XXVII Meeting of the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management
Species of Common Conservation Concern
June 27 – 30, 2023

SPECIES OF COMMON CONSERVATION CONCERN WORKING TABLE

VIRTUAL MEETING
27 – 30 JUNE 2023

Co-chairs

Maricela Constantino
U.S. Fish and Wildlife Service, U.S.

Craig Machtans
Canadian Wildlife Service, Environment and Climate Change Canada

Eduardo Ponce Guevara
National Commission for Natural Protected Areas, Mexico

Facilitators

Demetra Panos
U.S. Fish and Wildlife Service, U.S.

Paula Pacholek
Canadian Wildlife Service, Environment and Climate Change Canada

Angelica Narváez
National Commission for Natural Protected Areas, Mexico

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Agenda at a Glance:

	TRILATERAL COMMITTEE for Wildlife and Ecosystem Conservation and Management	XXVII Meeting of the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management Species of Common Conservation Concern June 27 – 30, 2023		
	Tueday, June 27	**Wendesday, June 28**	**Thursday, June 29**	**Friday, June 30**
10:00 - 10:15	Registration		State wildlife agencies and US and Wildlife Director	
10:15 - 10:30	Welcome and Plenary			
10:30 - 10:45				
10:45 - 11:00				
11:00 - 11:15		Biodiversity and Climate Change: A continental assessment of scientific knowledge and policy options	Trilateral Island Initiative: Conservation and Restoration of the Islands of Canada, the United States, and Mexico (Compartida con Ecosistemas y aves migratorias)	Ocelot Recovery Program
11:15 - 11:30			A Multinational Yaqui Catfish Conservation Propagation and Stocking Plan	
11:30 - 11:45		A North American Network to Address the Double Jeopardy of Climate Change and Invasive Species	Recovery, genomic management and conservation of the Threatened Yaqui catfish (Ictalurus pricei) and establishment of a reproductive stock in support of an emerging sustainable conservation perspective for the Yaqui Ethnic Group in Mexico.	Jaguar Recovery – Examples of Collaboration between the U.S. and México
11:45 - 12:00			Endangered Freshwater Fish of the Rio Sonoyta: Conservation and Education in the Southwest-US and Northwest-Mexico Borderlands	Securing connectivity for jaguars in strategic regions of Northwestern Mexico
12:00 - 12:15	Break	Break	Focus group on endangered Mexican Blindcat (Prietella phreatophila) in the binational Edwards-Trinity Aquifer (Texas and Coahuila)	Communities and jaguar coexistence in Western Mexico under the impacts of COVID 19
12:15 - 12:30	Species of Common Conservation Concern Working Table Welcome, Introductions, Action Item Report, Adoptions of the Agenda, 2022-2023, and Co-Chairs Country Reports	North American Management of Feral Swine/Wild Pigs	Freshwater fish conservation group	Promoting Human-Jaguar Co-existence in the Mayan Forest of Mexico
12:30 - 12:45			Break	Jaguar Ilegal Trade
12:45 - 13:00	Traditional Ecological Knowledge (Mexico)	Implementation of the North American Rabies Management Plan	Black-footed Ferret Recovery Update for Mexico, Canada, and the United States	Mexican Wolf Recovery in the United States and México
13:00 - 13:15			Grassland and Black-Tailed Prairie Dog Conservation	
13:15 - 13:30	North American Bat Conservation Alliance	Applying structured decision making to prevent Prussian Carp Carassius gibelio introduction into US waters from Canada through high-risk border pathways	Sonoran Pronghorn Recovery	Break
13:30 - 13:45			Bison Conservation Activities (10 minutes per country)	
13:45 - 14:00	Developing an eDNA infrastructure to track pollinators	U.S.-Mexico California Condor Recovery Program – Status Report		Executive Table and Co-chair
14:00 - 14:15				
14:15 - 14:30	Monarch Butterfly Conservation	Masked Bobwhite: Transnational Collaboration for Stewardship of an Endangered Subspecies	Bison Integrated Genomics (BIG) – A Parks Canada and University of Saskatchewan Project	
14:30 - 14:45			IUCN Species Specialist Committee (SSC) Bison Specialist Group Update	
14:45 - 15:00		SCCCWT adjourn		ET Closing Remarks

* *All Times are **Mexico City Time** (Central Standard Time)*

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Agenda
Tuesday, June 27, 2023

Wednesday, June 28, 2023

Thursday, June 29, 2023

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Tuesday, June 27, 2023

10:15 – 12:00 Welcome and Plenary Session

12:00 – 12:15 Relocation to SCCCST Room

12:15 – 12:45 AGENDA ITEM 1. Species of Common Conservation Concern Working Table Welcome, Introductions, Adoptions of the Agenda, 2022-2023 Action Item Report, and Co-Chairs Country Reports

COLLABORATORS & CONTACTS: Craig Machtans (Canadian Wildlife Service), Maricela Constantino (US Fish and Wildlife Service), José Eduardo Ponce Guevara (Comisión Nacional de Áreas Naturals Protegidas).

DESCRIPTION: Welcome and introductions of new and returning participants to the working table. Approval and adoption of the agenda. Report on major accomplishments or challenges from the Action Item Report and any outstanding actions from the previous meeting or relevant changes on each country on species conservation.

BACKGROUND: Standard item to build consensus and ensure full participation. The AIR is used to record decisions and monitor progress on work. Working tables review the previous year's AIR at the beginning of each annual meeting.

REQUESTED SPECIFIC OUTCOMES: Approval of the agenda. Monitor progress on action items and agreements. Identify issues and challenges in accomplishing action items.

12:45 – 13:15 AGENDA ITEM 2. Traditional Ecological Knowledge: Mexico and its Biocultural Diversity throughout centuries – Ties to its Traditional Ecological Knowledge

SUBMITTED BY: Ismael Arturo Montero García (National Commission for Natural Protected Areas, CONANP).

AGENDA ITEM PRESENTOR(S): Ismael Arturo Montero García (CONANP - ismael.monterogarcia@fao.org)

PRESENTATION/PROJECT DESCRIPTION: This presentation intends to share with participants some examples of the management and use of traditional knowledge that Mexico has kept as part of the Public Policies, that are key in its agenda. One of the highlights nowadays is the example of the use of the Melipona bee (*Scaptotrigona mexicana*), whose extraordinary honey has been used by rural communities for thousands of years in the same way that "mayas" did in the Yucatan Peninsula and "totonacos" within the coast of the Gulf of Mexico.

The Flora and Fauna Protected Area, which will be tentatively named "Ichan Nekstin" (which means ICHAN- home and NEKTSIN – little bee) is a great example of the public

policies implemented by Mexico as it recognizes, respects, and considers in public consultations, a justifying study of the bee and its environment. It is important to note that this process is written in "nahuatl masewal", its traditional dialect, and not in Spanish. The respect, care and use of indigenous communities and its related wildlife species in Mexico are ancestral. Most notable cultures that inhabited territories that are now part of Mexico left extraordinary archaeological evidence of its global interpretation of the universe. Such interpretation proofs the accurate relationship they had with the environment. Not few wildlife species were sacralized and venerated. The codex iconography and other archaeological materials is overwhelming. Therefore, only a few examples will be presented (i.e. bats, birds –condor--, Mexican wolf, jaguar and ocelot) as well as a number of insects, such as the Monarch butterfly and the Melipona bee that has been referred above. Summarizing, species that were venerated in the past and admired currently.

BACKGROUND: Mexico is a megadiverse country: its history, culture, and nature proofs it as such. Very few nations have such variety, and this is why the Secretariat of Environment and Natural Resources (SEMARNAT) through its National Commission for Natural Protected Areas (CONANP), considers highly important to include in the development of its public policies those ways in which the indigenous communities have advanced throughout the years in their productive processes in combination with nature. This, adding the ecological knowledge and local practices that have allowed them to manage their resources in a sustainable way while, at the same time, keeping their identity and social structure. Mexico promotes the recognition of these indigenous groups inhabiting the areas of greater biodiversity, where the environmental and cultural vulnerability are more notable before the overexploitation of nature. To do so, CONANP supports the specialized advisory to elaborate management plans that are sustainable and inclusive while, at the same time, allow the needed protection and care of its natural and cultural heritage.

