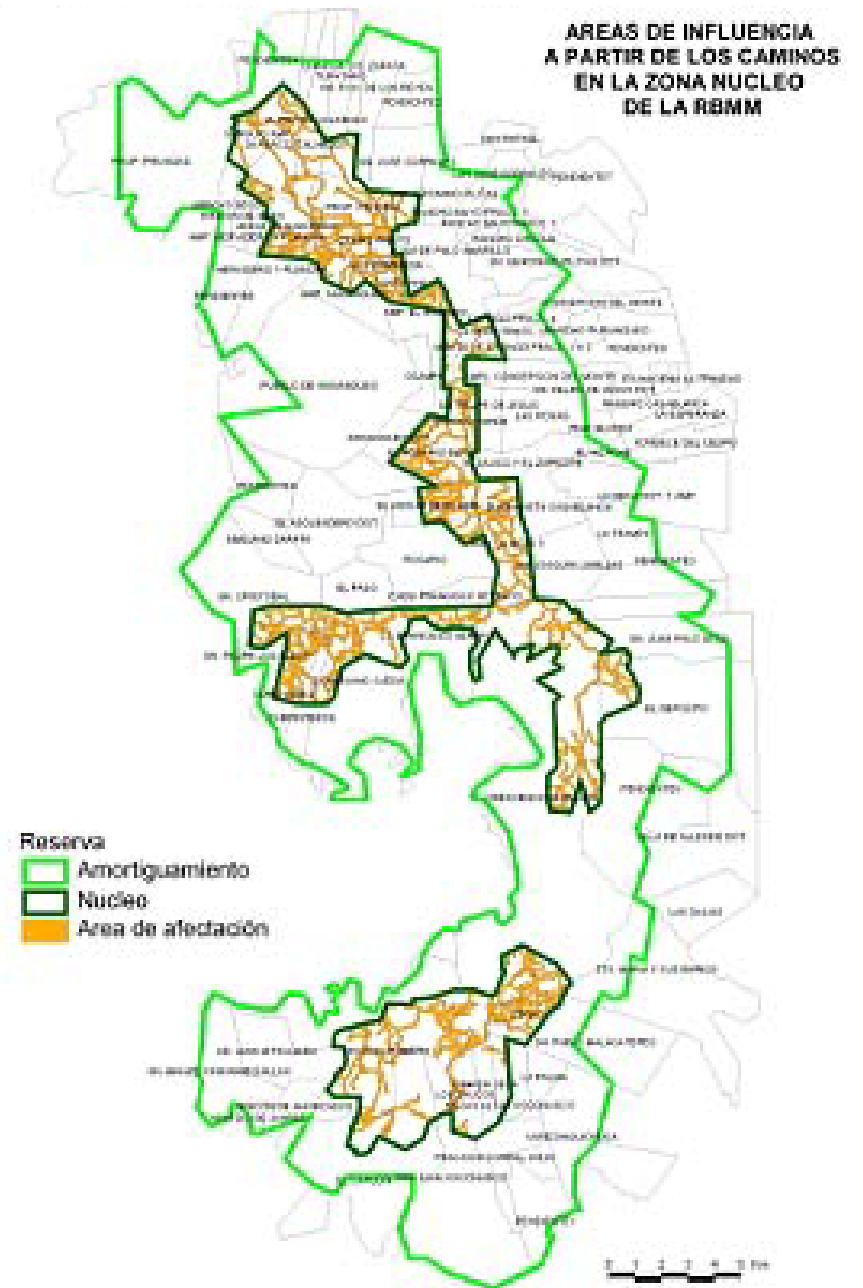
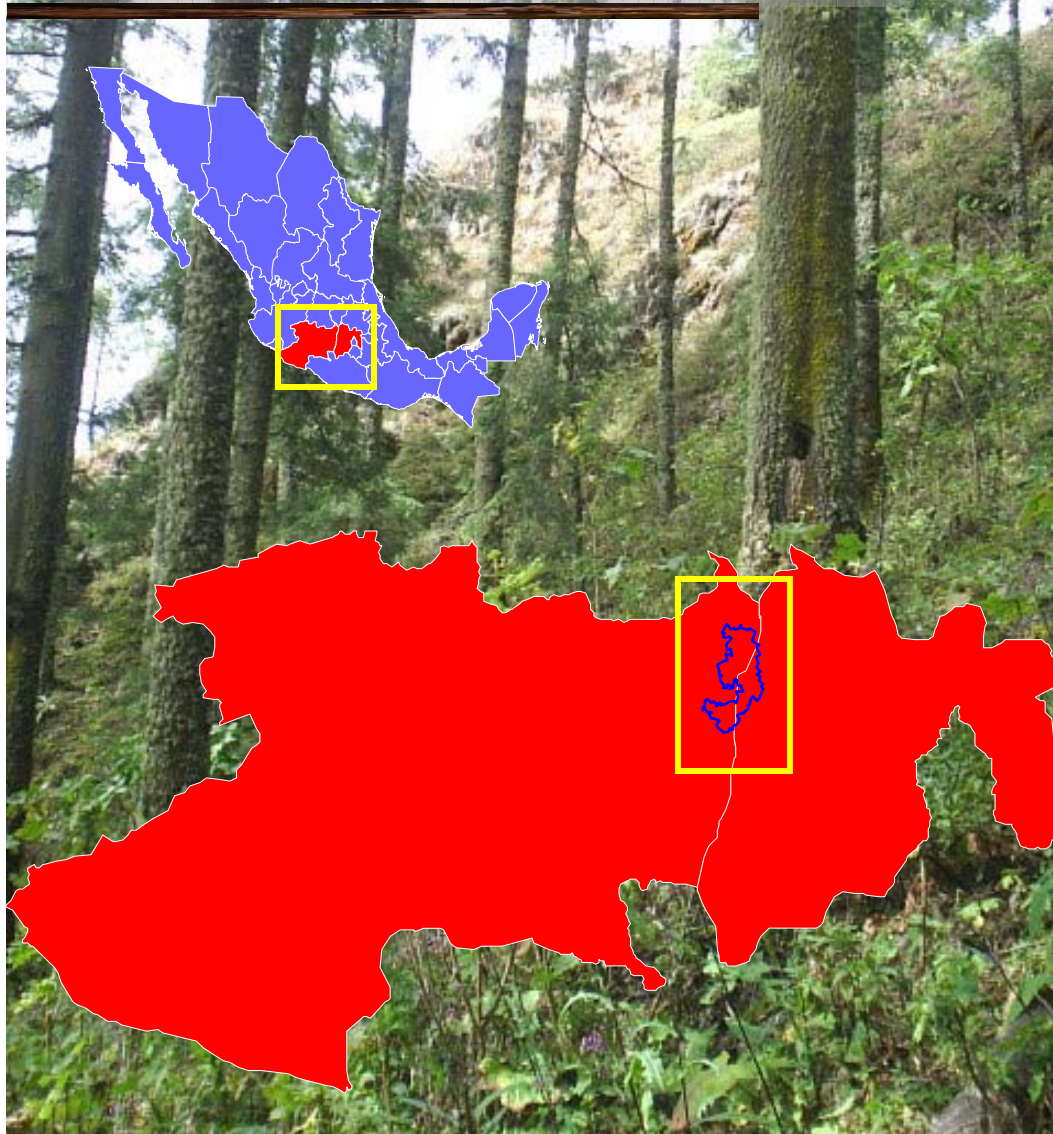
To ensure the sustainability of conservation activities and to support the Monarch Butterfly Biosphere Reserve



