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## WORLD HERITAGE NOMINATION – IUCN TECHNICAL EVALUATION

### MONARCH BUTTERFLY BIOSPHERE RESERVE (MEXICO) – ID No. 1290

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#### 1. DOCUMENTATION

- i) **Date nomination received by IUCN:** April 2007
- ii) **Additional information officially requested from and provided by the State Party:** IUCN requested supplementary information on 8 November 2007 before the field visit and on 20 December 2007 after the first IUCN World Heritage Panel meeting. The State Party response was officially received by the World Heritage Centre on 12 February 2008.
- iii) **UNEP-WCMC Data Sheet:** 13 references (including nomination)
- iv) **Additional literature consulted:** Brower, L. (2000) **Suggested Guidelines for more Effective Enforcement and Management of the Core and Buffer Areas in the Monarch Butterfly Biosphere Reserve**; Galindo-Leal, C. and Rendón-Salinas, E. (2005) **Danaidas: Las Maravillosas Mariposas Monarca**. Publicación Especial No. 1, WWF México-Telcel, México D.F.; Hilton-Taylor, C. (compiler) (2006) **IUCN Red List of Threatened Species**. IUCN, Gland, Switzerland; Magin, C. and Chape, S. (2004) **Review of the World Heritage Network: Biogeography, Habitats and Biodiversity**. UNEP-WCMC and IUCN, Cambridge, UK; Rendón, E. et al. (eds) (2005) **Memorias del Primer Foro Mariposa Monarca, 2004**; Rendón, E. et al. (eds) (2007) **Memorias del Tercer Foro Mariposa Monarca, 2006**; SEMARNAT-CONANP (2001) **Programa de Manejo Reserva de la Biosfera Mariposa Monarca, México**. Ministry of the Environment and Natural Resources, Mexico; Thorsell, J. and Hamilton, L. (2002) **A Global Overview of Mountain Protected Areas on the World Heritage List**. IUCN, Gland, Switzerland; Thorsell, J. and Sigaty, T. (1997) **A Global Overview of Forest Protected Areas on the World Heritage List**. IUCN, Gland, Switzerland; Tipping, C. (1995) **The Longest Migration**. Chapter 11 in the University of Florida Book of Insect Records, Gainesville, Florida; Urquhart, F. (1976) **Found at last: the monarch's winter home**. National Geographic Magazine, 150: 161-173.
- v) **Consultations:** 7 external reviewers. Extensive consultations were undertaken during the field visit with: the Directors and staff of the Mexican National Commission for Natural Protected Areas (CONANP); the Director of the Monarca Fund; Mayors of towns and villages in the buffer zone; representatives of rural cooperatives in the buffer zone; NGO representatives; representatives of the tourism sector and fish farmers.
- vi) **Field visit:** Allen Putney, November 2007
- vii) **Date of IUCN approval of this report:** April 2008

#### 2. SUMMARY OF NATURAL VALUES

The 56,259 ha Monarch Butterfly Biosphere Reserve is located in the Transvolcanic Mountain Range within the Mexican States of Michoacán and México, about 100 km west and northwest of Mexico City, and was listed by UNESCO as a Biosphere Reserve in 2006. The additional information provided by the State Party confirms that only the three separate core zones of the Biosphere Reserve are nominated for World Heritage status, thus representing a serial nomination. The three core zones cover 13,552 ha in total area and are surrounded by two buffer zones covering 42,707 ha, as shown in Table 1.

The nominated property is covered by oyamel fir forest on the crest of a north-south ridge, which forms part of the wide belt of mountains known as the Transvolcanic Range, which runs east-west across the centre of Mexico. The variations in aspect and altitude in the mountains create a range of microclimates. Biogeographically the Transvolcanic Range forms the southern limit of the Mexican Plateau and is near the southern limit of the Nearctic ecozone. The Biosphere Reserve has 493 vascular plant species and 49 fungus species. These include the endemic Mexican box elder and martin pine. On the high ridges the dominant vegetation is coniferous forest, the most important tree in which is the Mexican or oyamel fir.

Within the Biosphere Reserve, 198 vertebrates are recorded, including the endemic Mexican vole. There are 132 bird species and at least three endemic salamander species; however, the monarch butterfly is the “flagship” species of the nominated property.

