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Priority Actions for Monarch Butterfly Conservation in North America

Strengthening Evidence-Based
Collaboration



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About the author

The Monarch Joint Venture (MJV) is a national conservation nonprofit that implements science-based conservation actions for monarch butterflies and other pollinators. The MJV supports conservation planning and implementation efforts by facilitating information sharing, partnership building, and carrying out identified conservation priorities throughout the monarch's migratory range.

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© Wendy Caldwell, Monarch Joint Venture

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on tree branch in blue sky background,

Michoacan, Mexico © JHVEPhoto/iStock

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For more information:

Commission for Environmental Cooperation

1001 Robert-Bourassa Boulevard, bureau

1620 Montreal, Quebec, Canada H3B 4L4

Phone: +1 (514) 350-4300

Fax: +1 (438) 701-1434

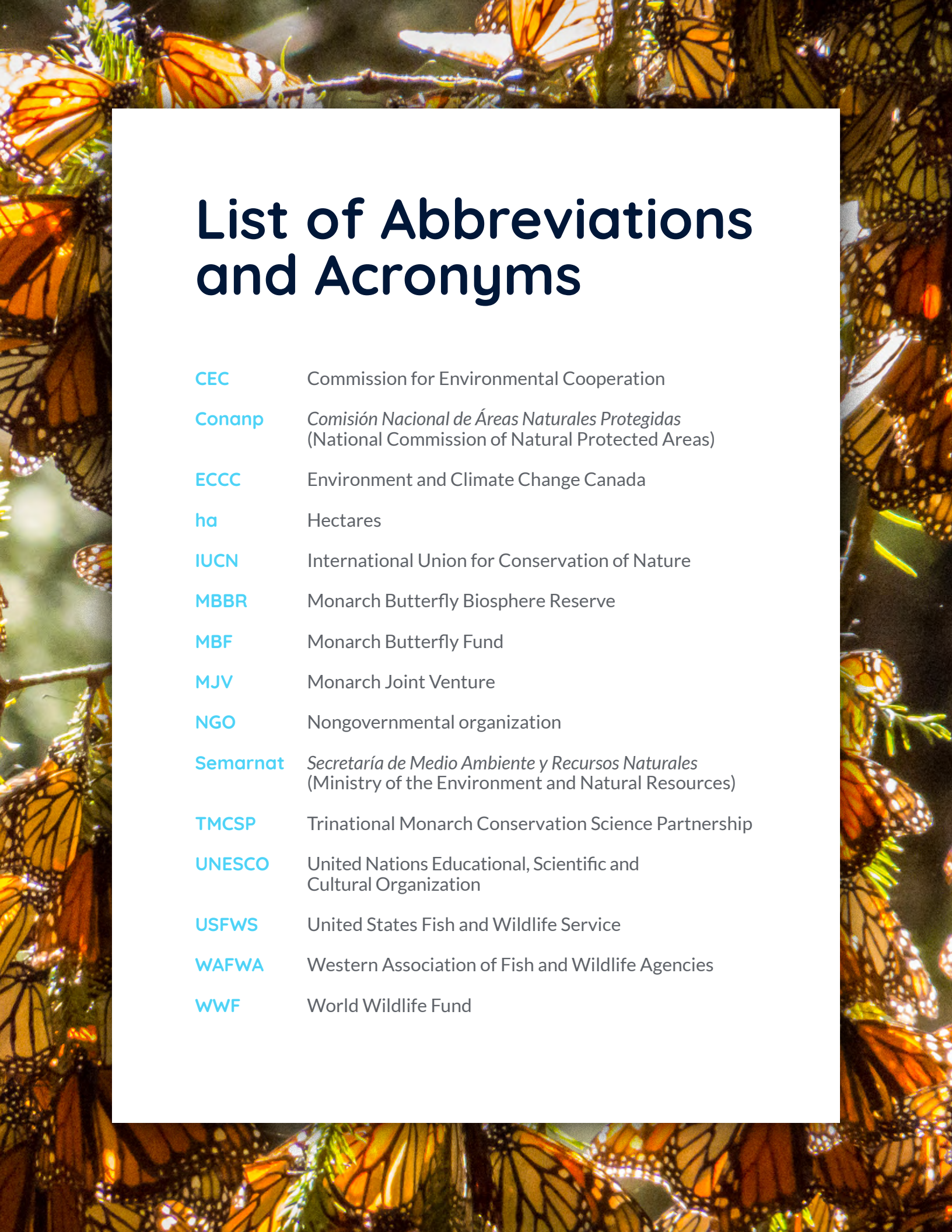
Email: info@cec.org / www.cec.org

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A close-up photograph of several monarch butterflies perched on a green branch. The butterflies' wings are a vibrant orange with black veins and spots. The background is softly blurred, showing more foliage and butterflies.

List of Abbreviations and Acronyms

CEC	Commission for Environmental Cooperation
Conanp	<i>Comisión Nacional de Áreas Naturales Protegidas</i> (National Commission of Natural Protected Areas)
ECCC	Environment and Climate Change Canada
ha	Hectares
IUCN	International Union for Conservation of Nature
MBBR	Monarch Butterfly Biosphere Reserve
MBF	Monarch Butterfly Fund
MJV	Monarch Joint Venture
NGO	Nongovernmental organization
Semarnat	<i>Secretaría de Medio Ambiente y Recursos Naturales</i> (Ministry of the Environment and Natural Resources)
TMCSP	Trinational Monarch Conservation Science Partnership
UNESCO	United Nations Educational, Scientific and Cultural Organization
USFWS	United States Fish and Wildlife Service
WAFWA	Western Association of Fish and Wildlife Agencies
WWF	World Wildlife Fund

Abstract

Priorities guiding North American monarch butterfly conservation were first established at a continental, trinational level through a collaborative process undertaken by the Commission of Environmental Cooperation (CEC) that resulted in the 2008 *North American Monarch Conservation Plan*. This document provides updated priorities, developed jointly by monarch conservation specialists from Canada, Mexico, and the United States through a series of virtual and in-person meetings in 2025. The priorities are organized into three thematic, yet interdependent sections:

- 1) Systems for Collaboration and Communication,
- 2) Coordination of Science and Monitoring, and
- 3) Strategic Habitat Initiatives.

Each section includes examples of accomplishments since 2008, priority actions, sub-actions, and additional context with suggested next steps. This high-level framework is intended to provide guidance to government agencies, conservation organizations, Indigenous communities, academic researchers, industry groups, landowners, community groups, and funders who are involved in or interested in contributing to monarch conservation. It reflects a shared commitment to sustaining healthy migratory monarch populations across the continent.



Adult monarch on aster flowers
© Mercy Manzanares, Monarch
Joint Venture

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We gratefully acknowledge the contributions of the Trinational Monarch Conservation Science Partnership (TMCSP), which includes representatives from government agencies, research institutions, and non-governmental organizations across North America, and a broad network of collaborators invited to review the plan as it developed. Their expertise, insights and feedback were essential in shaping the contents of this report. Core participating organizations are listed in alphabetical order:

- Association of Fish and Wildlife Agencies
- Autonomous University of Tamaulipas (*Universidad Autónoma de Tamaulipas*)
- Autonomous University of Querétaro (*Universidad Autónoma de Querétaro*)
- Canadian Wildlife Federation
- Canadian Wildlife Service
- Carleton University
- *Ecosistémica A.C.*
- *Ejido Cerro Prieto*
- *Ejido Los Remedios*
- Environment and Climate Change Canada
- James Madison University
- Michoacán University of San Nicolás de Hidalgo (*Universidad Michoacana de San Nicolás de Hidalgo*)
- Monarch Butterfly Fund
- Monarch Fund (*Fondo Monarca*)
- Monarch Joint Venture
- Monarch Watch
- Montreal Insectarium | Space for Life (*Insectarium de Montréal | Espace pour la vie*)
- National Autonomous University of Mexico (*Universidad Nacional Autónoma de México*)
- National Commission of Natural Protected Areas (*Comisión Nacional de Áreas Naturales Protegidas—Conanp*)
- National Wildlife Federation
- Natural Resource Solutions, Inc
- Neovolcanic Axis Conservation Fund (*Fondo de Conservación del Eje Neovolcánico, A.C*)

- Ontario Ministry of Natural Resources
- *Profauna A.C.*
- *Pronatura Noreste A.C.*
- Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales—Semarnat*)
- United States Fish and Wildlife Service
- United States Forest Service
- United States Geological Survey
- University of California Davis
- University of Guelph
- University of Ottawa
- University of Toronto
- University of Wisconsin La Crosse
- University of Wisconsin Madison
- Washington Department of Fish and Wildlife
- Washington State University
- World Wildlife Fund Mexico
- Xerces Society for Invertebrate Conservation

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Finally, we note that the content and recommendations presented in this document do not necessarily represent the official positions of any individual organization. They reflect a collaborative effort by many individuals across organizations to reach alignment on priority actions for monarch conservation in North America.

