

# History of Trinational Meetings

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# A Butterfly Uniting a Continent

- Government, NGO, and public scientists, educators, and conservationists across North America
  - Trinational meetings (1981, 1986, 1997, 2001, 2012, 2025x2)
  - North American Monarch Conservation Plan (2009)
  - Monarch Conservation Science Partnership (2011 to far into the future, I hope)





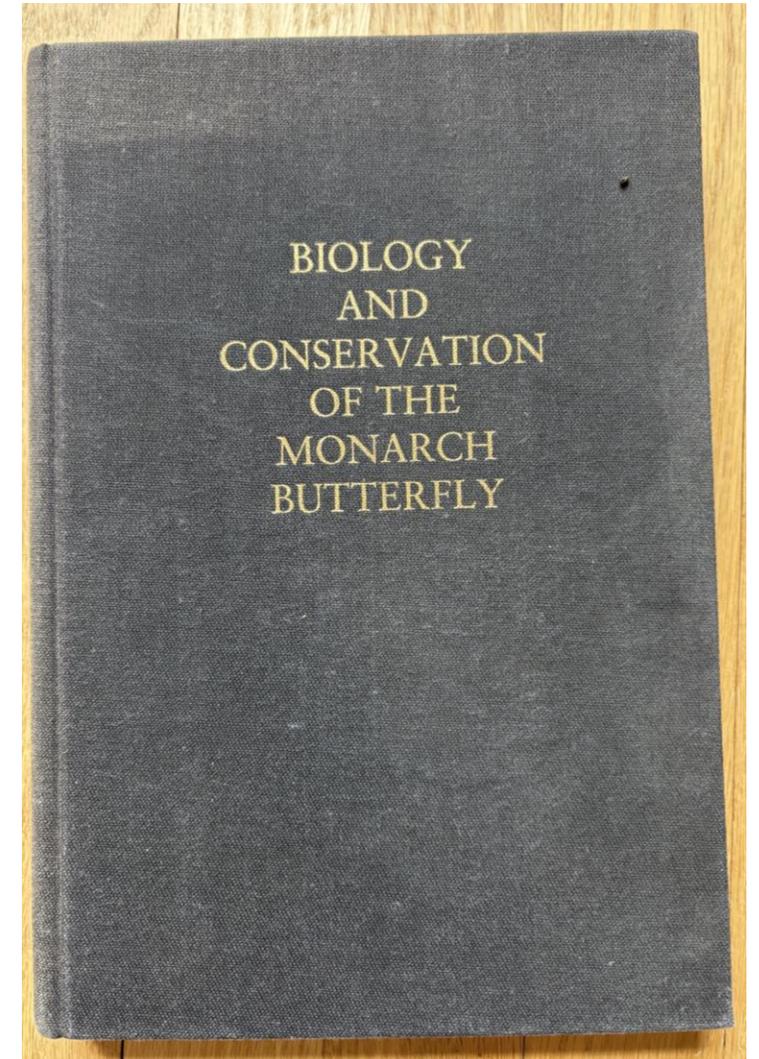
# Early Meetings



- 1981 Symposium on the Biology and Conservation of the Monarch Butterfly (MonCon-1)
  - Morelos Mexico
  - Looking for whole picture... (Bob Pyle, Bill Calvert and Lincoln Brower there)

# Early Meetings

- 1981 Symposium on the Biology and Conservation of the Monarch Butterfly
- 1986 Second International Conference on the Monarch Butterfly: Los Angeles CA
  - MonCon-2 organized and hosted by Julian Donahue of the Natural History Museum of LA County.
  - Participants from 7 nations and four continents
  - Announcement of significant conservation efforts by the government of Mexico (Presidential Decree that created Monarch Butterfly Special Biosphere Reserve).
  - First edited volume: Malcolm and Zalucki 1993



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# PRIORITY FOLLOW-UP ACTIONS

*"I believe the financial means, the technology and people exist to make these things happen."*

DON DAVIS



Secretaría de Medio Ambiente, Recursos Naturales y Pesca

Conference participants and Action Items. A conference was held to develop the Conference Action Items.

The two documents aimed at highlighting on this list the following actions of the high priority attendees. The following items reflect the participants. In some instances, their position is noted.

Those items that received the most attention are listed below for: 1) further clarification on selected items are presented in the pages that follow. The original lists from which the final choices were selected can be found in Appendix "A" of this document.