Monarch butterflies are found especially in the latitude of the American Great Lakes but also in the northern Middle West, Texas and California, where their sole food plant, milkweed is abundant. There are some 100 species of milkweed, the common milkweed being the most widespread, but 27 others are known to be eaten by the butterfly larvae. An egg becomes a caterpillar in three to eight days; nine to sixteen days later it pupates for a week before metamorphosis. The butterfly's normal life cycle is from two to six weeks and there are usually four to five generations a year, only the last of which leaves the country to hibernate abroad. The eastern population of the monarch butterfly is remarkable for its 3,500 to over 4,500 km annual autumn migration from the northeast to their overwintering sites in central Mexico (the far smaller western or Californian population of the monarch butterfly migrates and hibernates locally). During this migration, the butterflies travel an average of 129 km a day, first flying south-southwest until over the Sierra Madre in northern Mexico where they turn south-southeast to reach the oyamel forests. They migrate in the last week of August and first week of September, triggered by the shortening of daylight and lowering temperatures. They store fat for the journey, but feed on nectar on the way and roost at night and in bad weather. They also travel in a sexually immature state termed reproductive diapause which enables them to live between six to ten weeks and in the torpor of hibernation for seven to ten months.

Millions, perhaps a billion butterflies from wide areas of North America, cluster densely on small areas of forest, turning the trees orange. They are susceptible to wet and cold conditions and millions die either on site or on the return, providing food for the two species of bird and five species of mice which can eat them without being repelled by toxins ingested from the milkweed. As with other species, their toxicity is advertised by the bright coloration of both caterpillar and butterfly. After five months, at the end of March, the butterflies move down the watershed, mate, and return some 1,500 km to the Gulf of California, to lay their eggs and die. The next generation continues the

cycle, returning north, thus no butterfly survives the return.

Between November and April, the cool and cloudy humid climate of the dense oyamel forests provides the most suitable environment for the overwintering monarch butterflies. The remaining oyamel forests represent the last 2% of a once extensive range. Where the tracts are large and dense enough (larger than 1,000 ha and at least about 400 trees per hectare) and above about 2,900 m, they provide the conditions needed by the overwintering monarch butterflies: sheltered from rain but humid enough to prevent desiccation and forest fires, cool enough to maintain their torpor but not so cold as to kill them and not so warm as to prompt premature maturation. Freedom from disturbance is essential to the survival of the oyamel forests, but during the last quarter of the 20th century, logging and agricultural encroachment have diminished the largest tracts of this rare habitat by four-fifths. As a result, it now remains as islands of thinned woodland more easily invaded by rain, frost and disease.

### 3. COMPARISONS WITH OTHER AREAS

The core zones of the Monarch Butterfly Biosphere Reserve have been nominated under criteria (vii) and (ix). In relation to criterion (vii), the nominated property is compared with other World Heritage properties and protected areas where species migration represents a superlative natural phenomenon. A comparison of the nominated property with key World Heritage properties with notable species migrations is summarised in Table 2. As shown in this table, the application of criterion (vii) to a number of World Heritage properties is linked to the phenomenon of species migrations, particularly of birds and large mammals.

Insect migration is a phenomenon displayed by many species and can be broadly classified in two types: dynamic migration and homeostatic migration. Dynamic migration is directed movement controlled by tides or wind, with navigational abilities not essential. The desert locust, found in Africa, is a good example of this type of migration, and the majority of migratory insects fall into this category. Homeostatic migrations are two-way migrations with migrants or offspring returning to breeding areas, hence the need for

**Table 1:** Core areas of the nominated property and their buffer zones

Name of the area	Size (ha)	
	Core areas	Buffer zones
Cerro Altamirano	589	Unknown
Chinca-Campanario-Chivati-Huacal	9,234	Unknown
Cerro Pélon	3,729	
<b>Total</b>	<b>13,552</b>	<b>42,707</b>

navigational abilities. The monarch butterfly migration is considered the classic example of this type of insect migration, involves millions of individuals, and is as long as or longer than that reported for the desert locus. As part of this migration, perhaps a billion monarch butterflies land in close-packed clusters within 14 overwintering colonies in the oyamel fir forests of central Mexico, 8 of which are included in the nominated property.

The millions of monarch butterflies bend tree branches by their weight, fill the sky when they take flight, and make a sound like light rain with the beating of their wings. Witnessing this unique phenomenon is an exceptional experience of nature. Of many insect migrations none compares with that of the monarch butterfly in terms of length, regularity, singularity and visibility on site. The overwintering concentration of the monarch butterfly is a superlative natural phenomenon.