Defining Priorities: A Collaborative Trinational Process for Monarch Conservation

Monarch butterflies (*Danaus plexippus*) continue to experience significant population declines across North America. They undertake remarkable annual migrations, with the Eastern population traveling long distances from Canada and the United States to overwintering sites in central Mexico, and the Western population, west of the Rocky Mountains, migrating shorter distances to coastal California. As they face multiple threats across all stages of their annual cycle, conserving this migratory phenomenon requires coordinated, evidence-based action across the continent, making trinational collaboration essential. This document presents an updated set of trinational conservation priorities, developed collaboratively by monarch conservation specialists from Canada, Mexico, and the United States through a series of virtual and in-person meetings in 2025, to guide collective efforts and reflect a shared commitment to sustaining healthy migratory monarch populations.

Historical Context

High-level priorities were first established through a collaborative, trinational process undertaken by the Commission of Environmental Cooperation (CEC) that resulted in the 2008 *North American Monarch Conservation Plan* (CEC 2008). Since then, significant progress has been made in international coordination, monarch

June 2025 North American
Monarch Summit in
Minneapolis, MN © CEC



research, and habitat protection and restoration across North America.

A notable example of this continued collaboration is the Trinational Monarch Conservation Science Partnership (TMCSP), established in 2015 with support from the CEC. This network of monarch researchers convened regularly between 2016 and 2019 through CEC-funded monarch projects, and again in 2024 at a strategic meeting convened by the Government of Mexico to share new findings, set joint research priorities, and identify next steps for advancing monarch conservation efforts.



Overwintering monarchs in Mexico (cluster) © Greg Mitchell

In 2025, the CEC launched the *Strengthening Evidence-Based Collaborative Monarch Butterfly Conservation* project, a year-long effort with the TMCSP and facilitators from the Monarch Joint Venture (MJV) to revisit and update the 2008 priorities. One in-person and ten virtual meetings were held from March through December 2025, bringing together TMCSP members and other collaborators from federal agencies, research institutions, and nongovernmental organizations. This document represents the collective expert opinion of this diverse group of monarch conservation specialists and underscores the ongoing commitment to protecting one of North America's most iconic migratory species.

Purpose and Structure

The updated priorities presented in this document build on previous successes and aim to align conservation efforts where the trinational community can be most effective. This high-level framework is intended to provide guidance to government agencies, conservation organizations, Indigenous communities, academic researchers, industry groups, landowners, community groups, and funders who are involved in or interested in contributing to monarch conservation. The purpose is to inform and align each organization's actions from a trinational perspective. These priorities are not meant to replace national or regional plans, but to strengthen coordination, foster partnerships, and amplify collaborative strategies.

The priorities are organized into three thematic, yet interdependent sections:

- 1) Systems for Collaboration and Communication,
- 2) Coordination of Science and Monitoring, and
- 3) Strategic Habitat Initiatives.

Each section:

- Opens with examples of accomplishments since 2008, acknowledging progress while emphasizing remaining needs.
- Lists priority actions and sub-actions, including funding, which underpins all efforts. All actions are shared responsibilities.
- Provides context and suggestions to inform future efforts. These are illustrative rather than prescriptive.

Recovery Goals

Despite significant progress in on-the-ground-conservation efforts, monarch populations continue to face serious challenges, including habitat loss, pesticide use, climate change, and other stressors, making renewed, coordinated action essential. The trinational community has identified population benchmarks to guide the recovery and long-term sustainability of North America's migratory monarch butterflies. For the eastern population (which migrates east of the Rocky Mountains and overwinters in central Mexico), the target is to maintain at least 6 hectares (ha) of overwintering monarchs (Executive Office of the President 2015; Semmens et al. 2016). For the western population (which migrates west of the Rocky Mountains and overwinters along the California coast), the target is a five-year running average of 500,000 overwintering monarchs (WAFWA 2019). It is important to note that these targets may be refined as new information becomes available. As of early 2026, monarchs are listed as *Endangered* under Canada's Species at Risk Act (Government of Canada 2023), are proposed for listing as *Threatened* under the United States' Endangered Species Act (USDOI 2024), are listed as a species of *Special Protection* (*sujeta a protección especial*) under Mexico's NOM-059-Semarnat-2010 environmental regulation (Semarnat 2010) and migratory monarchs are listed as *Vulnerable* by the International Union for Conservation of Nature (IUCN 2023).

Moving Forward

Successful monarch recovery depends on broad participation from all sectors of society throughout the monarch's migratory range, as well as aligned conservation actions among government agencies, conservation organizations, Indigenous communities, academic researchers, industry groups, landowners, community groups, and funders. While the priorities listed below are centered on monarchs, the conservation actions that support this iconic species also strengthen the health and resilience of ecosystems across North America. By aligning shared trinational priorities and coordinating efforts, we can conserve migratory monarchs and the many other species that depend on these shared landscapes.

1. Systems for Collaboration and Communication

Collaboration and communication are vital for a migratory species whose annual cycle spans Canada, Mexico, and the United States. During the development of these priorities, monarch conservation specialists consistently emphasized the need for ongoing and expanded opportunities for collaboration, communication, and coordination across all areas of conservation action.

This section highlights some examples of accomplishments in collaboration since 2008 and presents priority actions to guide future efforts (Table 1), building on successes while strengthening international and national frameworks that support them.

Examples of Accomplishments

Trinational

At the 2014 North American Leaders' Summit, the heads of state of Canada, Mexico, and the United States formalized trinational collaboration on monarch conservation through a commitment to establish a working group (United States Office of the Press Secretary 2014). This set the stage for the TMCSP, which was endorsed in 2016 by the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management (Diffendorfer et al. 2023).

Since the development of the *North American Monarch Conservation Plan* (CEC 2008), multiple in-person and virtual meetings have fostered ongoing collaboration among conservation specialists. Notable gatherings include the International Monarch Biology and Conservation Meeting hosted by the University of Minnesota Monarch Lab in 2012, several TMCSP meetings from 2016 to 2019 and again in 2024, the 2025 North American Monarch Summit, which was hosted by MJV and the Rights-of-Way as Habitat Working Group, and the 2025 International Monarch Science Symposium hosted by Monarch Watch.



June 2025 in person meeting in Minneapolis, MN to update conservation priorities © Christine Chase, Monarch Joint Venture

Programs and initiatives such as The Mayors' Monarch Pledge (National Wildlife Federation, David Suzuki Foundation, and Profauna), North American Pollinator Protection Campaign (Pollinator Partnership), and the North American Monarch Institute (MJV) continue to further connect conservation collaborators' actions across borders. For example, since 2015, more than 2,300 cities across Canada, Mexico, and the United States have committed to monarch conservation through the Mayor's Monarch Pledge, a program created by the U.S. National Wildlife Federation and expanded into a trilateral initiative (NWF 2025).

Canada

In 2023, the monarch was reclassified from a species of *Special Concern* to *Endangered* under Canada's Species at Risk Act, which triggered national protections on federal lands and the development of a recovery strategy and action plan (Government of Canada 2023). To guide this process, ECCC's Canadian Wildlife Service convened a National Monarch Recovery Technical Committee. The monarch is also listed as a species at risk under several provincial acts. Since 2017, ECCC has invested in monarch conservation through the Habitat Stewardship Program (ECCC 2025a) and Indigenous Partnerships for Species at Risk (ECCC 2025b) to leverage partnerships for conservation impact.

ECCC, through the Science and Technology Branch, also continues to carry out research to inform monarch conservation policy both domestically and trilaterally. The Montreal Insectarium played a leading role in launching the International Monarch Monitoring Blitz in 2016, to which Canadian supporting partners include iNaturalist and ECCC (Espace pour la vie 2017).

