LA CRUZ HABITAT PROTECTION PROJECT

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www.ForestsForMonarchs.org
MISSION

To **protect the migratory monarch butterfly** and other endemic species by reforesting the land within the Monarch Butterfly Biosphere Reserve in Michoacán, Mexico.
MISSION

To promote sustainable forest management among the local landowners for their economic benefit and the conservation of the forest.

Picture by José Andrés Arredondo, 2015
COMPONENTS OF *FORESTS FOR MONARCHS*

Environmental Education

Forest Restoration

Sustainable Wood Harvest
MBBR history:

• 1980: First Decree as Wildlife and Refuge area. Logging was allowed most of the year.

• 1986: Five isolated areas were delimited. Special MBBR, delimiting the core zone (4,991 ha), and the buffer zone (11,619 ha)

• 2000: The actual MBBR: Buffer zone area is 42,707 ha, and core zone area is 13,552
Solving an environmental problem

- High rates of annual deforestation within the MBBR
- Create unsuitable habitat for monarch hibernation and reproduction
- Cause habitat loss of endemic species
- Hydrology is disrupted
- Loss of Sequestered CO₂
- Increased soil erosion

Data source: Vidal et. al., 2014
<table>
<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>COMMON NAME</th>
<th>IUCN CATEGORY</th>
<th>IUCN CRITERIA</th>
<th>SEMARNAT CATEGORY¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Invertebrates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danaus plexippus</td>
<td>Monarch butterfly</td>
<td>Its annual migration is considered threatened</td>
<td></td>
<td>Subject to special protection</td>
</tr>
<tr>
<td><strong>Amphibians</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambystoma ordinarium</td>
<td>Michoacan Stream Salamander</td>
<td>Endangered</td>
<td>B1ab(iii)+2ab(iii)</td>
<td>Subject to special protection*</td>
</tr>
<tr>
<td>Pseudoeurycea robertsi</td>
<td>Tlaconete de Roberts</td>
<td>Critically Endangered</td>
<td>B1ab(iii)</td>
<td>Threatened*</td>
</tr>
<tr>
<td>Pseudoeurycea bellii</td>
<td>Bell's False Brook Salamander</td>
<td>Vulnerable</td>
<td>A2ace</td>
<td>Threatened*</td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nelsonia neotomodon</td>
<td>Diminutive Woodrat</td>
<td>Near Threatened</td>
<td></td>
<td>Subject to special protection*</td>
</tr>
</tbody>
</table>
Forest Restoration

- Germination of seeds
- Direct seeding to copper-treated styro-blocks
Forest Restoration

Careful packing and transportation of native tree seedlings
We deliver trees to planting sites at the optimal planting time, and provide other logistical support.
Education is Reforestation

The conservation of our forests is in the hands of our future generations.

*Forests for Monarchs:*

- Teaches local landowners to sustainable harvest restored forests on former agricultural land.

- Promotes environmental education among the local children and their families, and

- Encourages the participation of higher education students at our reforested sites and our partner Nursery,
Children of the region value the important connection between the Pine-Oyamel mixed forest and the iconic monarch butterflies.
“Environmental protection should be taught as a practical class, and not only in the classroom”
Eva González
Technical assistance

To teach the local participants to maintain healthy trees in a healthy land.
The rate of development of trees is encouraging to local participants—up to 50 feet in height in 10 years.

Local people set the example for their neighbors—Increasing the quality and value of land.

Site in El Rosario in 2000, two years after planting

The same site in 2009
The participation of higher education students at our reforested sites and our partner Nursery is one of our priorities.
Almost 8 million native seedlings planted

Year

Seedlings (#)
0 100,000 200,000 300,000 400,000 500,000 600,000 700,000 800,000 900,000 1,000,000 7,889,135

7,889,135 3,736,095 2,449,365
Forests for Monarchs is dedicated to protecting the monarch butterfly and other endemic species by reforested the land surrounding the Monarch Butterfly Biosphere Reserve, and to promote sustainable forest management among the local landowners for their economic benefit and forest conservation.
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