It is important to note the inherent difficulties that encumbered the process of identifying and prioritizing action items, such as the probable mistranslation of at least a few items or differing interpretations in meaning, among others. However, despite these obstacles, the conference organizers believe that this priority setting exercise successfully laid the foundation for future progress.

While the roundtables served as the mechanism to expose conference participants to the broad gamut of perspectives, the priority setting exercise served to build consensus on items requiring action in both the short and long-term. The ultimate objective of the priority setting was to identify those important actions which are not receiving adequate attention so that individuals or organizations can step forward to fill the void.

### Resource Management and Biodiversity

1. Review reserve management plan with local participation.
2. Develop alternative income and fuel sources for forest dependent communities.
3. Identify land use potential at the ejido and community level.
4. Promote/encourage reforestation.
5. Identify legal, social and practical impediments to resource management.
6. Conduct biodiversity threat analysis to determine conservation needs.
7. Decrease soil erosion.
8. Develop a program to train and employ people in a permanent forest industry.

### Sustainable Development and Conservation

1. Strengthen organizational capacity of local communities.
2. Provide technical support.
3. Create a permanent training program for campesinos addressing use and management of biodiversity.
4. Incorporate local priorities in workshops and training.
5. Promote exchange of experience among communities.
6. Encourage school, state, local and private participation.
7. Promote a regional development program for alternative sources of employment within the communities.
8. Showcase alternative economic projects.
9. Provide economic incentives to encourage local protection of reserves.
10. Generate an intensive program on reforestation with direct participation of the campesinos.
11. Establish a campesino council within the reserve to determine actions that institutions carry-out and endorse investment programs.
12. Create an information and consultation center regarding the monarch butterfly.
13. SEMARNAP should open a local office to deal with permits regarding forest.
14. Revise the decree which created the Monarch Sanctuary in direct consultation with the communities, ejidos and small-scale land owners.
15. Develop compensation programs.

### Biological Research Priorities

1. Study the role of overwintering site characteristics on butterfly presence and survival.
2. Experimentally study Oyamel ecosystem succession and watershed function.
3. Monitor Monarch distribution and abundance and encourage public participation.
4. Study environmental effects on distribution and abundance.
5. Use remote sensing techniques to study the temporal and spatial distribution of overwintering sites and Monarch abundance and dynamics.
6. Study the variation in butterfly condition during the overwintering season and its effects on behavior and survival.
7. Study the impact of milkweed cultivation and butterfly gardening on Monarch distribution and abundance.
8. Study sources of mortality during all life stages.
9. Monitor milkweed resource distribution, abundance and diversity.
10. Study the use of the Monarch Butterfly and its migration as an environmental indicator.

### Policy and Law

1. Seek alternative funding mechanisms.
2. Review and assess laws, policies, actions and the decree which created the Monarch Sanctuary.
3. Promote the reduced use of pesticides.
4. Develop a strategy for long-term political support and national councils in all three countries.

### 5. Increase enforcement.

6. Develop a framework for channeling funds.
7. Promote participatory land-use planning.
8. Establish a local coordinating committee for reserves.
9. Convene a conference of resource managers.
10. Establish new reserves.