Participants searching for monarchs during the Monarch Blitz © Monarchs Matter

Mexico

Mexico strengthened coordination through the *National Action Plan for the Conservation of the Monarch Butterfly in Mexico 2018 – 2024* (*Plan de Acción para la Conservación de la Mariposa Monarca en México, 2018–2024*) (Semarnat and Conanp 2018). Federal conservation funding managed by Conanp has expanded through programs like the Conservation Program for Sustainable Development (*Programa de Conservación para el Desarrollo Sostenible—Procodes*), and the Program for the Protection



and Restoration of Priority Ecosystems and Species (*Programa para la Protección y Restauración de Ecosistemas y Especies Prioritarios—Prorest*).

National NGOs such as *Alternare*, *Fondo de Conservación del Eje Neovolcánico*, and *Fondo Monarca* support sustainable livelihoods around overwintering sites. Collaborative networks such as the Working Group for the Conservation and Monitoring of the Monarch Butterfly Flyway (*Red Nacional de Monitoreo de la Mariposa Monarca—Red Monarca*) have unified NGOs, agencies, and communities.

United States

Investments through the United States Forest Service International Programs have supported national and international monarch conservation partnerships and programs since the early 2000s. Following the publication of the 2008 *North American Monarch Conservation Plan*, the MJV was launched as a national implementation framework and now convenes over 140 partners across the United States to coordinate education, science, and habitat conservation efforts. Following the 2014 petition to list monarchs under the Endangered Species Act, the United States Fish and Wildlife Service (USFWS) expanded its leadership of national monarch conservation efforts alongside partners from multiple sectors, including energy and transportation, defense, agriculture, and public lands.

National coordination efforts were strengthened through the 2015 *National Strategy to Promote Health of Honey Bees and Other Pollinators* (Executive Office of the President 2015). Regional collaborations mobilized state efforts through the Midwestern and Western Associations of Fish and Wildlife Agencies (MAFWA 2023; WAFWA 2019). In June 2022, the USFWS launched the Center for Pollinator Conservation (USDOI 2022), and in 2024, the USFWS proposed listing the monarch as a threatened species under the Endangered Species Act (USFWS 2024).

Overwintering monarchs in Mexico (colony) © Greg Mitchell



Table 1. Priority Actions: Systems for Collaboration and Communication (Part 1)

Priority Actions	Sub-actions	Context and Suggestions
1. Secure long-term funding to support collaboration and communication priorities for North American monarch conservation.	1.1. Fund collaborative efforts across sectors, regions, and countries.	Secure flexible and sustained funding to strengthen collaboration and communication that supports multiscale conservation partnerships across the monarch’s migratory range. This investment should expand staff capacity for coordination, foster innovative solutions, and support the broad distribution of resources. Funders and recipients should work together to develop shared metrics that effectively capture the impact of coordination efforts and take opportunities to demonstrate the value of this work through invited participation by funders and elected officials in field events, conferences, and other meetings. Organizations should also leverage a broad portfolio of funding mechanisms (e.g., carbon or biodiversity credits, market-based conservation models, etc.).
2. Collaborate across sectors, regions, and countries.	2.1. Establish permanent trilateral system(s) for collaboration.	Create and sustain a formal, transparent, and well-resourced trilateral coordination and leadership structure to align monarch conservation strategies, facilitate data sharing and technical training, and coordinate communication across Canada, Mexico, and the United States. The TMCSP, historically supported by the CEC, is a topic-specific example of trilateral coordination that could be expanded upon or used as a model for other topics. Suggestions include: • Identify potential host institutions that could house or facilitate coordination structures; an independent or semi-independent entity with dedicated leadership and accountability may be preferable to a specific government entity for long-term collaboration. • Intentionally incorporate collaborators from across a broad range of industries and sectors (e.g., government agencies, NGOs, community groups, private landowners, industry sectors, and Indigenous communities and organizations) to engage existing networks in trilateral strategies. • Focus on strategic collaboration, consistent messaging, and efficient and effective implementation of conservation actions across the full migratory range. • Coordination entities should develop a more detailed purpose, charter, and impact evaluation framework as determined by the committed parties. • Explore a formal framework, such as a Memorandum of Understanding or Agreement of Intent, that aims to strengthen partnerships, share data, and integrate monarch conservation into broader land management and planning activities.
	2.2. Support national-level structures that integrate local, regional, and sector-based collaboration.	Establish national-level coordination systems in Canada, Mexico, and the United States to align local, state/provincial, and regional efforts with trilateral goals and priority actions. These structures should include both government and non-government partners, foster cross-sector collaboration, reduce duplication of efforts, and offer strategic, scientific, and technical support at multiple levels. Suggestions include: • Where possible, countries should prioritize strengthening and engaging existing efforts, managing and improving current networks, and establishing mechanisms to monitor collaboration and effectiveness over time. • National entities should work together across borders to coordinate, track, and report conservation efforts on a larger scale and to define the common functions of national-level partnerships.

Table 1. Priority Actions: Systems for Collaboration and Communication (Part 2)

Priority Actions	Sub-actions	Context and Suggestions
3. Design, build, and maintain tools for collaborative communication.	3.1. Establish shared, open-access directories of individuals, programs, and organizations.	Establish shared, open-access directories to connect individuals, programs, and organizations involved in monarch and pollinator conservation across North America. This will strengthen communication, support message alignment, and facilitate coordinated action and training across Canada, Mexico, and the United States. Suggestions include: • Identify existing resources and lists that are already maintained by entities such as MJV, CEC, Conanp, and other key partners. • When possible, prioritize use of existing platforms that can be updated for broader use, and consider multilingual access, access preferences, directory management, and user guidelines. • Include contact information for individuals, programs, and organizations working in monarch and pollinator conservation, their areas of expertise, geographic focus, opportunities for collaboration, and other relevant information on program or resource offerings.
	3.2. Improve coordination on collaborative campaigns to recruit participation and share information trinationally.	Coordinate trinational campaigns to share simple, multilingual, and culturally relevant messages that recruit participation, engage local champions, and build public momentum for monarch butterfly conservation across Canada, Mexico, and the United States. The International Monarch Monitoring Blitz (coordinated by the CEC and involving several partner organizations) is an example of this approach which engages participation in community science projects. With its accessible, multilingual communications tools and broad appeal, the Monarch Blitz could be expanded or serve as a model for additional collaborative campaigns and initiatives. The Monarch Joint Venture is an example of this at a national scale that can be replicated more broadly across North America. Suggestions include: • Identify topics best-suited for trinational participation, e.g., general awareness campaigns, sector-specific outreach, habitat certification programs, community science campaigns, or strategies for engaging local jurisdictions. • Establish trinational working groups (short- or long-term) to co-create resources where applicable. • Include collaborators from a wide range of sectors (e.g., government agencies, NGOs, Indigenous communities, community groups, private landowners, and industry) when developing resources, tools, and messaging. • Build shared campaign toolkits with adaptable templates, social media posts, and visually compelling graphics. • Establish shared timelines and coordinated launch dates. • Incorporate locally relevant examples to deepen audience connection.
	3.3. Disseminate resources that convey technical information in clear, accessible, and engaging formats for multiple audiences.	Make monarch conservation information (including scientific research and protocols, habitat management practices, complex regulations, and policy decisions) accessible, understandable, and actionable for a wide range of audiences in multiple formats (written, live training, virtual resources, etc.). This includes translating complex information into plain language across various languages (English, Spanish, French, and Indigenous languages as relevant) and being mindful of social and cultural contexts that may affect engagement and dissemination. When considering new content and/or training materials, a gap analysis engaging potential end users or audience is recommended to maximize usefulness. Possible audiences and topics could include: • Policymakers, to inform policy-related decisions and investments. • Funders, to demonstrate the impact of investments in both quantitative and qualitative measures. • Land stewards and practitioners, to apply best management practices and to understand policy implications. • Educators and community leaders, to teach, engage, and mobilize. • The public, to inspire conservation action and behavior change.

2. Coordination of Science and Monitoring

Effective monarch conservation is guided by evidence acquired through science and monitoring. Throughout the development of this document, monarch conservation specialists emphasized the importance of maintaining strong scientific foundations and expanding capacity to gather, share, and analyze data that inform decision-making at multiple scales.