Why?

- There are 93 properties (59 ejidos, 13 indigenous communities and 21 small properties)
- Illegal cutting
- Alternative sources of employment and productive projects reduce pressure on the forest
- Eco-tourism is an opportunity—100,000 tourists during overwintering season

Where is the Reservation?






Eco-tourist Business Plan in ejido Cerro Prieto

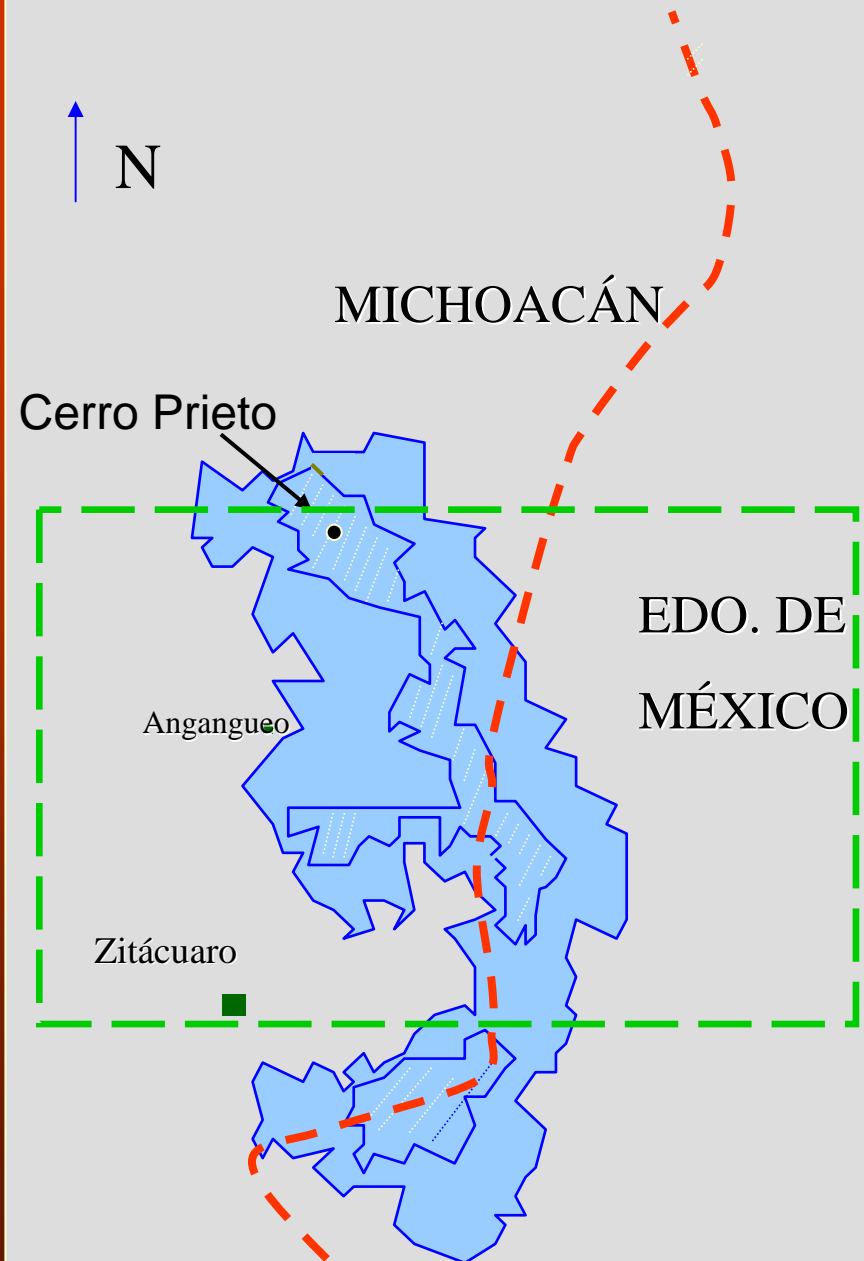
- Cerro Prieto sanctuary is located in the municipality of Angangueo and Ocampo, in Michoacán
- 2750 meters of elevation
- Is the second most popular tourist site within the reserve
- It is inside the nuclear zone

Where is the ejido?

