



# The updating of the list of endangered species in Mexico

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# Introduction

- In Mexico, the General Wildlife Law (LGVS) states in its Article 56, that the Ministry of Environment and Natural Resources (SEMARNAT) identifies through lists, the species or populations at risk, in accordance with Mexican federal list of endangered species, (Norma Oficial Mexicana) NOM-059-SEMARNAT-2010.



Also provides that the lists will be reviewed and, if necessary, updated every three years or sooner if there is sufficient information for the inclusion or exclusion of one species and populations from the list or their change from one category to another.

# The original NOM-059-ECOL-1994



On May 16, 1994, in the government legal journal (D.O.F.) a Mexican federal list of endangered species NOM-059-ECOL-1994 was published, which determines the species and subspecies of terrestrial and aquatic wildlife in danger of extinction, threatened, rare, and subject to special protection and establishes specifications for protection.

# NOM-059-ECOL-1994 was important but had....

- Lack of information about the species listed
- Lack of objectivity in assigning risk categories to species
- Risk categories do not accurately reflect the degree of threat
- Lack of explicit relationship with the risk categories of IUCN

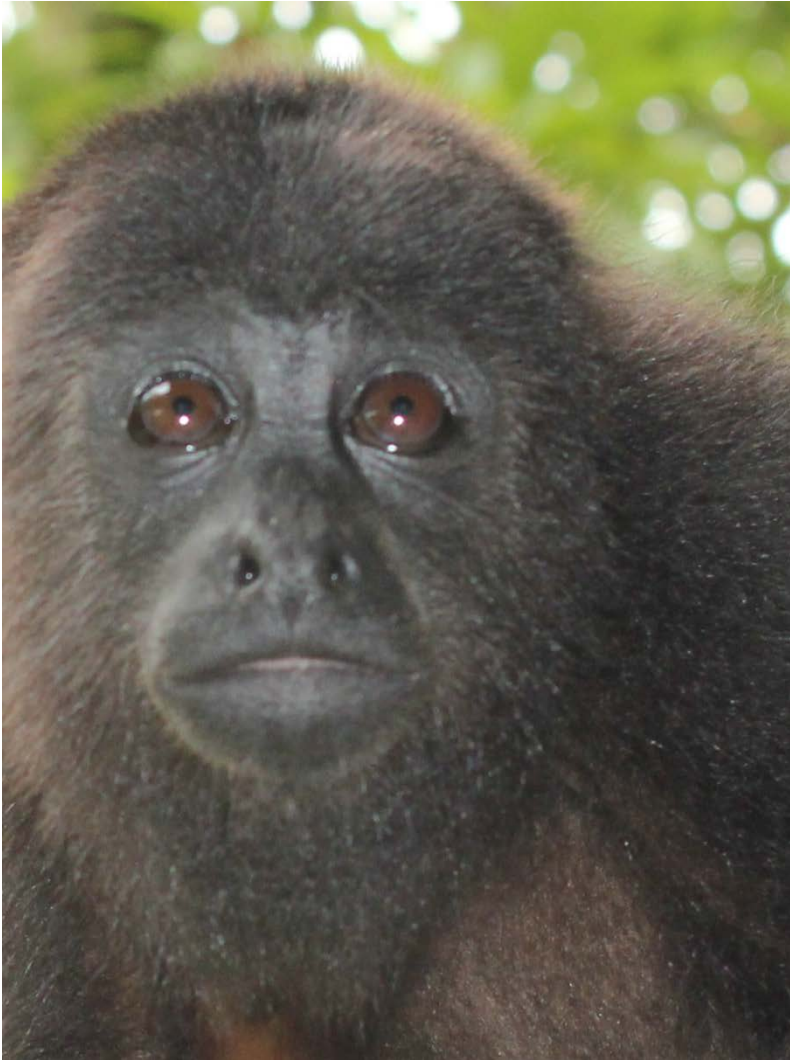


# NOM-059-SEMARNAT-2001

- Established criteria for determining Extinction risk
- It defined the minimum information required to support any proposal.
- Criteria for the evaluation were clearly defined
- Greater precision in the definition of the categories of risk
  - The “rare” category was removed
  - The “Probably extinct in the wild” category was defined



# NOM-059-SEMARNAT-2001



- Population scale was included
- Some comparative benchmarks with the UICN system were established
- The Method for the Assessment of Risk Extinction of wild species in Mexico “**MER**” was defined
- Collaboration with scientific institutions
- Species list, must be review every three years

# After 9 years the last version was published

## MEXICAN FEDERAL LIST OF ENDANGERED SPECIES

**NOM-059-SEMARNAT-2010.** ENVIRONMENTAL PROTECTION - MEXICAN NATIVE SPECIES OF WILD FLORA AND FAUNA - SPECIFICATIONS FOR RISK CATEGORIES AND INCLUSION, EXCLUSION OR CHANGE - LIST OF SPECIES AT RISK.