This section highlights examples of accomplishments since 2008 and priority actions (Table 2) to strengthen coordinated research, improve long-term monitoring activities, and ensure that data are accessible and actionable. This section does not identify specific research priorities, which evolve over time, but instead emphasizes the systems and tools needed to coordinate research networks and regularly review and update research priorities.

Examples of Accomplishments

Trinational

Trinational collaboration has significantly advanced monarch science. A review of papers available in the Monarch Net library, together with those cataloged in MJV's annual research reviews since 2020, indicates that more than 550 peer-reviewed publications on monarch butterflies have been produced by the international scientific community since 2008 (MJV 2025). The Monarch Net library, launched in 2009, provides a centralized repository for published research, while the Trinational Monarch Knowledge Network (TMKN) was created in 2019 as an open-source database integrating monitoring data from all three countries.

The International Monarch Monitoring Blitz, a trinational community science initiative celebrating its 10th anniversary in 2026, has expanded public engagement in monarch research. The International Union for Conservation of Nature's listing of North American migratory monarchs (IUCN 2023) reflects a global scientific assessment informed by these shared efforts.



Participants searching for monarchs during the Monarch Blitz © U.S. Army Corps of Engineers

Canada

Canada's contribution to the eastern monarch population has been quantified through stable isotope analysis (Flockhart et al. 2015) and community science data (Momeni-Dehaghi et al. 2021), findings that have also helped shape conservation priorities. Scientific research has highlighted the impacts of pesticides on monarch survival (e.g., Knight et al. 2021) and the need for additional common milkweed in Canada to reach recovery targets (Mitchell et al. 2025).

The Canadian Wildlife Service developed a protocol to detect suitable roosting habitats along the Great Lakes. This protocol contributes to identifying habitat preferences during fall migration and may contribute to critical habitat decisions (Fyson et al. 2023). Organizations like Birds Canada supports cross species monitoring through standardized monarch migration counts along Lake Erie and leadership of the Motus Wildlife Tracking System. Community science initiatives, including iNaturalist.ca (Canadian Wildlife Federation), Mission Monarch and Mission Monarch Expert (Montreal Insectarium), support ongoing monitoring and rapid updates to population estimates, helping Canada meet its share of trinational recovery targets (Drapeau Picard et al. 2024).

Mexico

Coordinated and systematic monitoring of overwintering colonies by Conanp and the World Wildlife Fund (WWF) since 2004, continues to provide critical population data (Rendón-Salinas et al. 2024).

Coordinated community science monitoring along the monarch butterfly migratory route is led and coordinated by Conanp through *Red Monarca*, the Working Group for the Conservation and Monitoring of the Monarch Butterfly Flyway (*Red Nacional de Monitoreo de la Mariposa Monarca*). *Red Monarca* also maintains a central database for national research on the conservation of the species (Red Monarca 2024).

Research networks, university collaborations, and updated climate adaptation plans strengthen the scientific foundation for habitat management. For example, forest restoration research



Overwintering monarchs
in Mexico (close up)
© Greg Mitchell

projects have tested assisted migration techniques for *Abies religiosa* seedlings using nurse plants to increase survival (Carbajal-Navarro et al. 2019) and evaluate forest health and tree vitality using drones equipped with LiDAR and multispectral imaging (MBF 2025b).

United States

The U.S.-based Monarch Conservation Science Partnership (Diffendorfer et al. 2023), along with federal agencies such as the United States Geological Survey and United States Fish and Wildlife Service and programs like the Integrated Monarch Monitoring Program, have standardized breeding habitat surveys and collaboratively developed robust monitoring protocols that align with and inform habitat and population targets (Cariveau et al. 2019).

Monarch community science programs, including Journey North and the Monarch Larva Monitoring Project (MJV), Project Monarch Health (University of Georgia), Western Monarch Count and Western Monarch Milkweed Mapper (Xerces Society), and tagging programs run by Monarch Watch and Southwest Monarch Study, have expanded public participation in scientific research and increased geographic coverage of monitoring efforts.

Scientific advancements such as remote sensing, advanced tagging and tracking technologies, and demographic and population viability models (e.g., Semmens et al. 2016; Oberhauser et al. 2016; Schultz et al. 2017) support strong progress in modern conservation science. Critical research assessing species status, assessments of milkweed declines, and pesticide effects have informed conservation actions (e.g., USFWS 2020; Espeset et al. 2016; Thogmartin et al. 2017b; McCulloch et al. 2025).

Table 2. Priority Actions: Coordination of Science and Monitoring (Part 1)

Priority Actions	Sub-actions	Context and Suggestions
4. Secure long-term funding to support coordinated science priorities for North American monarch conservation.	4.1. Fund research and collaborative scientific networks.	Manage and optimize sustained funding for scientific collaboration, new research, maintaining long-term monitoring datasets, and data analysis. This funding should advance shared cross-sector research priorities; maintain robust, accessible data systems and technical tools; and provide ongoing coordination (e.g., through the TMCSP and other science-focused working groups). Flexible, phased financial models should foster innovation, build resilience to political change, and support the full participation and recognition of academic, technical and public collaborators. This investment will ensure that conservation efforts are guided by the most current and relevant scientific research.
5. Coordinate science efforts.	5.1. Strengthen the TMCSP as a key research network advancing shared priorities.	The TMCSP is a key initiative established in 2015. It fosters collaboration, alignment, and shared priorities among scientists working to conserve monarchs and their habitats. Continuous investments are needed for ongoing structure, facilitation, and participation. Suggested next steps include: • Update the operating charter that defines meeting frequency, participant roles, and a shared scientific agenda. • Secure a long-term home for ongoing coordination support. • Establish a recurring mix of virtual and in-person meetings to drive collaboration on key initiatives, including research priorities (see 5.2), data analysis, and conservation modeling. • Integrate various organizations and perspectives into the network to share priorities, co-develop solutions, and build scientific capacity throughout the trinational region.
	5.2. Facilitate regular trinational reviews of research priorities.	Convene the TMCSP, or a dedicated working group, to assess and update shared research priorities, and review available monarch conservation data in response to evolving needs. Greater continuity of process, transparency, and follow-through are needed to strengthen ongoing coordination and long-term impact. Suggested activities for this group include: • Establish research priority categories for consistency. The following are suggested categories based on an analysis of past research and established conservation plans: - Conservation Effectiveness and Opportunities - Data Efficacy - Breeding Habitat Use and Distribution - Migration - Overwintering - Population Dynamics - Threats • Determine frequency of review meetings (e.g. bi-annually, every 5 years, etc.). • Document progress on previously identified research priorities to inform future direction. • Publish and widely share an updated list of research and monitoring priorities organized by high-level categories to guide and engage the broader research community. • Leverage literature reviews to identify progress on research priorities, articulate how recent research results should impact conservation activities, and identify future monitoring and data analysis needs.

Table 2. Priority Actions: Coordination of Science and Monitoring (Part 2)