REQUESTED SPECIFIC OUTCOMES:

- Inform participants of Mexico's biological and cultural richness by means of the productive process of indigenous communities throughout the years, achieving a great repository of traditional ecological knowledge.

13:15 – 13:45 AGENDA ITEM 3. North American Bat Conservation Alliance

SUBMITTED BY: Rodrigo A. Medellin (UNAM/CONABIO), Charles M. Francis (ECCC-CWS), Jeremy T. H. Coleman (USFWS).

AGENDA ITEM PRESENTORS: Rodrigo A. Medellin (UNAM/CONABIO - medellin@iecologia.unam.mx), Jeremy T. H. Coleman (U.S. Fish and Wildlife Service - jeremy_coleman@fws.gov), Charles M. Francis (ECCC, Canadian Wildlife Service - charles.francis@ec.gc.ca).

COLLABORATORS & CONTACTS: Winifred Frick (Bat Conservation International), Amanda Adams (Bat Conservation International), Luis Trujillo (Universidad Nacional Autónoma de

México), Jorge Ortega (Instituto Politécnico Nacional), Joaquin Arroyo (Instituto Nacional de Antropología e Historia), Brian Reichert (USGS Fort Collins Science Center).

PROJECT DESCRIPTION: The three countries have been actively pursuing several collaborative projects, with coordination through the North American Bat Conservation Alliance (NABCA).

1) State of North America's Bats Report

A public report summarizing the conservation status and major threats facing bats in all three countries was released on 17 April 2023, marking International Bat Appreciation Day (https://digital.batcon.org/state-of-the-bats-report/2023-report/). This was based on an expert conservation assessment of all 154 bat species in North America separately by country and is the first ever assessment at that scale. The results highlight that nearly half (47%) of species are at some level of risk in one or more countries. Some of the main threats affecting bats are various factors destroying habitats and roosts, mortality from wind turbines, white nose syndrome, and climate change. Additional details on the report will be shared with the table.

2) Tracking and Mitigating the Spread of White-nose Syndrome.

The fungus *Pseudogymnoascus destructans* that causes the disease White-nose Syndrome in bats continued to spread in North America, leading to death of millions of bats. The U.S. Fish and Wildlife Service WNS Program provides grant support to States and Tribes to conduct bat monitoring, disease surveillance, and management actions to mitigate the effects of WNS and improve survival of susceptible species. Several States are involved with adaptive management and/or field testing tools to combat the effects of WNS. With USFWS support, Mexico has made significant progress assessing hibernacula in Mexico and sampling hibernating bats across the territory for the fungus. To this effect, we visited over 100 caves with hibernating bats (of which 15 were only discovered during winter 2022-2023). The visited states include Mexico City, state of Mexico, Tlaxcala, Veracruz, Puebla, Zacatecas, Coahuila, Chihuahua. So far, results from the USGS National Wildlife Health Center have not detected Pd fungus, but Mexico is in the process of securing export permits to ship and process samples from winter 2022-2023. Ongoing sampling is crucial to provide early warning if the fungus appears, to initiate control and mitigation measures.

3) Wind energy mortality mitigation across North America.

Mortality due to collisions with wind turbines is a growing concern for North American bats, particularly as the number of turbines on the continent continues to increase in response to the need for renewable energy. Several mitigation measures have been developed that can reduce mortality of bats, but coordinated efforts are needed to encourage wind energy companies to adopt those measures.

4) Continental Coordination of Bat Population Monitoring

The North American Bat Monitoring program, NABat, has expanded rapidly over the past few years, with over 1,100 registered users who have contributed well over 100,000 colony survey records and over 60 million acoustic species detections across 49 U.S. states and 8 Canadian provinces. There are now nine regional bat hubs coordinating monitoring activities across the U.S. and Canada, and a tenth hub is being planned for the northeastern U.S. The Mexican program, SIMMA, has been delayed because of the pandemic, but we are working on ways to enhance the way these programs work together.

5) Identification, designation and implementation of Key Bat Conservation Areas

Quantitative information from bat monitoring programs such as NABat and other sources is being used to identify areas of important conservation value for bat species in North America, in the context of the Key Biodiversity Areas program. The book entitled *Áreas y Sitios de Importancia para la Conservación de los Murciélagos en Latinoamérica y el Caribe* was published in December 2022 identifying a suite of AICOMs and SICOMs across Latin America and the Caribbean. The next step is to work with CONANP to secure recognition and protection for the 30 AICOMs and SICOMs identified in México.

6) One additional element is that the Mexico component of this group would like to announce that Mexico launches every year a PROREST CC (Program for the Protection and Restoration of Ecosystems and Priority Species in the component of Community Conservation, for its Spanish acronym) wich potentially may cover long-nosed bats conservation actions of the genus *Leptonycteris* (*L. yerbabuenae* and *L. nivalis*). We are exploring ways to synergize with the U.S. given the existing nivalis conservation network and the updating process of the Post-Delisting Monitoring Plan for L. yerbabuenae.

BACKGROUND: The North American Bat Conservation Alliance, involving representatives from the bat conservation community in all 3 countries, was formed under the umbrella of a Letter of Intent signed by the Executive Table of the Trilateral Committee in 2015. We have provided regular updates to the Trilateral on progress under this initiative.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS: In addition to the continued goals established in previous years, we would like to:

- Promote the *State of North America's Bats* report to highlight the need for urgent action to support bat conservation in North America.
- Complete a companion scientific document providing the details behind the State of North America's Bats report.

We would like to request that the following key activities be highlighted to the Executive Table:

- The publication of the *State of North America's Bats* report which highlights that nearly half of the 154 North American bat species have some level of conservation concern in one or more countries. We encourage the wildlife agencies in each of the three countries to take proactive measures to support bat conservation before additional species reach the point of becoming listed under species at risk legislation.
- The publication of: *Áreas y Sitios de Importancia para la Conservación de los Murciélagos en Latinoamérica y el Caribe*, which includes 30 areas important for bat conservation in México. We encourage the executive table to consider ways to enhance protection for these areas to support conservation efforts for North American bats.

13:45 – 14:15 AGENDA ITEM 4. Developing an eDNA infrastructure to track pollinators

SUBMITTED BY: Tabitha Graves (US Geological Survey).

AGENDA ITEM PRESENTOR: Tabitha Graves (US Geological Survey - tgraves@usgs.gov).

COLLABORATORS & CONTACTS: David Pilliod (US Geological Survey), Stephen Spear (US Geological Survey), Clint Otto (US Geological Survey), Ralph Grundel(US Geological Survey),

Muraleedhara Byappanahalli (US Geological Survey), Aaron Aunins (US Geological Survey), Jeff Everett (US Fish and Wildlife Service), Chris Boone (Bureau of Land Management).

PROJECT DESCRIPTION: Pollinators support crops, cattle, birds, small mammals, game species, endangered wildlife, biodiversity, and experiences on public lands. Across a 6 USGS Science Center team with many federal and university partners, we are developing, testing, and establishing protocols for using pollinator environmental DNA (eDNA deposited on flowers during visitation). This approach can be used to assess the performance of restoration and improve our understanding of ecological resilience of grasslands. This work focuses on developing novel, non-invasive methods to characterize plant-pollinator interactions, identifying the most important flowers for both common and declining bees. This can inform prioritization of plants for restoration and the National Seed Strategy. It establishes foundational infrastructure on which to build databases needed to track status and trends of pollinator diversity in America's grasslands and beyond. In year 1, we identified a primer to detect bumblebee species, and tested methods for collecting and concentrating pollinator DNA from flowers, extracting DNA from flowers, and assessing pollinator diversity from eDNA at 6 project areas across the northern grasslands. This year, we will conduct in-depth experiments at 4 focal project areas identified through collaborations with partners. By 2025, we will have established an eDNA detection framework. As a toolset useful across international boundaries, we are interested in identifying others working on these objectives to promote rapid development. Last year we also published results of a study assessing the recent and future trajectories of the Western bumble bee, a species under consideration for listing under the Endangered Species Act in the US.