### Communication and Outreach

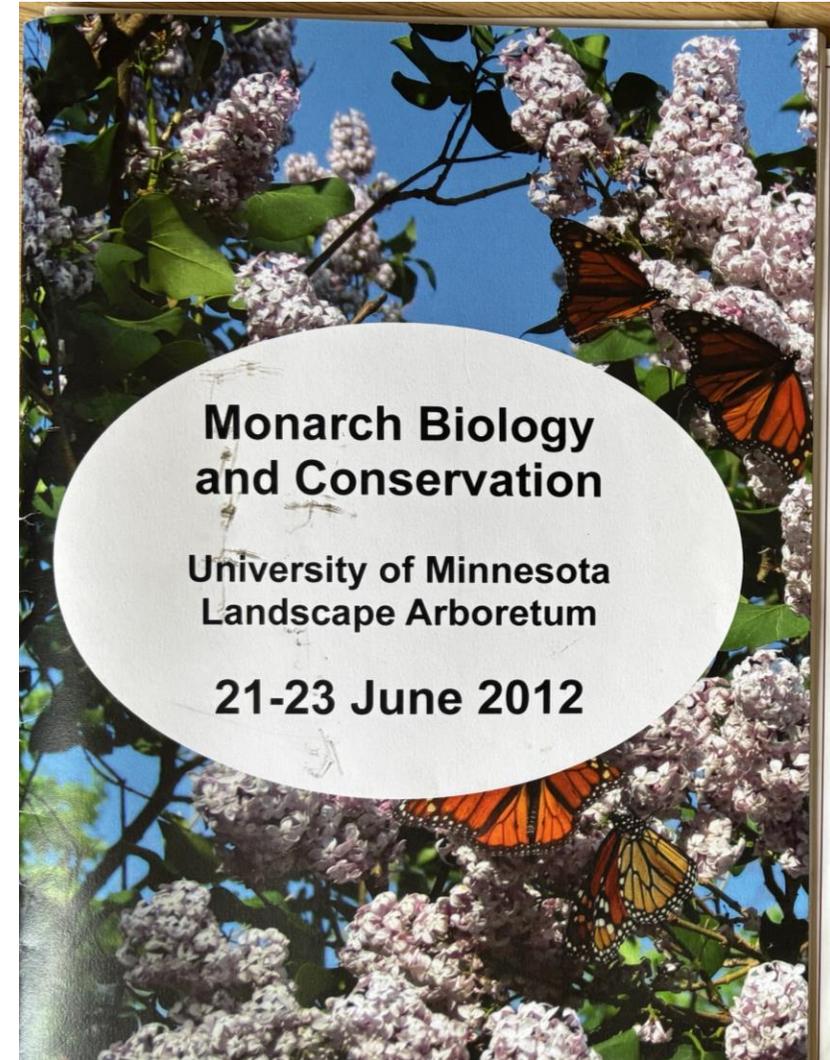
1. Establish community training project(s) for sustainable development.
2. Develop outreach initiatives to inform the public of trans-border collaboration.
3. Incorporate local and regional priorities into workshops and training.
4. Establish a network of organizations involved in environmental education projects.
5. Recognize and publicize reserves, successful initiatives and demonstration projects.
6. Promote a Canada-Mexico student exchange program.
7. Ensure that training courses contain action-oriented information.
8. Improve communication between local communities and outside players.
9. Establish Monarch Butterfly internet clearing house on information and current research.
10. Strengthen the educational experience of visitors to the Reserve.