Priority Actions	Sub-actions	Context and Suggestions
	5.3. Maintain a centralized online platform for public dissemination of TMCSP actions.	A public-facing platform should serve as a central hub for communicating TMCSP goals and outputs, helping to provide transparency, support data integrity, and minimize duplication of efforts. It should be actively maintained and regularly updated by the TMCSP or a designated working group. Suggested key materials to be shared through the platform include: • A list of available datasets and how they can be used and accessed • A library of peer-reviewed publications • TMCSP’s current research priorities • Summaries of recent research findings • A list of existing monitoring programs and protocols • Existing tools that could be leveraged or used as a starting point for these include Monarch Net’s searchable library of publications, the Trinational Monarch Knowledge Network, the Global Biodiversity Information Facility (where International Monarch Monitoring Blitz data will be shared), and MJV’s annual research reviews and database resource guide.
6. Strengthen and expand monarch monitoring networks.	6.1. Support varying levels of participation within existing monitoring protocols.	Adapt existing monitoring protocols to offer multiple opportunities for participation that accommodate different levels of expertise, time investment, and effort, while maintaining alignment with core metrics. Suggested actions include: • Analyze the barriers and motivations to widespread engagement in monarch monitoring efforts. • Enable participation at different levels of intensity, from simple opportunistic sightings to more intensive scientific surveys. • Develop and deliver targeted training and resources to support consistent, high-quality data collection across all levels of participation. • Enhance existing programs by ensuring core metrics are reported to established databases, while incorporating additional custom fields as needed to support specific research objectives. • Standardize baseline data collection across all levels and trinationally for consistency and comparability.
	6.2. Expand collaboration across broader monitoring networks.	Foster awareness and collaboration among individuals and programs involved in related ecological monitoring efforts. These connections will help strengthen monarch conservation science and broaden participation. Suggested actions include: • Identify existing monitoring efforts, programs, or projects that could integrate with monarch conservation data priorities. • Support cross-promotion between monarch efforts and broader conservation efforts (e.g., pollinator, water, habitat, and biodiversity monitoring programs; cultural, economic, and social science evaluations). • Encourage data sharing across platforms.
	6.3. Maintain and improve tools for evaluating conservation efforts through time.	Effectively evaluating success in monarch conservation requires a robust tracking and monitoring program that captures the full scope of conservation actions, including surveillance of monarch populations and habitat conditions, as well as conservation effectiveness. This effort should leverage emerging technologies and innovative approaches, while drawing on broader conservation networks to foster coordination, scalability, and shared learning. Suggested actions include: • Expand monitoring efforts to include not only habitat and population metrics but also key drivers of monarch conservation-effectiveness, such as education, community engagement, and scientific research. • Consider other local data collection needs that can facilitate adaptive management and support non-biological outcomes of conservation investments (e.g. return on investment, social impacts, etc.). • Promote strategic use of emerging technologies such as remote sensing and advanced tagging and tracking to improve data collection. • Design and implement optimization models to prioritize conservation actions for the highest impact. • Enhance landscape-scale planning and prioritization tools by incorporating high-resolution geospatial data from across the monarch’s range to track habitat changes over time, while aligning land use classifications to enable international evaluation. • Identify and integrate conservation programs that advance broader ecological or land management goals, even if not specifically focused on monarchs. • Monitor both conservation actions and outcomes alongside continued habitat loss to assess relative gains, losses, and overall progress.

3. Strategic Habitat Initiatives

Habitat availability and quality across breeding, migratory, and overwintering areas are critical to sustaining monarch populations. Monarch conservation specialists across all three countries emphasized the need for strategic actions to address climate change, pesticide exposure, and other threats while still prioritizing measurable increases in habitat quality and quantity.

This section highlights examples of accomplishments since 2008 and presents priority actions (see Table 3) aimed at strengthening habitat connectivity, enhancing resilience, and supporting ecosystems that sustain monarchs throughout their annual cycle. It also underscores the need to monitor habitat restoration and improvement efforts alongside habitat loss and degradation. Recognizing that specific best management practices are context-dependent and appropriately developed at local and regional scales, this section instead emphasizes overarching strategies to strengthen habitat conservation efforts.

Examples of Accomplishments

Trinational

Trinational engagement among federal agencies to collaborate and conserve monarch habitat across nationally designated protected areas in Canada, Mexico, and the United States is institutionalized through mechanisms such as the North American Intergovernmental Committee on Cooperation for Protected Area Conservation (NAPA n.d.) and the Trilateral Monarch Butterfly Sister Protected Area Network (USDA n.d.).

The Monarch Butterfly Fund (MBF) is an international NGO led by a trinational board of directors and advisors. With funding from MBF, organizations in Mexico have planted over 450,000 trees in and around the Monarch Butterfly Biosphere Reserve (MBBR) since 2009 (MBF 2025a). Additional international partnerships between Butterfly Pavilion, the Consulate General of Mexico in Denver, Mexican Agency for International Development Cooperation (*la Agencia Mexicana de*



Overwintering monarch in Mexico © Wendy Caldwell, Monarch Joint Venture

Cooperación Internacional para el Desarrollo), Alternare A.C., Semarnat, and Conanp supported reforestation with 100,000 oyamel seedlings and the establishment of pollinator gardens at 20 schools in buffer zones (Semarnat and Conanp 2025).

Across the United States and Canada, the Rights-of-Way as Habitat Working Group (University of Illinois Chicago) has connected more than 400 organizations to build capacity for pollinator conservation on energy and transportation lands (UIC 2025).

Canada

Federal efforts led by ECCC have protected 4,300 ha of monarch habitat and improved an additional 4,900 ha through native plantings and the removal of exotic species, in collaboration with NGOs and multiple levels of government (ECCC, personal communication, January 6 2026). Canada has also advanced native seed strategies with the development of the *Southern Ontario Seed Strategy* (Hall et al. 2024), and a national native seed strategy framework (CWF 2025) while fostering Indigenous engagement in these efforts.

The *Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada* (ECCC 2018) prioritizes multispecies, ecosystem-level habitat actions, including stewardship and restoration across nationally identified and community-nominated priority places. 9 of the 12 nationally identified priority places and 10 of the 17 community-nominated priority places occur within the monarch breeding range, demonstrating the relevance of this approach for monarch conservation.

NGOs play a critical role in monarch conservation by supporting habitat protection and restoration through certification programs, native plant distribution, and technical assistance. The Nature Conservancy of Canada and the Canadian Wildlife Federation have protected and restored breeding, feeding, and stopover habitat across Canada for decades, including key sites in the monarch's core breeding range around the Great Lakes. CWF also leads a national peer-to-peer network of rights-of-way managers focused on monarch habitat restoration, providing training, technical support, and funding to expand habitat across managed landscapes (CWF, personal communication, February 13, 2026).

Mexico

Through WWF and its partners, over 21,515 ha of monarch habitat have been restored, including the planting of 22.5 million trees (WWF 2025a). As of 2024, financial investments and technical support provided by WWF to 13 community-based nurseries provided both permanent and temporary jobs as conservation

incentives for local communities and led to the production of more 21 million oyamel and pine tree seedlings for reforestation efforts in the MBBR and surrounding areas (WWF 2025b).

Conanp promotes alternative income-generating efforts in the overwintering areas through initiatives such as the Monarch Butterfly Collective Seal (*Sello Colectivo Mariposa Monarca*), benefiting artisans in the MBBR (UNESCO 2025). Refuge and nectar-producing plant species occurring within the hibernation, transitional, and agricultural zones of the Protected Natural Areas Nevado de Toluca Flora and Fauna Protection Area, Valle de Bravo Natural Resources Protection Area, and Biosphere Reserve Barranca de Metztitlán were systematically characterized, along with their associated pollinator assemblages (Delgado et al. 2020).



Overwintering monarch cluster in California
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United States

Beyond improving habitat for at-risk species on public lands managed by U.S. state and federal agencies, all levels of government engage private landowners through easement or other cost-share initiatives such as federal Farm Bill programs that enhance habitat for monarchs and other species.

NGOs also play a critical role, offering wildlife habitat certification programs, free or subsidized native plant materials, and technical assistance for land managers. The energy and transportation sectors have made notable contributions through the Monarch Candidate Conservation Agreement with Assurances for Energy and Transportation Lands, enrolling over one million acres (404,685 ha) under pollinator-friendly management practices (UIC 2024).

Progress has also been made toward identifying priority landscapes for conservation, such as the western habitat suitability modeling led by the Xerces Society and collaborators (Dilts et al. 2019). Efforts to document and report monarch habitat initiatives were captured through the Monarch Conservation Database, active from 2015 to 2021, as part of the U.S. Endangered Species Act listing process.

Additionally, California overwintering site restoration and management have been implemented and evaluated through federal and NGO collaborations. Major funding mechanisms, including the National Fish and Wildlife Foundation's Monarch and Pollinator Fund, continue to play a key role in supporting habitat restoration across the monarch's range.