Recent publications:

- Recent and future declines of a historically widespread pollinator linked to climate, land coWestern bumble bee: declines in the continental United States and range-wide information gaps - Graves - 2020 - Ecosphere - Wiley Online Library
- ver, and pesticides | PNAS

BACKGROUND: This work complements multiple other projects working on development of toolsets for understanding, monitoring, and researching the pollinators underlying so many of our natural ecosystem processes.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Identify other researchers working in Canada or Mexico on methods related to eDNA of flowers for pollinators.

14:15 – 15:00 AGENDA ITEM 5: Tri-national update on monarch butterfly conservation

SUBMITTED BY: Gloria Tavera (CONANP), Ryan Drum (USFWS), and Greg Mitchell (Environment and Climate Change Canada).

AGENDA ITEM PRESENTORS: Ryan Drum (USFWS - ryan_drum@fws.gov), Greg Mitchell (ECCC - gregory.mitchell@ec.gc.ca), Gloria Tavera (CONANP - gtavera@conanp.gob.mx)

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COLLABORATORS & CONTACTS:
Eduardo Rendón (World Wildlife Fund), Guadalupe del Rio (Alternare A.C.)

PROJECT DESCRIPTION: For 25 years, Canada, the United States and Mexico have worked jointly to increase and preserve the Monarch butterfly populations that migrate every year throughout the three countries. During this time, they have implemented several actions that look for the continuity of these populations in their natural habitat, while at the same time seek for the sustainability of the communities within the hibernation and migration sites of the species.

Many of these actions have made significant achievements and have also served as tools for the identification of new challenges. Nevertheless, it is important to resume such efforts to evaluate together the advancements made so far and identify new constraints and pertinent solutions for such.

BACKGROUND: The monarch butterfly is an iconic species of conservation concern across Mexico, the US and Canada. Both the Western and Eastern populations have experienced large declines over the last several decades and the monarch was recently listed as endangered by the IUCN. Each respective country has been engaged in monarch conservation, including the protection of wintering habitat as well as restoring and protecting its habitat along their migration routes and on their breeding grounds. The interest of the three countries has taken them to search for different ways of collaborating to restore the Monarch's habitat and population while trying to find the actions needed for the sustainability of the people that inhabit within the Monarch butterfly reserve.

As a result, in November 1997, Mexico was host of the first Monarch Butterfly North American Meeting which, under the framework of the CEC (Commission for Environmental Cooperation), gathered a great number of specialists from the governments, academia, civil organizations and representatives of the indigenous communities of the reserve in Mexico that, from a trilateral perspective, would identify actions required to achieve a balance between the people's sustainability and, of course, the conservation of the species.

In 2014, Authorities from Mexico, the U.S. and Canada committed to the creation of a working group aimed to ensure the conservation of the Monarch butterfly, establishing in 2015, the Trilateral Scientific Committee for the Conservation of the Monarch Butterfly. The latter, under the framework of the Trilateral Committee Meeting for Conservation and Management of Wildlife and Ecosystems.

Twenty five years later, there are still many unresolved challenges and many questions that need to be addressed by all the members of this group.

REQUESTED SPECIFIC OUTCOMES:

- The Trilateral Monarch Butterfly conservation group considers that the reinvigoration of the Trilateral Scientific Committee would be timely in trying to replicate the efforts made by all participants in 1997 to identify the main challenges in areas such as: 1) Conservation Economics, 2) Habitat Restoration and Conservation, 3) Research and Monitoring, 4) Law Enforcement, 5) Social Participation and Environmental Education, 6) Coordination and Funding; and propose Mexico as host of this meeting which would be repeated as often as experts consider necessary.

- This proposal intends also to inform participants of the SCCWT the progress that Mexico has made, considering the actions established in the Action Plan for the Conservation of the

Monarch Butterfly 2018-2024.

- We request the endorsement of the SCCCWT and the EWT to resume the actions previously identified, through the reinstitution of the Trilateral Scientific Committee, with annual meetings (if appropriate) among experts that would allow them to identify new challenges and solutions to continue advancing in the conservation and continuity of the species, in addition to the social and economic sustainability of the people that live within the butterfly's hibernation and migration sites.

Wednesday, June 28, 2023

11:00 – 11:30 AGENDA ITEM 6. Biodiversity and Climate Change: A continental assessment of scientific knowledge and policy options.

SUBMITTED BY: Douglas Beard (US Geological Service), Stephen Jackson (US Geological Service), Hien Ngo (US Geological Service), Christie Spence (Environment & Climate Change Canada), Anne Munier (Environment & Climate Change Canada), Patricia Koleff (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad).

AGENDA ITEM PRESENTOR: Christie Spence (Environment & Climate Change Canada - Christie.Spence@ec.gc.ca)

COLLABORATORS & CONTACTS: T. Douglas Beard, Jr. (National Climate Adaptation Science Center), Stephen T. Jackson (Southwest and South Central Climate Adaptation Science Centers), Hien T. Ngo (Southeast Climate Adaptation Science Center), Christie Spence (Landscape Science and Technology Division Environment & Climate Change), Anne Munier (Landscape Science & Technology Division Environment & Climate Change), Patricia Koleff Osorio (Comisión Nacional para el Conocimiento y Uso de la Biodiversidad).

PROJECT DESCRIPTION: The United States Geological Survey (USGS) is leading the process to develop the first-ever continental (North American) assessment of biodiversity and climate change. The assessment will be conducted by scientists, knowledge holders, practitioners, and policy experts from governments (federal, Native and Indigenous Nations, state/ province/ territory, local), universities, nonprofit organizations, the private sector, and Indigenous Peoples and Local Communities (IPLCs) from Canada, the United States and Mexico. It will characterize the state of understanding of key linkages between climate change and biodiversity, identify critical knowledge gaps, and summarize implications for biodiversity and climate-change policy.

Since the Trilateral Committee meeting last year:

- Canada and Mexico have partnerships with USGS through the following federal agencies: Environment & Climate Change Canada, and the Comision Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO);
- A Federal Registry Notice (FRN) was launched (April - June 2023) requesting comments and feedback on the draft prospectus and nominations of authors or Guidance Committee members. Both feedback and comments on the draft prospectus and expert engagement are welcomed from all three countries (Canada, US and Mexico);
- Assessment authors (co-chairs, coordinating lead authors and a majority of lead authors) and

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Guidance Committee members have been selected.

The presentation's main objectives are: 1) to update and introduce the assessment report to the Species of Common Conservation Concern Working Table and the Trilateral Committee for Wildlife and Ecosystem Conservation and Management, respectively, and 2) to explore and discuss opportunities for potential engagement with the Trilateral Committee members and this assessment process.

BACKGROUND: Biodiversity underlies nature's contributions to people (also known as ecosystem services), including food, food and water security, hazard protection, and cultural values. Understanding the interplay between climate change and biodiversity is critical for the implementation of effective and lasting solutions to climate change and for maintaining biodiversity and nature's contributions to people. The USGS proposed a national assessment of biodiversity and climate change in its FY'22 budget; it was subsequently decided that conducting the assessment at a continental scale was necessary to strengthen it and make the outcomes more effective and more broadly applicable. This assessment compliments and builds on previous efforts and synergizes with existing processes to assess the most current evidence base regarding status and trends, drivers, and effectiveness of responses.

Examples in the US include the **America the Beautiful** Initiative, which supports stewardship of US lands and waters. It will also draw from relevant chapters of the upcoming Fifth National Climate Assessment (NCA5, 2023) which, among other topics, examines climate impacts on ecosystems, ecosystem services and biodiversity. The assessment will contribute to the **National Nature Assessment** (NNA). Finally, the assessment will contribute to Executive Orders 14008 (Tackling the Climate Crisis at Home and Abroad) and 14072 (Strengthening the Nation's Forests, Communities, and Local Economies).