In relation to criterion (x), the claim for Outstanding Universal Value is based on the values of the monarch butterfly migration for science and conservation. The nomination argues that this is supported by the 1983 IUCN Invertebrate Red Data Book which designated the overwintering sites of the monarch butterfly in Mexico as a “threatened phenomena”. However,

neither this assessment nor the IUCN Red List of Threatened Species classifies the monarch butterfly as a threatened species. The World Heritage Committee has also previously noted that criterion (x) should not be used in relation to a single species. In addition, the nominated property alone does not encompass the monarch butterfly migration, which involves other overwintering colonies in Mexico and a wide range of breeding areas in the USA and Canada (see also Section 4.2 below).

In response to IUCN's request to expand the justification in relation to criterion (x), the State Party has provided additional information comparing the nominated property with 26 comparable forest World Heritage properties. On the basis of these comparisons, the nominated property does not rank highly in terms of plant and animal species richness and endemism. In addition, the nominated property has not been identified as an area which may merit consideration for World Heritage listing in IUCN's thematic studies on forest protected areas, mountain protected areas and biodiversity values. In conclusion, at the global level, the nominated property is not one of the most important and significant areas for the *in situ* conservation of biodiversity and threatened species.

**Table 2:** Comparison of the Monarch Butterfly Biosphere Reserve with key World Heritage properties with notable species migrations

Name of property	Criteria	Main species	Migration route	Number of migrating individuals	Two-way distance (km)
Banc d'Arguin, Mauritania	ix, x	Wading and waterbirds	East Atlantic flyway	7 million	8,000-30,000
El Vizcaino, Mexico	x	Grey whale	Northern Pacific to western Mexico	26,000	16,000-22,000
Sub-Antarctic Islands, New Zealand	ix, x	Seabirds	Southwest of New Zealand to Chile and Korea	20 million (sooty shearwater)	18,000 (sooty shearwater)
Danube Delta, Romania	vii, x	Waterbirds	East Europe-Africa flyway	? millions	6,000-12,000
Laponian Area, Sweden	iii, v, vii, viii, ix	Reindeer	Across northern Sweden, Finland and Norway	30,000-35,000 (herded)	300-400
Serengeti, Tanzania	vii, x	Wildebeest, zebra, gazelles	East African savannah	1.5-2.5 million	1,500-1,600
Gough and Inaccessible Islands, UK	vii, x	Seabirds	Circumpolar feeding route	10 million	16,000-25,000
<b>Monarch Butterfly Biosphere Reserve, Mexico</b>	<b>vii, x</b>	<b>Monarch butterfly</b>	<b>Eastern North America to central Mexico</b>	<b>400 million to 1 billion</b>	<b>3,500 to over 4,500</b>

## 4. INTEGRITY

### 4.1 Legal status

The overwintering phenomenon of the monarch butterfly was first discovered by scientists in 1975, but it was not until 1980 that a Presidential Decree proclaimed all overwintering sites as a Wildlife Reserve and Refuge Zone, without specifying its boundaries. A Presidential Decree of 1986 established an area of 16,110 ha with specific boundaries. A Presidential Decree of 2000 established the Mariposa Monarca National Biosphere Reserve in its present boundaries with three core zones and two buffer zones. The large central Chincua-Campanario-Chivati-Huacal core zone is flanked by the Cerro Pelón core zone 6-14 km to the south and by the Cerro Almirano core zone 23-26 km to the north. The core zones are divided into two sub-zones: protection sub-zone (12,623 ha) and restricted use sub-zone (934 ha). The core zones comprise land of rural cooperatives (6,534 ha), communal land (4,792 ha), small private properties (932 ha), national land (707 ha) and other land (427 ha).

A human population of well over 100,000 people lives in over 100 agrarian centres and 55 villages within the buffer zones. The buffer zones comprise land of rural cooperatives (20,603 ha), communal land (11,209 ha), small private properties (1,432 ha), national land (7 ha) and other land (9,616 ha). These lands fall within 15 municipalities in the State of Michoacán and 12 municipalities in the State of México. This highly complex pattern of land ownership creates a challenge for the protection and management of the Biosphere Reserve and nominated property.