Table 3. Priority Actions: Strategic Habitat Initiatives (Part 1)

Priority Actions	Sub-actions	Context and Suggestions
7. Secure long-term funding to support habitat priorities for North American monarch conservation.	7.1. Fund habitat protection, enhancement, and restoration efforts.	Invest in a coordinated, science-based approach to restore, enhance, protect, and monitor monarch habitats across North America. Sustained funding is essential to support multi-sector planning, adaptive land management, and the technical training and capacity needed for effective habitat creation and maintenance. As part of this coordination, identifying existing funding sources that can be leveraged to support habitat will maximize efficiency and impact. Funding strategies should explore market-based models such as carbon or biodiversity credits and certification programs for monarch and pollinator friendly products to expand and diversify support. This integrated approach will build a resilient, collaborative conservation network guided by the best available science and equipped to adapt to changing environmental and social conditions.
8. Actively address threats from climate change and pesticide use in habitat implementation and management.	8.1. Integrate strategies to address the effects of climate change on habitat.	Utilize habitat planning, implementation, and management strategies that address climate-related impacts across breeding, migratory, and overwintering areas. Ecological resiliency and adaptive management techniques are necessary to respond to evolving climate challenges throughout the monarch's range. Suggestions include: • Use the best available science to identify areas most vulnerable to climate-driven variables such as shifting plant phenology, increased drought, and extreme weather events. • Prioritize habitat connectivity for broader biodiversity benefits and design strategies that enhance ecological resilience. • Establish habitat in areas with high climate resilience (e.g., close to water, milkweed collocated with shade in arid locations). • Identify and utilize diverse, drought tolerant or otherwise climate-adapted plant species in restoration efforts. • In overwintering areas, manage known risks from drought and forest degradation, and include ongoing climate-related monitoring and adaptations in planning and management efforts. • Utilize decision support tools (e.g., the Resist-Accept-Direct (RAD) framework) to choose the best actions for reducing climate-related impacts on pollinators.
	8.2. Minimize off-target pesticide exposure to monarchs and their habitat.	Acknowledging the complexity of pesticide use across sectors and the need for habitat across varied land use types, conservation planning across breeding, migratory, and overwintering habitat should recognize pesticide-related threats, specifically work to reduce exposure to insecticides, and degradation of habitat due to herbicide drift. Suggestions include: • Use the best available research on chemicals, mixtures, and adjuvants, together with realistic assessments of field exposure (considering both application patterns across the landscape and actual exposure rates) to guide habitat placement and management decisions, with particular attention to minimizing risks from insecticide exposure. • Incorporate appropriate habitat management tools such as prescribed fire, targeted grazing, strategic mowing, and selective herbicide application, along with long-term conservation planning, to reduce overall weed pressure and woody encroachment and thereby lessen reliance on herbicides. • Develop and promote holistic pesticide reduction strategies (e.g., integrated pest management) which consider the social and economic drivers of use. • Support continued research on pesticide application use and impacts, monitoring of pesticide exposure levels, and maintenance of data sharing platforms (e.g., USGS Pesticide Use Maps) to continue to update best practices.
9. Protect, enhance, and restore migratory and reproductive habitat.	9.1. Increase the availability of native plant materials.	A consistent supply of diverse, regionally appropriate native plant materials, especially milkweed and nectar plants, is essential for effective monarch habitat restoration. However, many regions face limited availability and high costs, particularly for species adapted to local conditions. Imbalances between supply and demand and the uneven distribution of plant materials across the monarch range can limit the scale of restoration efforts. In addition to increasing supply, it is important to use native plant materials responsibly to maintain genetic diversity, maximize ecological benefits, and reduce waste. This means choosing appropriate species, sourcing carefully, and designing seed mixes and seeding rates thoughtfully to avoid overuse and support successful establishment.

Table 3. Priority Actions: Strategic Habitat Initiatives (Part 2)

Priority Actions	Sub-actions	Context and Suggestions
		Suggestions include: • Support the development and expansion of regional native plant supply chains to meet growing habitat restoration needs. • Collaborate with Indigenous communities and organizations involved in the Indigenous seed sovereignty movement, honoring their leadership, knowledge, and expertise in increasing the availability of native plant materials. • Increase coordination between seed producers, nurseries, land managers, restoration practitioners, and participants in the Indigenous seed sovereignty movement to better align supply with demand. • Support local seed collection, propagation, and grow-out initiatives, especially in regions with limited access to native plants. • Develop and share best practices for the responsible use and sourcing of native plant materials, including appropriate seeding rates, seed mix design, and strategies to preserve genetic diversity and ecosystem function. • Provide tools and guidance to help practitioners select suitable species and seed sources that are compatible with current ecological conditions, build resiliency amid changing climate factors, and support project goals (e.g., maps, species lists, etc.).
	9.2. Expand the abundance, distribution, and diversity of native milkweeds.	Enhance and diversify native milkweeds in habitat projects across the monarch’s breeding range to support and maximize reproductive potential. Including multiple native milkweed species in a species mix enhances resilience to variable climate and site conditions, provides plants that emerge from early to late in the breeding season, and promotes long-term persistence of milkweed. Suggestions include: • In northern Mexico and the southern United States, increase native milkweeds to support reproduction during the spring migration. • In California, increase the prevalence of native, early emerging milkweed species in the early breeding zone as outlined in the Xerces Society’s Priority Action Zones in California for Recovering Western Monarchs (Xerces Society 2024) (e.g., <i>Asclepias eriocarpa</i>, <i>A. californica</i>, <i>A. cordifolia</i>). • Plant multiple native milkweed species in restoration efforts whenever possible. • Include milkweed species in broader conservation plans to provide multiple benefits to at-risk species and habitats. • Increase native milkweed availability and diversity across the breeding range in Canada, particularly in Ontario, Manitoba, New Brunswick and Prince Edward Island (Mitchell et al. 2025). • Add more than 1.8 billion native milkweed stems across the eastern monarch range (Thogmartin et al. 2017a). • Create 50,000 additional acres of habitat by 2029 focuses on the Central Valley and adjacent foothills in California to support breeding and migration (WAFWA 2019).
	9.3. Expand the use of diverse native plant communities in habitat conservation and management.	Incorporate diverse native plant communities that provide sequential blooms throughout the breeding and migration seasons, offering essential forage and shelter for monarchs and other species. Habitat enhancement and diversification efforts should be integrated into broader conservation strategies, such as those focused on climate resilience, water quality, soil health, and the protection of other wildlife species. Suggestions include: • Provide continuous and diverse nectar availability to support adult monarch reproduction and migration. • Promote planting native nectar plants which provide crucial fall and spring energy supplies (and winter energy supplies if near overwintering areas in California and Mexico). • Include areas of structural variation (e.g., shade-providing trees or woody plants) to support roosting during migration and breeding, and to support climate resilience for breeding monarchs. • Prioritize the inclusion of plant species and best management practices that also support other at-risk wildlife. • Consider where predicted expansions in monarch breeding range may warrant increased habitat creation beyond the known historical breeding range. • Develop comprehensive conservation management plans that minimize or avoid harm to monarchs and other wildlife while maintaining the integrity and resilience of the plant community.

Table 3. Priority Actions: Strategic Habitat Initiatives (Part 3)

Priority Actions	Sub-actions	Context and Suggestions
	9.4. Strengthen financial incentive and cost-share programs for habitat creation, management, or protection.	To effectively increase monarch habitat, it is essential to expand the financial incentives available for habitat improvement projects. This includes offering free or discounted native plant materials, financial incentives to offset lost income, long-term conservation easements, payment for ecosystem services, and alternative income opportunities. Efforts should prioritize the protection of critical areas, the long-term management of existing habitat, and creating new habitat where possible. Suggestions include: • Promote existing incentive, cost-share, and conservation easement programs with messaging that remains effective across political and economic contexts (e.g., emphasize benefits like agricultural productivity, landowner income, climate resilience, etc. with monarch conservation as an added value). • Work with existing incentive programs to: - Incorporate monarch habitat goals. - Provide flexible and adaptive support for priority habitats. - Foster collaborative partnerships with Indigenous communities, private landowners, municipalities, industries, and public agencies. • Enhance existing incentive and cost share programs, ensuring alignment and linkage with other relevant initiatives, to broaden access and create opportunities where they currently do not exist (e.g., certification programs for monarch and pollinator friendly products). • Use social science to identify the most effective incentives for encouraging land and resource managers to participate in habitat programs.
10. Protect, enhance, and restore overwintering habitat.	10.1. Expand protections throughout the monarch overwintering regions.	Increase protections for existing and newly identified overwintering sites for eastern and western migratory monarchs. This work should be done in close partnership with local communities to foster culturally appropriate, sustainable, and locally supported strategies that protect monarchs during overwintering. Suggestions include: • In Mexico: - Continue existing protection measures, for example, within the Nevado de Toluca Flora and Fauna Protection Area, Valle de Bravo Natural Resources Protection Area, Iztaccíhuatl–Popocatepetl National Park, La Malinche or Matlalcuéyatl National Park, and the MBBR, and in the broader protected area recognized by UNESCO. - Identify priority areas for certification as “Voluntarily Designated Areas for Conservation” outside of the overwintering zone and UNESCO sites. - Explore approaches to manage visitation in the Nevado de Toluca Flora and Fauna Protection Area, Valle de Bravo Natural Resources Protection Area, Iztaccíhuatl–Popocatepetl National Park, La Malinche or Matlalcuéyatl National Park and MBBR to support sustainable limits (e.g., a permit system). - Consider identifying and protecting potential new overwintering sites at elevations above the historic overwintering range to anticipate and adapt to shifting climate conditions. • In California: - Implement protections for known overwintering sites, even when only occupied intermittently or historically by monarchs. - Locate and document previously unidentified overwintering sites.