In Canada, the **Enhanced Nature Legacy Initiative** is continuing work to conserve species and ecosystems, in partnership and in the spirit of reconciliation with Indigenous Peoples; its goals include building resilience to climate change. From the climate perspective, a thriving natural environment is a key theme of Canada's **National Adaptation Strategy**, which explicitly recognizes the value of Nature-based solutions for both mitigation and adaptation. The assessment will inform these ongoing efforts, providing up-to-date knowledge and analysis to support effective action. It will also foster development of binational and cross-border solutions to the dual challenges of biodiversity conservation and climate change.

In Mexico, CONABIO has developed a **National Biodiversity Information System** with accompanying operational systems and has carried out analyses to provide data and information in different formats for decision-makers and the general public. This information will provide guidance for mitigation and adaptation measures to face major threats of climate change in Mexico, as part of its **National Programme on Climate Change 2020-2024.**

The Assessment will draw from and inform these ongoing efforts in Canada and Mexico, providing up-to-date knowledge and analysis to support effective action in those countries as well as the US. It will also foster development of binational, trinational, and cross-border solutions to the dual challenges of biodiversity conservation and climate change.

To be legitimate, credible and relevant, this assessment report will learn from previous assessment processes (such as conducted by IPCC, IPBES and the National Climate Assessments), models and

principles in its development. In addition, the assessment will be innovative with its approach in some respects, for example, with the deliberate inclusion of different knowledge systems and key stakeholders (e.g., practitioners, Indigenous Peoples and local community representatives, etc.) from the onset of the process to assure that we produce actionable, knowledge-based assessments for use in policy, regulation, and management of the environment.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- We seek the engagement of the Trilateral Committee to work with governmental and non-governmental partners at local, state, and Federal levels in México, Canada and the U.S. through the following:
- We seek cooperation with the Trilateral Committee during the assessment process such as: feedback during review phases (draft chapters - early 2024), participation in governmental engagement events, and support in developing outreach and awareness material regarding the key findings from the assessment report, even in conducting national outreach campaigns in each country.
- Garner support for any project and/or outreach opportunities involving continental/international collaboration resulting from assessment report key findings.

Project Goals:

- To increase awareness of the assessment process and report
- To increase participation from all stakeholders of the assessment process and report
- To build a better assessment process than currently exists
- To enhance collaboration/partnership of the three countries into a potential regular continuing process (assessment reports)
- To benefit from the Trilateral Committee's network and projects with respect to information exchange and dialogue.

11:30 – 12:00 AGENDA ITEM 7. A North American Network to Address the Double Jeopardy of Climate Change and Invasive Species

SUBMITTED BY: Toni Lyn Morelli (US Geological Survey/Regional Invasive Species and Climate Change Management Network).

AGENDA ITEM PRESENTORS: Toni Lyn Morelli (US Geological Survey - tmorelli@usgs.gov), Stanley Burgiel (US Department of Interior National Invasive Species Council - stanley_burgiel@ios.doi.gov)

COLLABORATORS & CONTACTS: Paul Heimowitz (U.S. Geological Survey), Wes Daniel (U.S. Geological Survey/Southeast RISCC), Heather Kerkering (U.S. Geological Survey/Pacific RISCC); Lindsey Thurman (U.S. Geological Survey/Northwest RISCC), Bryan Falk (National Invasive Species Council), Ken Donnelly, Kellie Sherman, Emily Posteraro, and Sarah Rang (Canadian Invasive Species Centre and Canada Invasives).

PROJECT DESCRIPTION: The challenging intersection of climate change and invasive species confounds conservation efforts by natural resource managers across North America. As temperatures increase, precipitation patterns change, extreme events happen more

frequently, and oceans warm and rise, non-native species are shifting in time and space and impact on their environments. This presentation will briefly summarize current science addressing the interaction of these two global threats and discuss a growing array of Regional Invasive Species and Climate Change (RISCC) Management networks in the United States and Canada. The RISCC networks work with local and regional federal, state, NGO, and indigenous partners, both researchers and practitioners/resource managers to synthesize relevant science, conduct priority research, share needs and knowledge, build stronger researcher-practitioner communities, and, ultimately, improve conservation outcomes. As bridging organizations, the RISCC networks connect invasive species management and research through the collaborative process of translational invasion ecology. Recent cross-RISCC initiatives include a workshop on identifying research and management priorities held at the 2022 annual conference of the North American Invasive Species Management Association, an evaluation of invasive species terminology viewed through the lens of climate change (including indigenous perspectives), and a synthesis of national survey data on perspectives and priorities of resource managers and researchers. The RISCC leadership is seeking to expand these surveys trinationally and to expand on the partnerships and information already established to improve invasive species management in the face of climate change across the continent.

BACKGROUND: Invasive species and climate change are global threats to ecosystems, and challenges resulting from their overlap already are rippling throughout North America. Changing climate conditions affect every aspect of biological invasions, in some cases worsening existing problems. Climate change is creating new pathways for invasive species to be introduced, such as shipping routes that open up as sea ice retreats. Warmer temperatures can allow an existing invasive species to expand its range into habitat that is currently too cool, or a naturalized species that is currently at low abundance to become environmentally and economically destructive. Furthermore, climate change is altering the effectiveness of invasive species treatment and control, such as aquatic barriers that require minimum water flows. Although these implications have received scientific attention for several decades, the rise of the RISCC networks represents a new approach to bring more effective collaboration, attention, and resources to the climate change-invasive species nexus into the hands of practitioners. Presently the RISCC Networks cover the Northeast, North Central, Northwest, Pacific, and Southeast U.S., as well as Canada. There is also interest in supporting the development of RISCCs in other regions of North America.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- This presentation aims to build awareness of the nexus between climate change and invasive species, promote the RISCC network as a valuable resource to address that nexus, and encourage continued expansion of the RISCC model to cover all regions throughout Canada, the United States, and Mexico.

12:15 – 12:45 AGENDA ITEM 8. North American Management of Feral Swine/Wild Pigs

SUBMITTED BY: David Bergman (USDA APHIS Wildlife Services).

AGENDA ITEM PRESENTORS: David Bergman (USDA APHIS Wildlife Services).

COLLABORATORS & CONTACTS: David Bergman (USDA APHIS WS), Jose Eduardo Ponce Guevara (CONANP), Dana Cole (USDA APHIS WS National Feral Swine Management Program),

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Colleen McElwain (Animal Health Canada), Mike Bodenchuk (USDA APHIS WS), Luis Lecuona (USDA APHIS International Services), Michael Marlow (USDA APHIS WS National Feral Swine Management Program), Ruben Murillo (SEMARNAT), Gabby Nichols, (Canadian Council of Invasive Species), Rebecca Lord (Executive Director, Canadian Council of Invasive Species), Kellie Sherman, Canadian Council of Invasive Species).

PROJECT DESCRIPTION: In the US, a Feral Swine Damage Management Program (NFSP) was initiated in fiscal year 2014 (FY14) as a way to implement control activities to reduce feral swine damage across the United States and afflicted territories. Since its inception, participation has expanded to include Canada and Mexico. The program and its components include ongoing collaborative research, operational feral swine population reduction, and outreach and communication campaigns.

Feral swine are a harmful and destructive invasive species and their geographic range is rapidly expanding with populations increasing across Canada, Mexico and the United States. Feral swine inflict significant damage to property, agricultural crops, natural resources, and native ecosystems. They also represent a risk to domestic animals and human health. Approximations of the total aggregate cost of damage caused by feral swine in the United States are estimated to be $1.5 billion annually. These costs would be expected to increase in the absence of control efforts as feral swine populations continue to expand across North America and losses are considerably greater if one were to factor in damages for Canada and Mexico. Currently one of biggest threats from feral swine is the potential to catch and transmit African Swine Fever. African Swine Fever has been found in the Dominican Republic and Haiti and is a threat to wildlife and agriculture in North America.