# 2012 Monarch Biology and Conservation Meeting

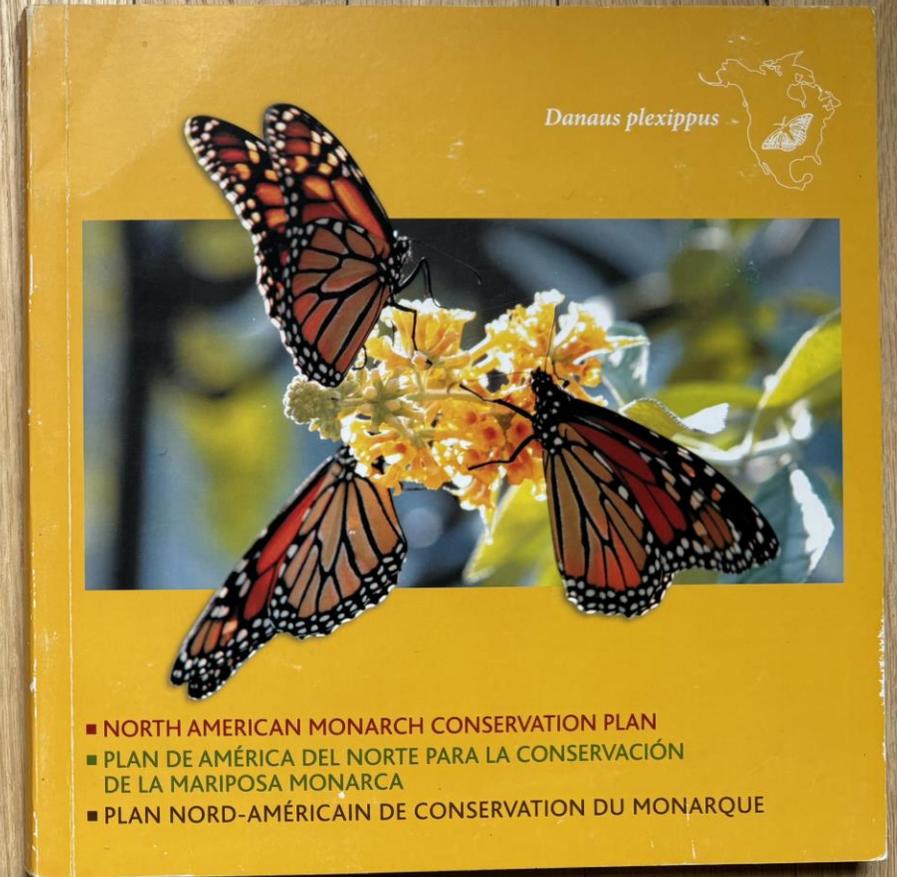
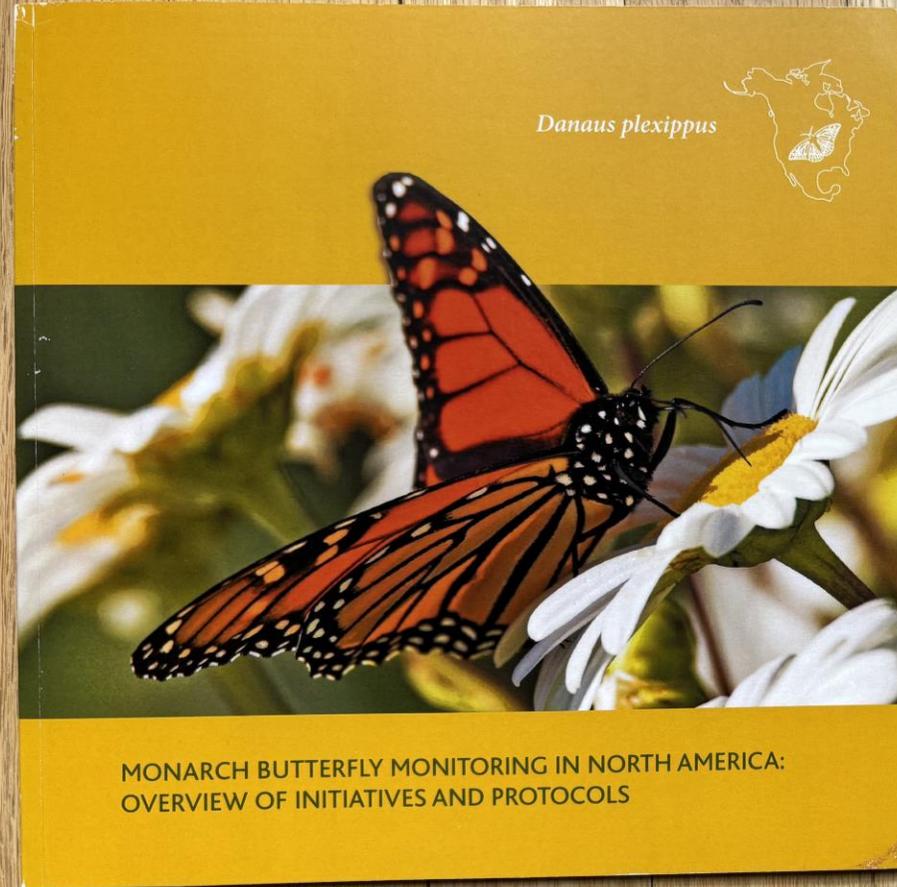
- Minneapolis Minnesota
- Organized by Monarch Joint Venture (UM Monarch Lab)
- Goal: Share information on monarch biology and population trends, and successful monarch conservation efforts
- Field trips to many MN locations







# 2009 North American Monarch Conservation Plan



# USFS-IP and MJV

- 2006 meeting in McAllen TX
- 2008 Meeting in Austin TX: USFS, Xerces, Monarchs in the Classroom, Monarch Watch, NRCS, Monarch Butterfly Fund, Texas Parks and Wildlife, USFWS, NABA



Carol Lively: USFS-IP, retired 2011, had experience with Joint Ventures through USFWS



# Monarch Conservation Science Partnership



- USGS, USFWS
- AFWA, CEC, Trilateral Committee for Wildlife and Ecosystem Conservation and Management
- Scientists from Canada, Mexico and the US
- Began in 2011-2013 with Powell Center meetings: Animal Migration and Spatial Subsidies