Table 3. Priority Actions: Strategic Habitat Initiatives (Part 4)

Priority Actions	Sub-actions	Context and Suggestions
	10.2. Restore degraded overwintering sites.	Improve forest structure, canopy density, and understory health to sustain the microclimates necessary for monarch survival across overwintering sites. Climate-related risks should be incorporated into monarch conservation restoration and planning efforts at overwintering sites in both Mexico and California. Suggestions include: • In Mexico: - Include mixed plantings of oyamel fir and native shrubs (i.e., <i>Baccharis conferta</i>) in restoration efforts. - Use locally appropriate species to improve micro-basin areas used by monarchs. - Increase the production of native plants in community nurseries for use in overwintering site restoration efforts. - Implement visitor management measures based on access control, ecological signage and trained guides that minimize disturbance of the microclimate and understory, while maintaining critical habitat integrity. • In California: - Implement tailored management plans for each site that consider unique challenges due to ownership, location, forest make up, long-term maintenance, etc. - Manage invasive tree removal and prepare for tree mortality through risk-informed transition plans that address fire danger, climate impacts, and challenges in establishing resilient native replacements. - Incorporate post-fire rehabilitation and revegetation for affected sites.
	10.3. Foster sustainable forest stewardship and community-led conservation.	Engage local communities, landowners, and land managers in the protection and care of overwintering habitats through education, outreach, and participatory stewardship. Building local capacity and fostering a sense of shared responsibility supports long-term habitat protection, encourages site-specific conservation actions, and strengthens the cultural and ecological value of monarch overwintering sites. These practices can balance ecological integrity with social and economic well-being, ensuring both people and monarchs can thrive. Suggestions include: • Leverage social science to better understand the communities and their needs to effectively plan conservation efforts that are balanced to support the economy and well-being of those living in areas surrounding overwintering locations. • In Mexico: - Assess the impacts of tourism to build alignment among local communities competing for ecotourism benefits, while ensuring monarch colonies remain sustainable under current visitation levels. - Support <i>Ejidors</i> (communal landholders) with technical guidance and resources to support sustainable management of overwintering areas. - Provide local nurseries with technical guidance and resources to expand their supply of native plants that support resilient forest ecosystems amid changing climates. - Equip local community members with training and resources to pursue alternative income opportunities. • In California: - Engage communities in pursuing necessary protections at local, state and federal levels for overwintering site preservation. - Maintain a collaborative working group focused on the restoration and enhancement of overwintering sites.

4. Conclusions and Recommendations

Conservation of the North American monarch butterfly requires coordinated action and agreement among Canada, Mexico, and the United States in three priority areas:

- 1) Systems for Collaboration and Communication,
- 2) Coordination of Science and Monitoring, and
- 3) Strategic Habitat Initiatives.

While significant progress has been made across all three countries and key areas over the past few decades, monarch conservation specialists have identified the shared priority actions in this report to help achieve sustainable population levels for migratory monarchs.

These priorities are intended to serve as a framework to guide and align conservation actions among government agencies, conservation organizations, Indigenous communities, academic researchers, industry groups, landowners, community groups, and funders. They provide a trilateral vision that complements, rather than replaces, existing national, regional, and local conservation plans. The overall aim is to strengthen coordination, foster partnerships, and inform collaborative strategies that amplify the impact of ongoing and future efforts.

Organizations are encouraged to use this document to:

- Inform planning and decision-making processes, with the goal that organizations align priorities and communicate the importance of coordinated monarch conservation efforts at all levels.
- Support and strengthen ongoing efforts through collaboration and shared resources.
- Build new initiatives that align with trilateral priorities and complement existing programs.
- Mobilize and coordinate funding and public support by demonstrating alignment with shared North American priorities.



Two monarch butterflies
in the act of reproduction
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Evaluating and tracking implementation efforts is critical to understanding our progress towards our shared goal of sustaining a healthy migratory monarch population across the continent. However, detailed tracking of efforts is often challenging to implement at the trilateral level. As these priorities are intended to guide, not replace, current plans, it is recommended that the evaluation of efforts continue at the local, regional, and national levels, and that these results be published regularly to better inform progress and updates to trilateral priority actions. Furthermore, it is recommended that trilateral priorities be revisited periodically as monarch populations, science, and conservation continue to change and evolve.