The body of the document  
Normative Annex I. -  
Method of Assessment  
of Extinction Risk of wild  
species in Mexico  
“MER”

Normative Annex II. -  
“MER” for plants

Normative Annex III. – List  
of endangered species

### Risk categories

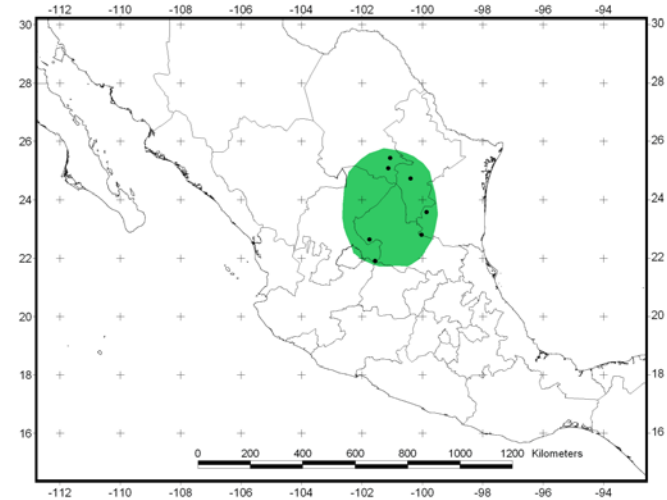
- **Special protection (Pr),**
- **Threatened (A),**
- **In danger of extinction (P)**
- **Probably extinct in the wild (E).**

# MER

- **Criteria A, DISTRIBUTION**

Range of the Taxon distribution in Mexico

- very restricted = 4
- restricted = 3
- moderately restricted or wide = 2
- widely distributed or very large = 1



- **Criteria B, HABITAT**

- Status of habitat

- hostile or very limiting = 3
- limiting or intermediate = 2
- propitious or bit limiting = 1





- **Criteria C, INTRINSIC VULNERABILITY**

- Biological Intrinsic Vulnerability of the taxon
  - high vulnerability = 3
  - average vulnerability = 2
  - low vulnerability = 1



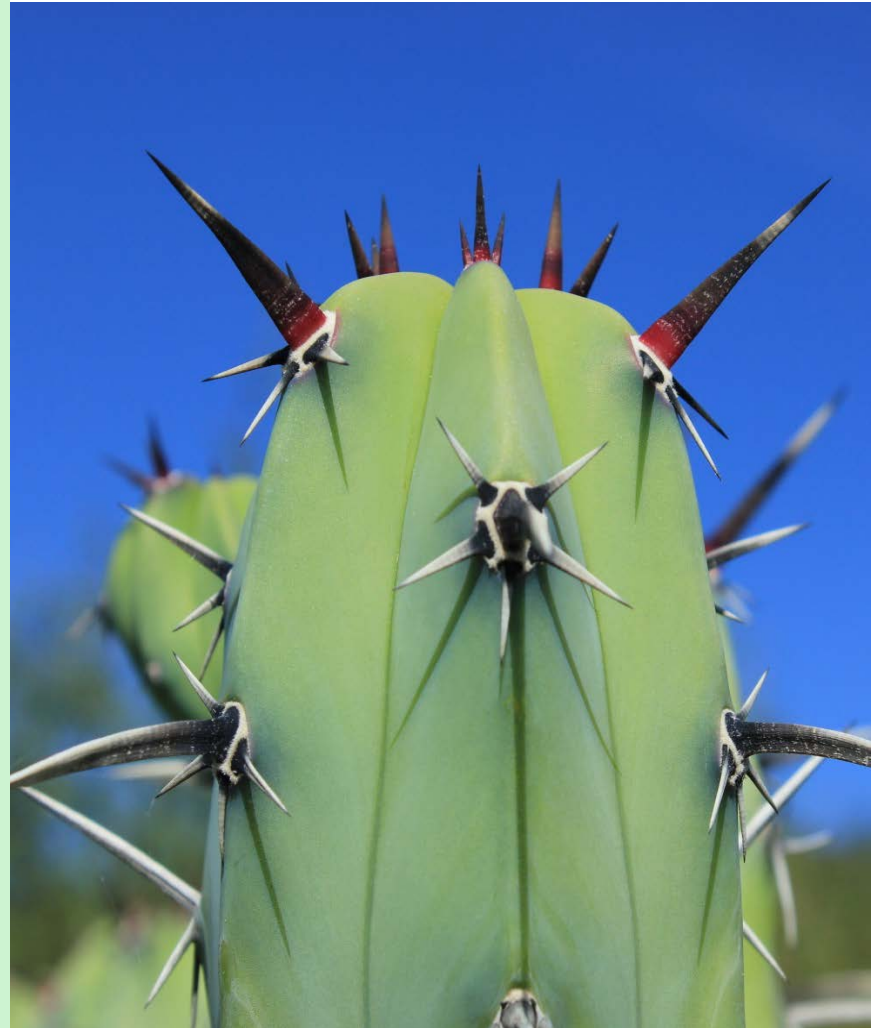
- **Criteria D, HUMAN IMPACT**

- Human activity impact on Taxon
  - high impact = 4
  - medium impact = 3
  - low impact = 2