### 4.2 Boundaries

The boundaries of the nominated property are clearly delineated by coordinates in the Presidential Decree of 2000 and include three core zones which are surrounded by two buffer zones. The boundaries were set to include the main overwintering sites of the monarch butterfly. The three core zones include 8 of the 14 overwintering colonies of the eastern population of the monarch butterfly and 70% of its total overwintering population. The remaining 30% overwinter in colonies outside the nominated property, three of them to the southwest of the Biosphere Reserve, two to the northwest, and one to the northeast. The boundaries of the core zones of the Biosphere Reserve are not demarcated on the ground. This represents a significant problem for the protection and management of the core zones. The boundaries of the nominated property are adequate for the protection of 70% of the overwintering population of the monarch butterfly, but the 6 overwintering colonies outside the nominated property could be considered as a potential serial extension in the future.

Since the nominated property features a migrating insect population, it raises the question whether other sites of importance to the life cycle of the eastern population of the monarch butterfly should be included in the nomination. However, after leaving the overwintering colonies in and around the Monarch Butterfly Biosphere Reserve, the monarch butterflies disperse into 2.6 million square kilometres of habitat in northern Mexico, the USA and Canada east of the Rocky Mountains, without following specific flyways. So far, scientists have not been able to locate any other areas where the eastern population of the species concentrates outside its overwintering colonies in Mexico, and thus no additional sites for potential inclusion in the nomination have been identified. What has been developed is a network of Monarch Butterfly Sister Protected Areas in an ongoing trilateral effort between Mexico, the USA and Canada to protect the whole life cycle of the monarch butterfly. IUCN therefore considers the protection of the monarch butterflies outside their overwintering colonies does not require a transnational serial nomination because of the wide range of breeding areas in the USA and Canada, which also provides for the integrity of the remainder of the butterfly's life cycle.

### 4.3 Management

The Monarch Butterfly Biosphere Reserve is managed by the National Commission for Natural Protected Areas (CONANP) assisted directly by 46 federal and state agencies. In addition, 13 NGOs and academic institutions and the Monarch Butterfly Trust Fund provide input to the management. Management is guided by a Management Programme that was adopted in 2001. The Management Programme is a general document that lays out policies on sustainable development, wildlife management, public use, scientific research and monitoring, operations and law enforcement, rather than specific prescriptions for management. The document forms the basis for the Annual Operational Plans that are used to guide the day-to-day management activities of the many organisations involved.

An Advisory Council, made up of 21 representatives of rural cooperatives, communities and NGOs, has been established to assist CONANP in implementing the Management Programme and Annual Operational Plans. At a broader scale, a Regional Committee has been established to integrate the efforts of the States of Michoacán and México and 27 municipalities in developing and implementing a regional land use plan. The work of the Advisory Council and Regional Committee is complemented by Annual Regional Fora, large meetings that include all interested stakeholders and serve to coordinate activities and inform the Annual Operational Plans.

A total of 137 staff from six organisations work directly in the Biosphere Reserve, including 9 senior

professionals from CONANP and over 100 federal and state forest police officers and agents. Law enforcement is an ongoing problem despite the large number of officers and agents involved in the different federal and state law enforcement agencies. Reviewers have noted that this problem is mainly the result of lack of coordination. The lack of adequate tourism planning and management paired with rapidly growing tourism infrastructure are problems that require the immediate development and implementation of a detailed public use plan for the Biosphere Reserve.

The Monarch Butterfly Trust Fund was set up when the Biosphere Reserve was established, and has been used to purchase the logging rights in the core zones which were granted to communities before the establishment of the Biosphere Reserve. No business plan has been developed for the Biosphere Reserve, but Government commitment is strong enough that increasing levels of investment are likely. The President of Mexico visited the Biosphere Reserve in November 2007 and pledged an additional US\$ 4.6 million for investment in tourism infrastructure and job creation within the Biosphere Reserve.

According to the additional information provided by the State Party, the total budget for implementing the Operational Plan for the Biosphere Reserve in 2007 was 5,514,900 Mexican Pesos (around US\$ 531,105). The nomination document indicates that both the existing level of staffing and funding is inadequate. Based on the consultations during the IUCN field visit and a number of reviews, IUCN concurs that the current level of funding is insufficient for the effective management and conservation of the potential World Heritage property in light of the threats it faces. In addition, it is of utmost concern that only 0.3% of the 2007 budget was dedicated directly or indirectly to address the key threat of continuing and significant forest loss in the Biosphere Reserve.