Migrating Monarch butterfly (*Danaus plexippus*) feeding on yellow Cosmos flower in the autumn garden in Texas
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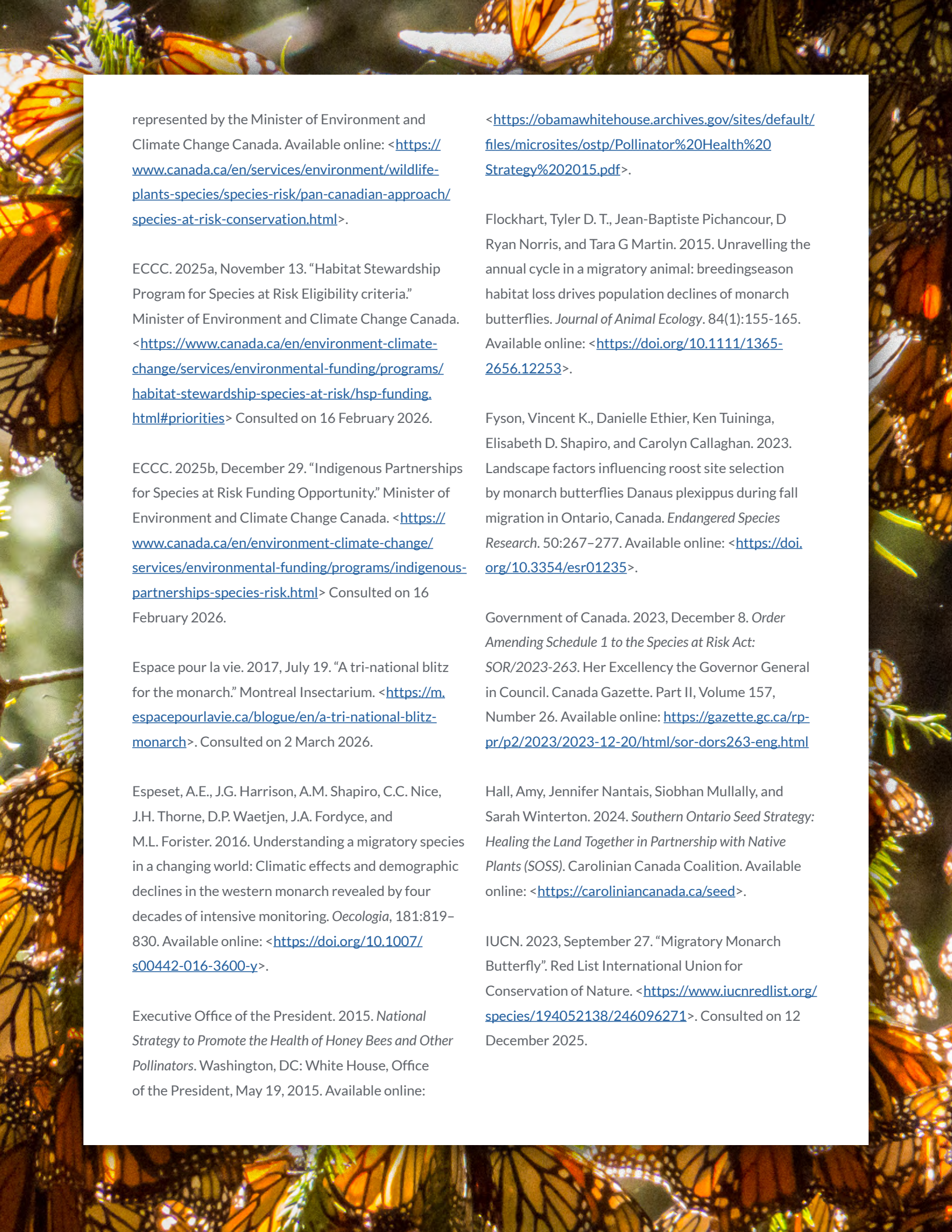
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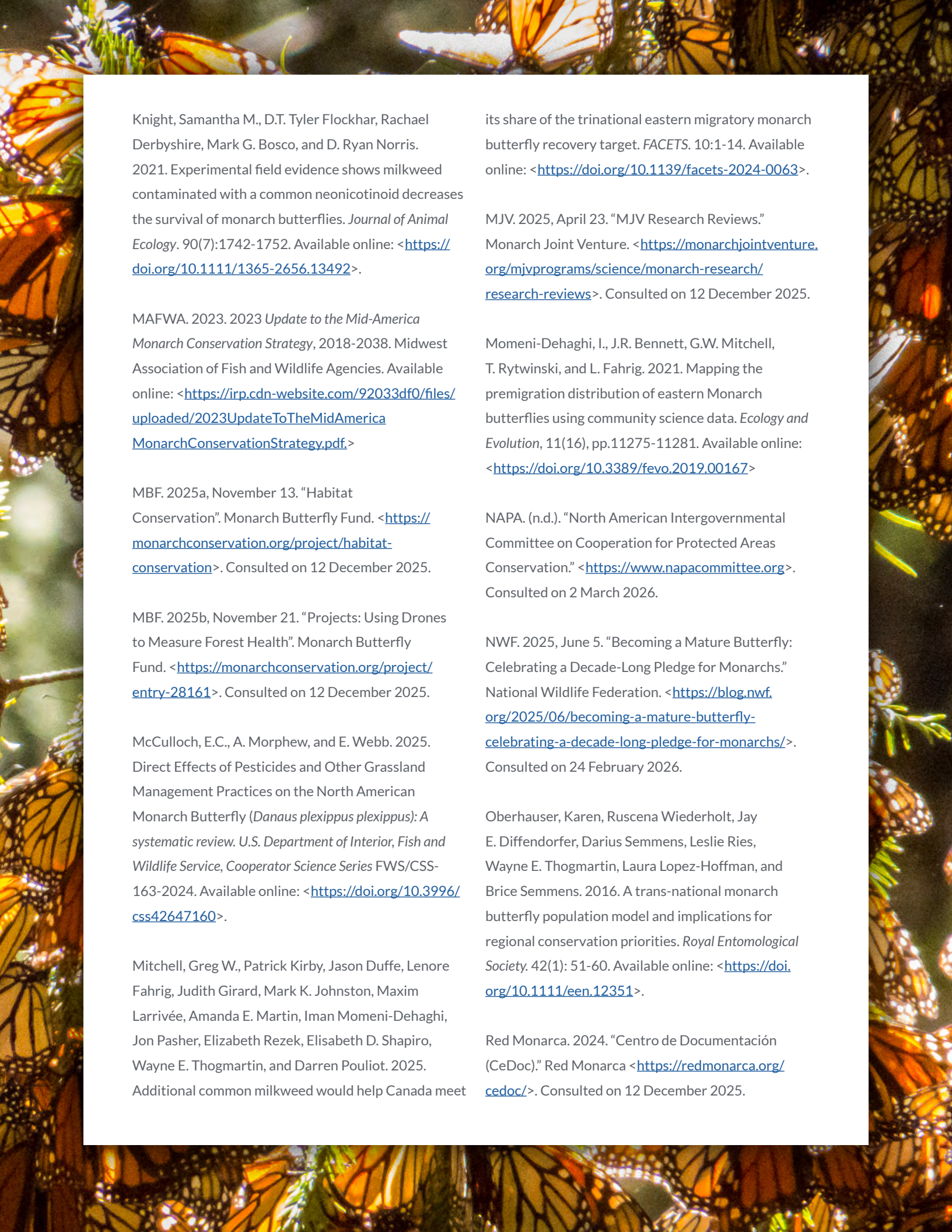
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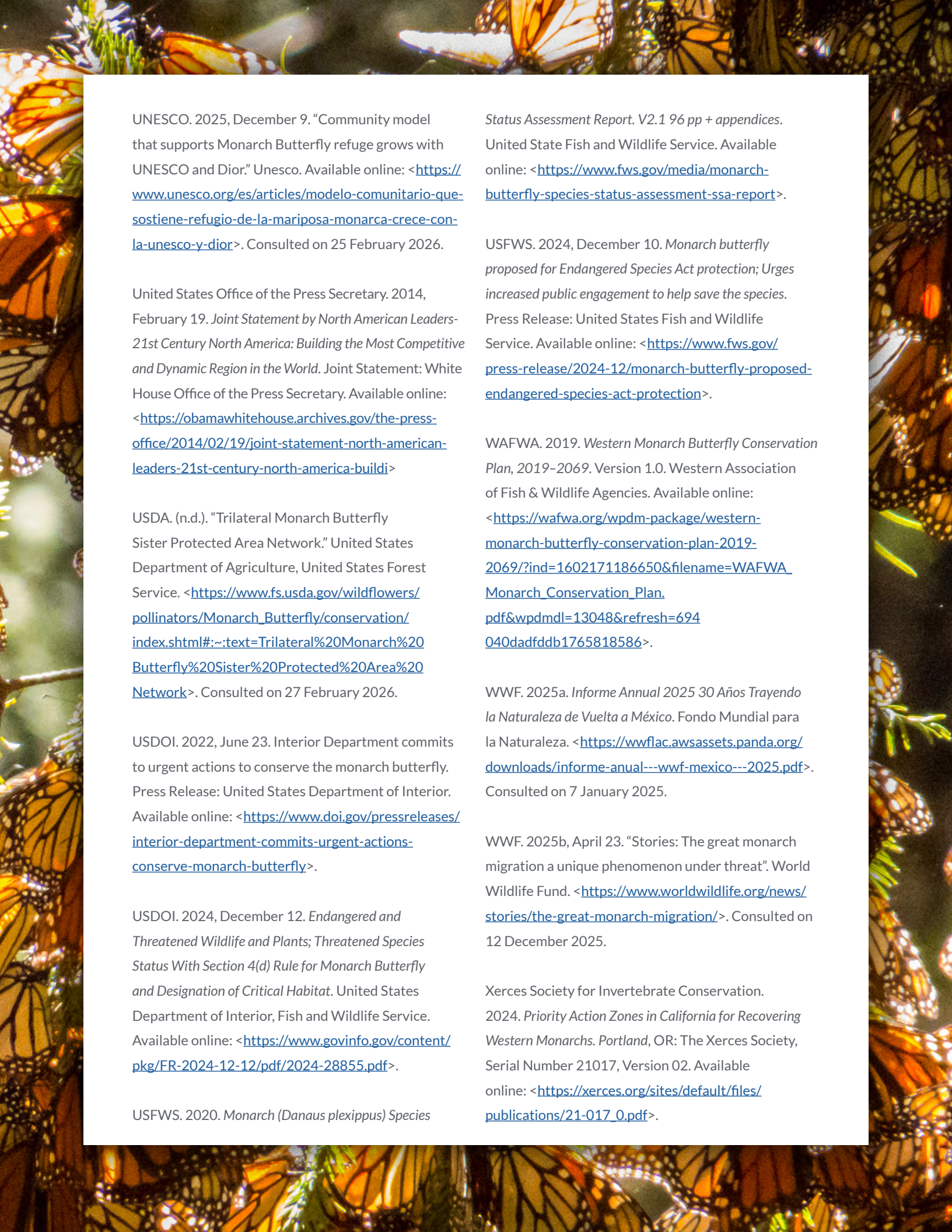
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