BACKGROUND: North American Management of Feral Swine has been presented to the Trilateral since 2021. Key to the implementation of the plan is the approval by the Trilateral and the cooperation that the Trilateral brings to the table. At last year's Trilateral, each country presented its own feral swine presentation. The three countries have now joined forces to address feral swine/wild pigs.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Further develop cooperative partnerships with other pertinent federal, state, provincial, tribal, local agencies, and private organizations working to reduce the impacts of feral swine to agriculture, natural resources, property, animal health, and human health.
- Expand feral swine management programs internationally to protect agriculture, natural resources, property, animal health, and human health.
- Expand disease monitoring in feral swine to improve understanding of disease ecology, particularly at the feral swine, agriculture, and human interface. Of particular interest is African swine fever and potential spillover of vampire bat rabies into feral swine.
- Develop and improve tools and methods to manage feral swine populations, including field tests to assess efficacy for reducing risks to agriculture, natural resources, property, animal health, and human health.
- Develop outreach materials and activities to educate the public about feral swine damage and related activities to prevent or reduce damage.
- Coordinate with Canada and Mexico to ensure awareness of feral swine initiatives and mitigation techniques and incorporate their activities into a trinational plan.
- Conduct outreach campaigns in Canada, Mexico, and the US.

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12:45 – 13:15 AGENDA ITEM 9. Implementation of the North American Rabies Management Plan

SUBMITTED BY: David Bergman (USDA APHIS WS), Richard Chipman (USDA APHIS WS), Tore Buchanan (Ontario Ministry of Natural Resources), Marianne Gagnier (Ministere des Ressources naturelles et de la Faune due Quebec), Luis Lecuona (USDA APHIS).

AGENDA ITEM PRESENTOR: David Bergman, USDA APHIS Wildlife Services

COLLABORATORS & CONTACTS: North American Rabies Management Team: Association of Fish and Wildlife Agencies; Western Association of Fish and Wildlife Agencies; Canadian Rabies Committee; Canadian Food Inspection Service; Environment Canada; Cornell; Indian Health Services; University of Alaska – Fairbanks; Mexico Ministry of Agriculture, Livestock Husbandry, Rural Development, Fisheries and Food (SAGARPA), National Service for Health, Safety and Food Quality (SENASICA); Mexico Ministry of Health (SALUD), National Center for Epidemiology Surveillance and Disease Control (CENAVECE); Ministere des Ressources naturelles et de la Faune due Quebec; Ministry of Environment and Natural Resources of Mexico (SEMARNAT); Navajo Nation; New York State Department of Health; Northern Arizona University; Ontario Ministry of Natural Resources; Provincial Health New Brunswick; Public Health Agency of Canada; Texas Department of Health Services; Thomas Jefferson University; United States Animal Health Association; United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services and International Services; United States Department of Health and Human Services, Centers for Disease Control and Prevention; Universidad Nacional Autónoma de México; Nova Scotia Department of Natural Resources; Global Alliance for Rabies Control; Puerto Rico Department of Health; PAHO; Lyssa LLC, and Wistar Institute.

PROJECT DESCRIPTION: Despite remarkable precedents and achievements in the rabies management field, greater accomplishments are possible through trilateral cooperation. The establishment of a North American Rabies Management Plan (Plan) represented a key step in facilitating planning processes by which mutual border rabies control and prevention goals and objectives can be identified and better met among Canada, Mexico, the Navajo Nation, and the United States. Plan architecture has been formed and will continue to be shaped with input from each country through representatives in the fields of wildlife management, public health, and agriculture. Rabies management creates the interface that requires integration of these areas of responsibility. This Plan establishes a mechanism for rabies management in North America by assessing and defining the needs, priorities, and strategies required to control and eventually eliminate terrestrial rabies and to determine methods for managing bat rabies virus variants.

BACKGROUND: Implementation of the North American Rabies Management Plan has been presented to the Trilateral since 2005. Key to the implementation of the plan has been the approval by the Trilateral and the cooperation that the Trilateral brings to the table.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Continued support of the North American Rabies Management Plan
- Increased border surveillance between Mexico and the US.
- Participation by the US and Canada in the impacts of climate change on rabies spread associated with Arctic foxes.
- Cross border participation in bat surveillance for rabies titers and impacts of climate change on bats especially vampire bats.

- Continued support for data, samples, and technological exchanges across borders, especially genetic tissue and serology samples.
- Continued support to evaluate rabies vaccines in wildlife species.
- Provide a workshop on skunk rabies management along the US-Mexico border (at the request of SALUD) in collaboration WS AZ, NM, and TX.
- Continued support of technological training programs to address human-wildlife conflict, especially through diagnostics and wildlife handling.
- Continued support to implement the outcomes of the Blue-Ribbon Panel on Vampire Bats (September 2020) moving into the US from Mexico with impacts of climate change and increased human-wildlife conflict.

13:15 – 13:45 AGENDA ITEM 10. Applying structured decision making to prevent Prussian Carp (*Carassius gibelio*) introduction into US waters from Canada through high-risk border pathways.

SUBMITTED BY: Patrick M. Kočovský (US Geological Survey)

AGENDA ITEM PRESENTORS: Patrick M. Kočovský (us Geological Services - pkocovsky@usgs.gov), Michael Colvin (US Geological Services - mcolvin@usgs.gov), Jesse Fischer (US Geological Services - jessefischer@usgs.gov), Max Post van der Burg (US Geological Services - maxpostvanderburg@usgs.gov.

COLLABORATORS & CONTACTS: Craig Martin (US Fish and Wildlife Service).

PROJECT DESCRIPTION: Prussian Carp *Carassius gibelio* is an invasive species in North America that is abundant and spreading rapidly in Alberta and Saskatchewan. Risk assessments by USFWS have determined most of the conterminous US and parts of northern Mexico are at high risk if Prussian Carp were to invade. The USFWS lists Prussian Carp as an injurious species under the Lacey Act. USGS researchers will be conducting Structured Decision Making (SDM) Workshops to identify management alternatives to prevent Prussian Carp from entering the US at high-risk potential entry points identified in USFWS risk assessments. Tribal Canadian federal and provincial, US State and Federal, and university stakeholders and experts will be participants in the SDMs.

BACKGROUND: Prussian Carp were reported in Alberta in 2014, but their arrival was probably more than a decade earlier. They have spread rapidly and across drainage basins indicating high invasiveness. Research at the University of Alberta (Poesch Lab) demonstrates Prussian Carp feed at multiple trophic levels and quickly outcompete and replace native benthic fishes. Their effects may be at the level of ecosystem engineer.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Identify experts, stakeholders, partners, and interested parties who will participate in SDM workshops.
- Coordinate and begin conducting SDM workshops.
- Potentially assist USGS researchers to identify Canadian and Mexican participants for the SDM workshops.

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13:45 – 14:15 AGENDA ITEM 11. U.S.-Mexico California Condor Recovery Program – Status Report

SUBMITTED BY: Ashleigh Blackford (USFWS), Steve Kirkland (USFWS), Amanda Gonzales (USFWS), Jose Eduardo Ponce Guevara (CONANP), Angelica Narvaez (CONANP), Catalina Porras (CONANP); Fernando Gual-Sill (Mexico City Zoos and Wildlife).

AGENDA ITEM PRESENTORS: Ashleigh Blackford (USFWS - Ashleigh_blackford@fws.gov), Catalina Porras (CONANP - maria.porras@undp.org), Fernando Gual-Sill (Mexico City Zoos and Wildlife - fernando.gual.sedema@gmail.com).

COLLABORATORS & CONTACTS: Ashleigh Blackford (USFWS); Steve Kirkland (USFWS), Amanda Gonzales (USFWS). Jose Eduardo Ponce Guevara (CONANP), Angelica Narvaez (CONANP), Veronica Mesa (CONANP), María Catalina Porras Peña (CONANP), Fernando Gual (Mexico City Zoos and Wildlife), Santiago Nyssen (State of Mexico Commission for Natural Parks and Wildlife), Ignacio Vilchis (San Diego Zoo Wildlife Alliance), Martha Caballero (Espacios Naturales y Desarrollo Sustentable).