#### 4.4 Threats and human use

The major threats facing the Monarch Butterfly Biosphere Reserve are human population growth, logging, agricultural encroachment, expansion of human settlements, grazing, forest fires, pests, and tourism. During the past decade, the population in the municipalities in which the Monarch Butterfly Biosphere Reserve is located grew from around 500,000 to 780,000. The population is essentially rural and widely dispersed. With over half of the human settlements with less than 100 people, the cost of providing adequate services or to develop alternative livelihoods is high.

Forest loss due to logging is the main direct threat to the Monarch Butterfly Biosphere Reserve. From 1971 to 2005, almost 4,000 ha of forest have been degraded (logged or disturbed) in the Biosphere Reserve. The nomination document notes that "due to

human pressures, despite the important efforts done by CONANP, the forest is under significant stress and the ecosystem is in danger". It further notes that due to the marked human population growth, the forested area shows "a permanent decline in total forested area, and simultaneously, an increasing rate of exploitation of the forest ecosystem". Despite the efforts of agencies and local communities, 510 ha were degraded from 2000 to 2003 and a further 479 ha from 2003 to 2005, mostly due to illegal logging. While illegal logging has been decreasing, it is still a major problem, as confirmed by recent satellite images that document continued and significant forest loss. This can be attributed to both loggers coming from outside the Biosphere Reserve as well as to firewood gathering by local communities. Agricultural encroachment and the expansion of human settlements are another significant cause of the forest loss. Widespread grazing of cattle, sheep and horses further degrades the forest ecosystem. Forest fires and pests are an ever present threat to the forest ecosystem. In 2006, 73 fires were detected within the Monarch Butterfly Biosphere Reserve, which burned 186 ha. Many of these fires are a consequence of land clearing for agriculture.

No environmental impact studies have yet been undertaken on the direct effects of tourism on the overwintering colonies of the monarch butterfly. CONANP has worked effectively with local communities to ensure that tourists visit only the smaller peripheral butterfly colonies and observe them from an appropriate distance. It would appear that the indirect effects of tourism that could cause the greatest alterations to the forest ecosystem are soil compaction, erosion, and depletion of water supplies. Current tourism impacts relate not so much to the butterfly colonies, but rather to the area's natural beauty. Most of the existing tourism infrastructure has been developed by local communities without considering visual or environmental impacts, and this detracts in a major way from the visual integrity of the sites that are visited by tourists.

Overall there is strong local support for the conservation of the property, although illegal activities of individuals from within and outside the Biosphere Reserve continue to occur. The site managers are convinced that the most effective conservation agents for the property are the local communities that rely on it for their livelihoods, and indeed these communities have been involved in halting illegal logging. However, the local communities expect the government to follow up promises of alternative livelihoods and payments for environmental services, and if these are not forthcoming it is expected that illegal activities will increase again.

A study of potential climate change impacts indicates that temperatures are unlikely to change significantly in the areas of the butterfly colonies, but that increased

rainfall is likely. However, this is projected to occur during summer, thus not affecting the overwintering of the monarch butterflies. It is even possible that the increased summer rainfall will be beneficial to the forest ecosystem. Therefore, in contrast to the continuing and significant forest loss, climate change impacts are not considered a major threat to the nominated property.

The level of effort by the State Party to address the existing threats has been increased recently with emphasis on a number of objectives. However, based on the consultations during the IUCN field visit and a number of reviews, IUCN considers that these increased efforts of the State Party are still insufficient for the effective management and conservation of the potential World Heritage property in light of the threats it faces. The high commitment of CONANP and other agencies and organisations involved in the protection and management of the property is not matched by the human and financial resources currently available. This is also recognized in the nomination document.

IUCN therefore considers that the property does not currently meet the necessary conditions of integrity as set out in the Operational Guidelines.

## 5. ADDITIONAL COMMENTS

### 5.1 Justification for serial approach

When IUCN evaluates a serial nomination it asks the following questions:

#### a) What is the justification for the serial approach?

The serial approach is justified because of the disjunctive nature of the major overwintering colonies of the monarch butterfly. These colonies occur only in large and dense tracts of oyamel fir forest that are restricted to the higher mountains of the Transvolcanic Range. Some of these colonies are separated by lower mountains and valleys that are heavily populated and retain limited natural habitats.