# MER for plants, its strengths are...

- Incorporate greater objectivity and avoid overestimates the risk of extinction.
- It is faster and in specific cases reduce the error due to problems scale
- Incorporate genetic, geographical and ecological information in addition to assessing anthropogenic use of species



# Format



## FICHA DEL MÉTODO DE EVALUACIÓN DEL RIESGO DE EXTINCIÓN DE LAS ESPECIES SILVESTRES EN MÉXICO (MER)

Nombre del proponente:

Domicilio :

Tel.

Fax

E-mail

Institución (si aplica) :

Si es el caso, nombre de los demás proponentes:

### DATOS DE LA ESPECIE

Grupo Biológico al que pertenece la especie:

Orden:

Familia:

Género:

Nombre científico valido:

Autoridad taxonómica:

Sinónimos:

Nombres comunes :

Inclusión:

Exclusión:

Cambio de categoría:



## FICHA DEL MÉTODO DE EVALUACIÓN DEL RIESGO DE EXTINCIÓN DE LAS ESPECIES SILVESTRES EN MÉXICO (MER)

Motivos específicos de la propuesta:

### CRITERIO A. Amplitud de la distribución del taxón en México

Descripción de la distribución (continua o en parches) :

Altitud:

Estados de la República en la que la especie se distribuye:

Localidades con registros históricos:

Localidades con registros actuales:

<b>Biological group</b>	<b>Special protection (Pr)</b>	<b>Threatened (A)</b>	<b>Endangered (P)</b>	<b>Probable extinct in wild (E)</b>	<b>Species in NOM-059-SEMARNAT-2010</b>
<b>Birds</b>	<b>152</b>	<b>126</b>	<b>95</b>	<b>19</b>	<b>392</b>
<b>Reptiles</b>	<b>274</b>	<b>142</b>	<b>27</b>	<b>--</b>	<b>443</b>
<b>Mammals</b>	<b>104</b>	<b>124</b>	<b>52</b>	<b>11</b>	<b>291</b>
<b>Amphibians</b>	<b>143</b>	<b>44</b>	<b>7</b>	<b>--</b>	<b>194</b>
<b>Fish</b>	<b>30</b>	<b>80</b>	<b>81</b>	<b>13</b>	<b>204</b>
<b>Invertebrates</b>	<b>17</b>	<b>12</b>	<b>20</b>	<b>--</b>	<b>49</b>
<b>Fungi</b>	<b>8</b>	<b>28</b>	<b>10</b>	<b>--</b>	<b>46</b>
<b>Plants</b>	<b>458</b>	<b>340</b>	<b>183</b>	<b>6</b>	<b>987</b>
<b>Total</b>	<b>1186</b>	<b>896</b>	<b>475</b>	<b>49</b>	<b>2606</b>

Wildlife species in some category risk of NOM-059-SEMARNAT-2010, in Mexico,

<b>Biological Group</b>	<b>Species recorded for Mexico</b>	<b>Species in NOM-059-SEMARNAT-2010</b>	<b>Percentage of species listed in the NOM</b>	<b>Species with MER</b>	<b>Percentage of species listed in the NOM with MER</b>
<b>Bird</b>	<b>1,107</b>	<b>392</b>	<b>35.4</b>	<b>91</b>	<b>23.2</b>
<b>Reptiles</b>	<b>804</b>	<b>443</b>	<b>55.0</b>	<b>71</b>	<b>16.0</b>
<b>Mammals</b>	<b>535</b>	<b>291</b>	<b>54.4</b>	<b>34</b>	<b>11.7</b>
<b>Amphibians</b>	<b>361</b>	<b>194</b>	<b>53.7</b>	<b>4</b>	<b>2.1</b>
<b>Fish</b>	<b>N/D</b>	<b>204</b>	<b>N/D</b>	<b>51</b>	<b>25</b>
<b>Invertebrates</b>	<b>N/D</b>	<b>49</b>	<b>N/D</b>	<b>16</b>	<b>32.6</b>
<b>Fungi</b>	<b>N/D</b>	<b>46</b>	<b>N/D</b>	<b>0</b>	<b>0</b>

Percentage of species includes in NOM-059 and the number of percentage of this species with MER

# Conclusions

- Since the first Official Standard publication there have been two updating processes. This means three updating processes (instead of 6)
- During 2013, we will begin the updating process, which involves the participation of several institutions

INECC CONABIO, SEMARNAT, (DGSPRNR, DGVS, CONANP, CONAFOR, PROFEPA), CONAPESCA, INAPESCA.

# Thank you!



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