PROJECT DESCRIPTION: The recovery program for the condor in Mexico began (1999) with the collaboration agreements reached by the governments of the United States (through the U.S. Fish and Wildlife Service; USFWS) and Mexico first, through Mexico's' National Institute of Ecology and Climate Change (INECC) and later on through the National Commission for Natural Protected Areas (CONANP) with the participation of the San Diego Zoo Wildlife Alliance (SDZWA). The first condor releases in Sierra de San Pedro Mártir National Park (SSPMNP), Baja California occurred in 2002. The release site in Baja is one of 7 release sites in the recovery program. The 2014 MOU between USFWS and CONANP identifies actions mutually agreed upon to support condor recovery with reintroductions in SSPMNP. The management and recovery of the Mexican population is integrated into the overall strategy to recover the species range-wide. The Baja condor population provides unique opportunities for population expansion but also some challenges including funding and cross-border logistics.

This agenda item provides an update concerning both, the species status in the U.S. and the implementation of the MOU. As of December 31, 2022, there is an estimated 347 condors in the wild, 40 of which are in the SSPMNP. Recently, the Baja field team has documented 2 fledglings from 2022, bringing the population up to 42 in Baja. There are 6 birds currently awaiting release at the SSPMNP field site. Two additional chicks raised at Chapultepec Zoo will be transferred later this spring. The USFWS has initiated a 5-year review of the species range-wide pursuant to the requirement under the Endangered Species Act, which is expected to be published in 2023.

BACKGROUND: The California Condor Recovery Program (Recovery Program) is an international multi-entity effort, led by the USFWS, to recover the endangered California condor. Partners in condor recovery include the Arizona Game and Fish Department, Bureau of Land Management, California Department of Fish and Wildlife, Chapultepec Zoological Park, Espacios Naturales y Desarrollo Sustentable, Los Angeles Zoo, Mexican Commission of Natural Protected Areas (CO-NANP), National Park Service, Oregon Zoo, Peregrine Fund, San Diego Zoo, Santa Bar-bara Zoo, Secretary of the Environment and Natural Resources of Mexico (SEMARNAT), U.S. Forest Service, Utah Division of Wildlife Resources, Ventana Wildlife Society, Yurok Tribe, Zacango Zoo, and a host of other governmental and non-governmental organizations.

The down listing goal identified in the California Condor Recovery Plan is to establish two wild, geographically distinct self-sustaining populations, each with 150 birds in the wild and at least 15 breeding pairs, with a third population of condors retained in captivity. There are four active release sites in California, one in Arizona, and one in Baja California, Mexico.

Captive breeding and release of condors, range-wide, continues to be the primary sources of population increase, as recruitment and survival in the wild are lower than mortality. From 1992 through 2022 there have been 126 deaths from lead poisoning in the free-flying population; accounting for 50% of the 253 deaths of known cause. However, mortality from lead poising in Baja is rare, making this population a model for what survivorship could be in the future as ammunition use transitions to non-lead choices in the U.S. Additional factors contributing to the difference in lead mortality in Baja may be the remote location the birds inhabit, lower human population density and/or fewer hunters. The main threat to the wild population in Baja is predation.

The overall condor population in Mexico grew steadily until 2014 from a combination of new releases from captive bred birds and natural productivity. However, cross border regulations resulting from concerns related to the highly pathogenic avian influenza (HPAI) occurring in the United States prevented exporting birds to Baja California from captive breeding sites in the United States from 2015-2021. The program successfully transferred 2 birds to Mexico in 2022 and plan to transfer two additional birds in 2023. These transfers are important to boost population growth and infuse novel genetics into the Baja flock.

In November 2022, USFWS staff traveled to Mexico City to coordinate and discuss next steps for Mexico's participation in the Recovery Program. This included a tour of the two zoological institutions that have condors with the program. Chapultepec Zoo currently has 2 breeding pairs. Zacango Zoo exhibits 3 females born at Chapultepec Zoo that cannot be released to the wild. The partners coordinated on future program planning, discussed opportunities for collaborative outreach on the success of the bi-national program, and participation in strategic planning for the overall recovery program. In the upcoming year the USFWS anticipates working with all recovery partners to establish additional goals and strategies tiered from the Recovery Plan to continue to focus our efforts most efficiently.

The USFWS has invited our Zoological Partners from Mexico to the U.S. to visit the facilities of our various condor captive breeding partners to learn more about the techniques and strategies developed to maximize success in producing birds that will be successful in the wild. We believe it will be valuable to view the design of enclosures including remote cameras for observation and learn additional techniques to maximize the likelihood that condor produced are viable candidates for release.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Continue transferring and releasing California condors from the U.S. and Chapultepec to Sierra de San Pedro Martir.
- Continue species conservation research and non-lead hunting education programs in Baja California.
- Continue captive-breeding program in Mexico and work with Zacango Zoo to implement its current outreach and environmental education program;
- Transfer of California condors to Mexico from the US and Chapultepec Zoo in 2023
- Discuss options for improved and continuous implementation of the MOU throughout the continued collaboration between CONANP, USFWS, and San Diego Zoo Wildlife Alliance on

the management of the wild California condor population in Sierra de San Pedro Martir National Park, the breeding in captivity program in Mexico, as well as monitoring and research actions of the species in the wild. – Completed Nov. 2022 binational meeting

- Identify priority goals for Baja program in context of the Recovery Program Priorities (2023-2024)
- Update Mexico's Action Program for the California Condor Conservation (PACE)
- Identify sufficient funding for the Baja, California Mexico program.
- Continue meeting and reporting under the shelter of the Species Table of the Trilateral Committee Meeting.

14:15 – 14:30 AGENDA ITEM 12. Masked Bobwhite: Transnational Collaboration for Stewardship of an Endangered Subspecies

SUBMITTED BY: Jennie Duberstein (Sonoran Joint Venture/US Fish and Wildlife Service).

AGENDA ITEM PRESENTORS: Jennie Duberstein (Sonoran Joint Venture/US Fish and Wildlife Service - jennie_duberstein@fws.gov); Teresa Solis (Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora CEDES - teresolis.cedes@gmail.com).

COLLABORATORS & CONTACTS: Norma Cruz Molina (CEDES), Martha Román (CEDES), Milka Valenzuela (CEDES), Lacrecia Johnson (USFWS), Rich Albers (USFWS), Steve Sesnie (USFWS), Don Wolfe (George Miksch Sutton Avian Research Center), Kevin Clark (San Diego Natural History Museum).

PROJECT DESCRIPTION: Since 2016 partners in the U.S. and Mexico have been working together to support the Masked Bobwhite Recovery Plan through work in Sonora, the epicenter of the historical range of this endangered subspecies. Currently our partnership is working to establish a captive breeding population of Masked Bobwhite in Hermosillo, at the Centro Ecológico de Sonora, managed by CEDES. CEDES also has a long-standing relationship with the owners of ranches north of the Sonoran capital city of Hermosillo, home to the last known spots for wild Masked Bobwhite in Sonora, and which still supports some of the most suitable remaining habitat. The ranching family that owns these lands is committed to supporting beneficial habitat conditions in anticipation of future Masked Bobwhite reintroductions and collaborates closely with CEDES and others to monitor ecosystem health. The grasslands of central Sonora are threatened by climate change and drought, so in addition to reintroduction, considering ways to steward these areas to best adapt to changing conditions will be necessary for long-term success of reintroduction efforts. The new captive breeding population will be managed in coordination with the Sutton Center, who oversees the Stud Book for the entire Masked Bobwhite program, to maximize genetic diversity. The ultimate vision is to begin reintroductions in Sonora in summer 2025-2026. The provides a unique opportunity to collaborate on the recovery of this iconic bird.