#### b) Are the separate components of the property functionally linked?

The superlative natural phenomenon of the overwintering concentration of the monarch butterfly in the remaining oyamel fir forest tracts provides the thematic framework for the serial approach. Although the descendants of the individuals of each colony apparently return to that same colony, the colonies in the three separate components of the nominated property are functionally linked in that they jointly provide the majority of the overwintering habitat that is essential to the eastern population of the monarch butterfly. Two of the three components are further

linked through a joint buffer zone.

#### c) Is there an overall management framework for all the components?

The three separate components of the nominated property are part of the Monarch Butterfly Biosphere Reserve and share the same administrative and management framework including the Biosphere Reserve's Management Programme and Annual Operational Plans. If additional areas were to be added in the future, it might be necessary to integrate them into the Biosphere Reserve's management framework, or otherwise harmonize management.

IUCN concludes that the serial approach put forward is justified in this case.

## 6. APPLICATION OF CRITERIA

The property has been nominated under criteria (vii) and (x). IUCN considers that the nominated property meets criterion (vii) based on the following assessment:

#### Criterion (vii): Superlative natural phenomena or natural beauty

The overwintering concentration of the monarch butterfly in the nominated property is a superlative natural phenomenon. The monarch butterfly migration is considered the classic example of two-way insect migration, involves millions of individuals, and is as long as or longer than that any other insect migration. Of many insect migrations none compares with that of the monarch butterfly in terms of length, regularity, singularity and visibility on site: Perhaps a billion monarch butterflies land in close-packed clusters within 14 overwintering colonies in the oyamel fir forests of central Mexico. The nominated property protects 8 of these colonies and thus 70% of the total overwintering population of the eastern population of the monarch butterfly. The millions of monarch butterflies bend tree branches by their weight, fill the sky when they take flight, and make a sound like light rain with the beating of their wings. Witnessing this unique phenomenon is an exceptional experience of nature.

IUCN considers that the nominated property meets this criterion but that a number of issues related to the integrity of the property need to be urgently addressed.

IUCN considers, however, that the nominated property does not meet criterion (x) based on the following assessment:

#### Criterion (x): Biodiversity and threatened species

The importance of the nominated property for the *in situ* conservation of biological diversity and threatened species is significant at the regional, but not at the global level. The property ranks lower in terms of plant and animal species richness and endemism than other comparable forest World Heritage properties. The “flagship” species of the property, the monarch butterfly, has not been classified as a globally threatened species. The World Heritage Committee has also previously noted that criterion (x) should not be used in relation to a single species. In addition, the nominated property alone does not encompass the monarch butterfly migration, which involves other overwintering colonies in Mexico and a wide range of breeding areas in the USA and Canada. In conclusion, at the global level, the nominated property is not one of the most important and significant areas for the *in situ* conservation of biodiversity and threatened species.

IUCN considers the nominated property does not meet this criterion.

## 7. RECOMMENDATIONS

IUCN recommends that the World Heritage Committee adopt the following decision:

*The World Heritage Committee,*

1. Having examined Documents WHC-08/32.COM/8B and WHC-08/32.COM/INF.8B2,
2. Defers the examination of the nomination of the **Monarch Butterfly Biosphere Reserve, Mexico,** to the World Heritage List on the basis of criterion (vii) to allow the State Party to address a number of issues related to the integrity of the nominated property;
3. Recommends the State Party to:
  - a) *Refocus as a matter of urgency the existing Management Programme, and the Annual Operational Plans and Budget for its implementation, to give the highest priority on actions aiming to halt illegal logging in the core zones of the nominated property. Particular attention should be given to: (1) working with local communities on environmental protection and alternative livelihoods to logging and (2) explore options for a major new investment in development and implementation of a coordinated plan to halt illegal logging involving all federal, state and local agencies;*
  - b) *Accelerate investment and actions oriented to clearly demarcating on the ground the core zones of the nominated property in*

*order to facilitate control and policing actions particularly on halting illegal logging; and*

- c) *Develop and implement, in the context of the 2007 Agreement of Collaboration between SECTUR and CONANP on the Development of Nature-based Tourism, a detailed plan for sustainable public use of the nominated property and an effective benefit-sharing mechanism for local communities as an incentive to enhance their support on the conservation of the nominated property;*
4. Commends the State Party and its partners for their demonstrated commitment to, and active collaboration in, the conservation and management of the Monarch Butterfly Biosphere Reserve.

Map 1: Location and boundaries of the nominated property