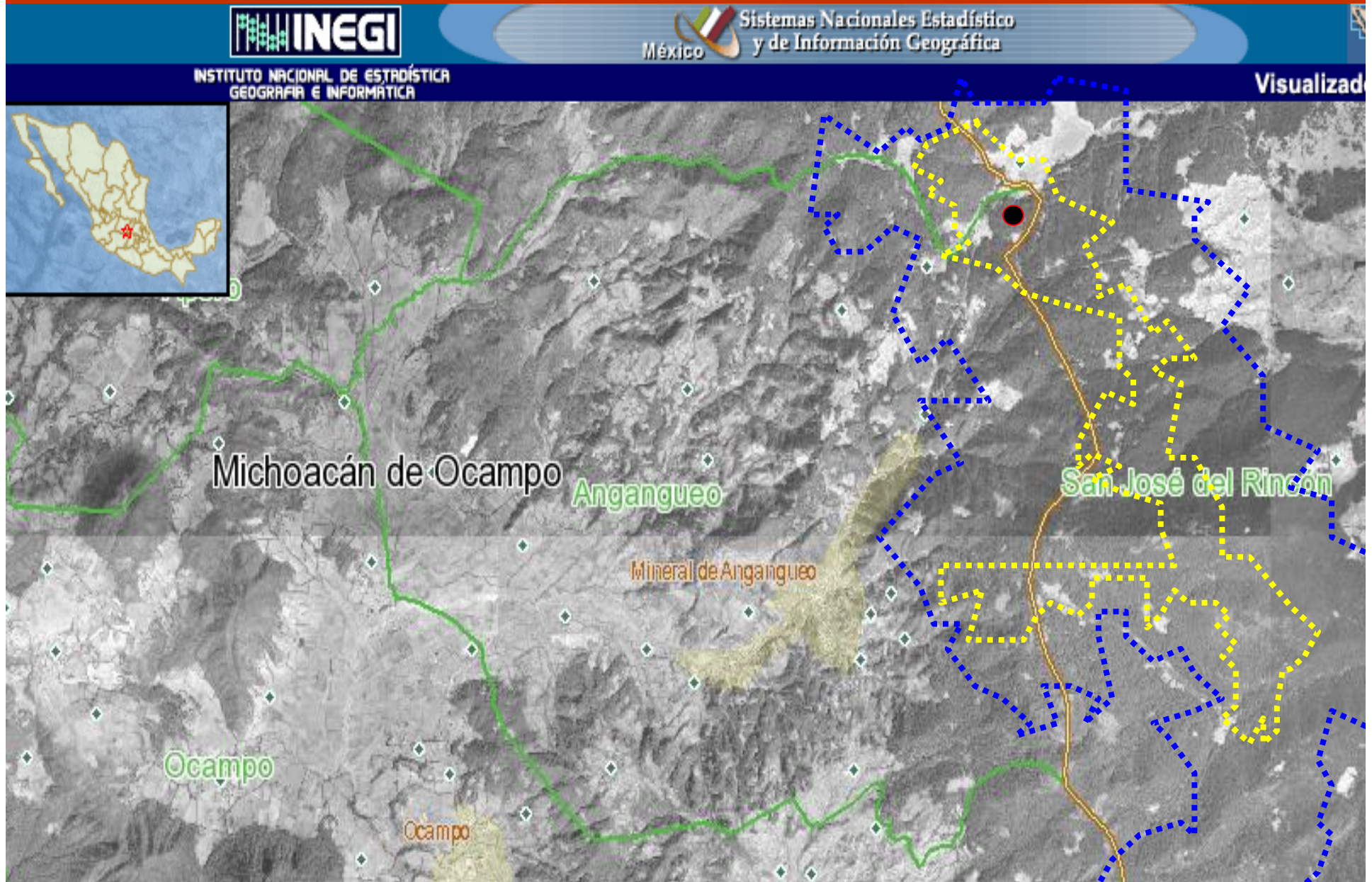


ZONIFICACIÓN

-  Zona de amortiguamiento
-  Zona núcleo
-  Límite estatal



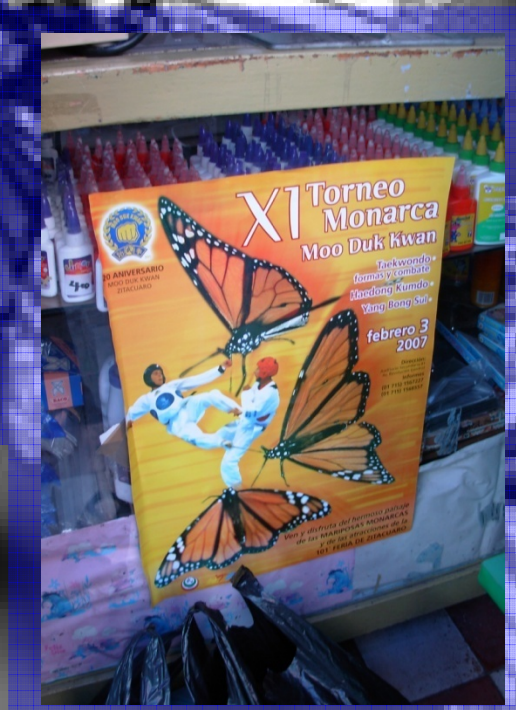
Cerro Prieto in Angangueo



General objective

- To carry out a Plan of tourist businesses of the ejido Cerro Prieto, defining strategies with a sustainable approach that will be able to fortify tourist activity in the region, mainly focused on migration of the Monarch Butterfly

Economic importance in Angangueo



Specific objectives

An aerial night photograph of a town nestled in a valley. A large, illuminated church with a prominent dome and a tall bell tower stands out in the center. The town's buildings are lit up, and the surrounding hills are dark, with some lights visible on the slopes. The overall scene is a warm, golden-brown color due to the night lighting.

- Marketing study
 - Demand-Customer
 - Offer
- Developing activities
- Training
- Funding
- Financial analysis

Methodology

- Necessary information-gathering from WWF-Mexico and the Direction of Reserve of the Biosphere of Monarch butterfly (RBMM-CONANP).
- WFI: Information will be synthesized; visit ecoparks in USA. Also in this phase market study and surveys were developed.
- Market study and diagnostic of tourist activity in the ejido: seasonal character
- Activities and training will be developed and given to the ejido before 07-08 season
- Plan of tourist business will be elaborated as a final document

Market study

- 297 surveys were applied
- 250 national & 47 international
 - 13-25 January



Preliminary results

	International	National
Gender	-	-
Age	50-↑	31-50
Source	USA & CAN	Mich, DF, Mex
Who is traveling with	Tours, friends	Family
Times visiting the Reservation	1	2-4
Planning trip	Internet	Media, internet
Troublesome areas	Trail, restrooms, guides	Trail, restrooms, guides
Income	\$50,001-75,000*	\$6,000-10,000*