BACKGROUND: The long-term recovery of Masked Bobwhite relies on a healthy population in Mexico. Part of this includes stewarding habitat to rebuild connectivity across the international border, while part focuses on reintroduction efforts. Collaboration between the U.S. and Mexico goes back to the 1960s, and since 2016 a binational working group of the Masked Bobwhite Recovery Team has been working to establish a captive breeding population in Mexico. Although initial efforts to develop a program at Africam Safari in Puebla, Mexico continue to hold promise, the group is now focused on developing a program at the Centro Ecológico in Hermosillo, Sonora.

This will offer a way for birds to be raised in the same habitats and climates where they will be released, and will also serve as a safety mechanism, ensuring that there are multiple sources for captive breeding and reintroduction efforts that can support each other and promote longer-term genetic diversity for both programs. Although the status of the program at Africam Safari is currently unclear, we are hopeful that the creation of a new facility at the Centro Ecológico will provide a mechanism to reinvigorate efforts in Puebla.

Our team meets regularly to discuss work in progress, develop and adapt manuals and documents for work in Mexico, and begin the permitting process to transfer eggs from the U.S. to Mexico. CEDES has designated a building to house a new captive breeding program and create flight pens on their property in Hermosillo, Sonora. Our team is currently working to find creative funding mechanisms to support this work in Sonora and is planning site visits in the U.S. and Mexico to share knowledge and experience and provide technical assistance in developing the facility in Sonora.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS

- Construct a captive breeding facility for Masked Bobwhite at the Centro Ecológico de Sonora, including flight pens (planned: 2023-2024)
- Acquire all necessary permits and transfer eggs (or live birds, as the situation dictates) to Sonora (planned: summer 2024)
- Evaluate Masked Bobwhite habitat on Rancho El Seri-Carrizo (2023-2024, ongoing)
- Connect with Africam Safari to support their ongoing involvement in Masked Bobwhite recovery (2023, ongoing)
- Help identify possible funding sources to support ongoing efforts in Mexico.
- Help re-connecting with Africam Safari and building a stronger working relationship.

Thursday, June 29, 2023

11:00 - 11:15 AGENDA ITEM 13. Trilateral Island Initiative: Conservation and Restoration of the Islands of Canada, the United States, and Mexico

SUBMITTED BY: Annie Little, NPS (Channel Islands National Park; formerly with FWS).

AGENDA ITEM PRESENTOR: Annie Little (NPS) and representatives from Canada, U.S., and Mexico.

COLLABORATORS & CONTACTS: Annie Little (NPS), Gilles Seutin (Parks Canada), Federico Méndez Sánchez (Conservación de Islas), Gregg Howald (Advanced Conservation Strategies), Patty Baiao (Island Conservation), Humberto Berlanga (CONABIO), Nick Holmes (The Nature Conservancy), Eric VanderWerf (Pacific Rim Conservation), Lindsay Young (Pacific Rim Conservation).

PROJECT DESCRIPTION: This agenda item focuses on a collaborative trilateral effort to conserve and restore marine island ecosystems, including seabird populations. Following the signing of the Letter of Intent (LOI) at the 2014 Trilateral Committee meeting, the three countries have been collaborating on multiple issues of shared interest related to island conservation. The Trilateral Island Working Group will update the SCCCWT on the status of current collaborative

efforts, including ongoing projects, new priorities, and efforts to further the LOI. We will highlight island conservation efforts that relate to the 2023 SCCWT priorities, including adaptation to ecosystem change, technological innovation, connectivity, and climate change.

BACKGROUND: Over the last decade, multiple bilateral and trilateral island restoration projects have been initiated. To further encourage coordination and collaboration on island projects, a Trilateral Island Working Group was created in 2012. This group developed the LOI that was signed by the three countries at the 2014 Trilateral Meeting in Querétaro, Mexico. The LOI documents that the three countries intend to engage in cooperative bilateral and trilateral activities to promote sustainable environmental policies and practices in support of island conservation. The Working Group will discuss achievements, priorities, and updates of recent collaborative efforts related to island conservation.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- We seek continued endorsement by the Trilateral Committee of collaborative conservation efforts on islands in Canada, United States, and Mexico. The goal of the Trilateral Island Initiative is for the three countries to engage in cooperative bilateral and trilateral activities to promote sustainable environmental policies and practices in support of island conservation.

11:15 – 11:30 AGENDA ITEM 14. A Multinational Yaqui Catfish Conservation Propagation and Stocking Plan

SUBMITTED BY: David Stewart (US Fish and Wildlife Service).

AGENDA ITEM PRESENTOR: David Stewart (US Fish and Wildlife Service).

COLLABORATORS & CONTACTS: Tasha Harden (USFWS), Grant Harris (USFWS), Joe Barron (USFWS), Lacrecia Johnson (USFWS), Cassondra Walker (USFWS), Gary Pandolfi, (USFWS), Janess Vartanian (USFWS), Julie McIntyre (USFWS), James Hopkins, (University of Arizona), Dean Hendrickson (University of Texas – Austin); Ed Heist (Southern Illinois University), Melanie Culver (USGS), James Long (USGS), Alejandro Varela-Romero (Universidad de Sonora).

PROJECT DESCRIPTION: The Yaqui Catfish (*Ictalurus pricei*) Initiative calls for a multinational, collaborative approach to ensure the long-term survival of the Yaqui Catfish species through captive propagation, habitat restoration, and population management. Involving governments and non-governmental organizations from the United States and Mexico, this initiative focuses on developing and implementing a joint US-Mexico captive propagation plan for the Yaqui Catfish.

Our aim is to support the development of captive propagation and husbandry methods for the Yaqui Catfish through collaborative research and information sharing between the United States and Mexico. Support hatchery and stocking initiatives in Mexico, and help establish joint US-Mexico stocking plans and timelines to guarantee a coordinated approach to population management and habitat restoration when the need arises. Create duplicative and parallel efforts by revitalizing the production of Yaqui Catfish in US National Fish Hatcheries, while reestablishing a supplemental stocking program for recently extirpated populations in the habitats of San Bernardino National Wildlife Refuge. Establish plans to introduce the Yaqui Catfish to lands administered by the Pascua

Yaqui Tribe, and support their efforts to develop family-based "microhatcheries."

BACKGROUND: The recent extirpation of the Yaqui Catfish (*Ictalurus pricei*) in the United States made it crucial to locate remaining population segments in Mexico for conservation planning aimed at preventing extinction. Hybridization with invasive species such as the Channel Catfish (*I. punctatus*) poses a serious threat to the Yaqui Catfish's existence. Until 2021, limited information was available on the current distribution of the Yaqui Catfish, mainly because no randomized survey of their population in Mexico had been conducted. However, historical and genetic evidence suggested that non-native Channel Catfish might co-occur with Yaqui Catfish, creating a risk of hybridization with the non-native species. To understand the potential for hybridization in the Yaqui basin, we developed and utilized mitochondrial DNA markers and a stratified random sampling method. Non-native Channel Catfish eDNA was discovered in all but five locations where Yaqui Catfish eDNA was detected, indicating a high likelihood of interaction and potential for hybridization throughout the basin. This hybridization threat to the already endangered Yaqui Catfish underscores the need for a binational approach to secure the remaining populations and ensure their long-term survival.

Recently, the US Fish and Wildlife Service (USFWS) secured funding to restore habitats in and around the San Bernardino National Wildlife Refuge. The restoration aims to promote habitats for the recovery of the seven Río Yaqui fish species, including Yaqui Catfish, through cíenega restoration and stream restoration (e.g., Black Draw) to raise the water table and restore artesian flow. The USFWS is highly committed to collaborating with partners to restore lost biodiversity. These endemic fish are also culturally significant to the Pascua Yaqui Tribe. Enhancing existing populations by reintroducing other Yaqui fish species in the US would increase their potential to re-populate elsewhere, especially the Yaqui Catfish, a traditional food source that supports nutritional independence for tribal families. In Mexico, this project fosters a binational effort by reinforcing relationships to promote water stewardship and ecosystem restoration.

The USFWS aims to promote climate change adaptation and resilience by restoring the cíenega habitats of the San Bernardino National Wildlife Refuge, ensuring the long-term viability of the three extant species (Yaqui Topminnow (*Poeciliopsis sonoriensis*), Yaqui Chub (*Gila purpurea*), and Beautiful Shiner (*Cyprinella formosa*)) and reintroducing the missing four species (Yaqui Sucker (*Catostomus bernardini*), Mexican Stoneroller (*Campostoma ornatum*), Roundtailed Chub (*Gila robusta*), and Yaqui Catfish). A large, functioning cíenega would restore the natural hydrology, increase the recharge of the local aquifer, and provide stable habitats similar to the historical ecosystem. Furthermore, these habitats are free of non-native fish species.

At present, approximately 20 Yaqui Catfish are housed in a Mexican hatchery, with plans to translocate an additional 20 fish. We propose a cooperative, multinational effort involving governments and nongovernmental organizations from both the United States and Mexico. This joint venture aims to develop and implement a comprehensive Yaqui Catfish Captive Propagation and Stocking Plan, securing long-term survival of the species.

By working together, we can refine captive propagation and husbandry methods, establish US-Mexico stocking plans and timelines, and develop genetic-based assessments to prevent genetic contamination in hatcheries across both countries. Our objectives include preventing the global extinction of a species that was once mass-produced by US National Fish Hatcheries. Additionally, we aim to assist Mexico in developing supplemental stocking program to support local populations, while working to reestablish a similar program for recently extirpated populations in the habitats of

San Bernardino National Wildlife Refuge. Moreover, we seek to support the Pasua Yaqui Tribe to develop family-based "microhatcheries."

This collaborative effort will also encourage the establishment of captive Yaqui Catfish populations in zoos and aquariums throughout the US, support hatchery and stocking initiatives in Mexico, rebuild the USFWS captive population, and introduce the species to lands administered by the Pascua Yaqui Tribe.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Our goals are to highlight growing evidence that Yaqui Catfish are endangered on both sides of the binational boundary and stress the need to reinvigorate collaborations between US and Mexico to enhance opportunities for collaborations, where captive propagation programs both commercial and agency-based are developed and supported in Mexico and in the US to accelerate the conservation of Yaqui Catfish. We want to enter an agreement with Mexico to assist with their capture and hatchery efforts, while also working toward an agreement to transport Yaqui Catfish to the US for mass production by US National Fish Hatcheries, similar to what was successfully accomplished in the 1990s.
- To facilitate conversations with the government of Mexico, USFWS National Wildlife Refuge Program, and the USFWS National Fish Hatcheries to work toward capturing and receiving Yaqui Catfish from Mexico to import into the US and into hatcheries in Mexico.

11:30 – 11:45 AGENDA ITEM 15. Recovery, genomic management and conservation of the Threatened Yaqui catfish (Ictalurus pricei) and establishment of a reproductive stock in support of an emerging sustainable conservation perspective for the Yaqui Ethnic Group in Mexico.

SUBMITTED BY: Dr. Alejandro Varela-Romero, University of Sonora

AGENDA ITEM PRESENTOR: Dr. Alejandro Varela-Romero (University of Sonora - alejandro.varela@unison.mx).

COLLABORATORS & CONTACTS: Alejandro Varela-Romero (Departamento de Investigaciones Científicas y Tecnológicas de la Universidad de Sonora DICTUS, Francisco García-de León (Centro de Investigaciones Biológicas del Noroeste S.C. CIBNOR), José Manuel Pérez Cantú (Cuenca los Ojos), Ramón Alberto Nenninger Check (Instituto de Acuacultura del Estado de Sonora IAES), Norma Cruz Molina (Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora CEDES), Gorgonio Ruíz Campos (Facultad de Ciencias Universidad Autónoma de Baja California FC-UABC), Chuck Minckley (Fish Advocated).

PRESENTATION/PROJECT DESCRIPTION: The Yaqui catfish is a species at risk due to the dramatic reduction in its natural distribution, its population abundances in few historical localities where it still lives, and extirpation in two hydrological basins in the last 50 years. This risk is accentuated by the recent hybridization with the exotic channel catfish, for which a recovery, genomic management and conservation strategy is required to guarantee its persistence and potential repopulation in historical habitats.

The establishment of a reproductive stock is proposed as the most profitable strategy in the long term for its recovery, management and conservation. We propose its recovery in all its natural distribution in the Sonora, Yaqui, Mayo, Fuerte and Casas Grandes river basins in northwestern Mexico and we consider it a species of aquaculture interest due to its traditional historical consumption before extension for channel catfish fishing purposes.

The adequacy of pure reproductive stocks of the species in the regional environment will have a direct effect on the regional economy, starting with the Yaqui ethnic group as it postulates itself as a sustainable economic activity for this community.

The appropriation of pure reproductive stocks of the species in the regional environment will have a direct effect on the regional economy, starting with the Yaqui ethnic group, postulating itself as a sustainable economic activity for this community.

The genomic purity certification, currently in progress, of a captive stock at the Centro Acuícola del Estado de Sonora (CAES), will allow the exclusion of hybrid individuals with exotic channel catfish, to ensure a reproductive stock and carry out controlled reproduction events for the production of hatchlings for conservation purposes initially in the ADVC Cuenca Los Ojos. This project seeks collaboration with the USRWS to become binational.

BACKGROUND: It is in an initiative to recover the species that began almost six years ago, which begins with the detection of hybrids between the native Yaqui catfish and the exotic channel catfish in the Arroyo Cajón Bonito in the Yaqui River Basin, Sonora, Mexico. This project involves the ADVC Cuenca Los Ojos as an initial refuge area for Yaqui catfish populations in their natural distribution and the Instituto de Acuacultura del Estado de Sonora for assisted reproduction and generation of offspring for conservation and sustainable use purposes.

The project is led by DICTUS and assisted as collaborators by CIBNOR, UABC, IAES, CEDES and Dr. Chuck Minckley. This group is the Mexican Team for the Recovery of the Yaqui catfish in Mexico and we propose its recovery in Mexico through the involvement of the Yaqui ethnic group in Sonora, Mexico in the management of its reproduction and obtaining offspring for conservation purposes, thus promoting an activity sustainable emerging economy in northwestern Mexico.

Goal.- Establish a reproductive stock of Yaqui catfish with genomically selected pure individuals for reproduction in captivity and train members of the Yaqui ethnic group of Sonora in aquaculture management for the induction of reproduction and monitoring of offspring. This activity will be extended among the Yaqui community that’s lives in Sonora.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Search for binational collaboration for cooperation between USFWS Yaqui catfish management specialists and CAES reproductive stock managers in Sonora and the rest of the Mexican Recovery Team to increase the feasibility of inducing reproduction.

- Support for the generation of financing opportunities for the development of the induction event for the reproduction of the reproductive stock in CAES facilities in Sonora.
- Establish the collaboration of the Mexican Yaqui Catfish Recovery Team with the Team led by the USFWS to design recovery strategies for the species with management on both sides of the border.
- Promote collaboration between the Mexican Yaqui Catfish Recovery Team and the recovery team led by the USFWS.

11:45 – 12:00 AGENDA ITEM 16. Endangered Freshwater Fish of the Rio Sonoyta: Conservation and Education in the Southwest-US and Northwest-Mexico Borderlands

SUBMITTED BY: Nélida Barajas (CEDO Intercultural Center for the Study of desert and Oceans).

AGENDA ITEM PRESENTOR: Nélida Barajas (CEDO Intercultural Center for the Study of desert and Oceans - nelida@cedo.org).

COLLABORATORS & CONTACTS: Jessica Pope (Organ Pipe Cactus National Monument), Alejandro Varela Romero (Universidad de Sonora), Chuck Minckley (Native Fish Advocate), Doug Duncan (U.S. Fish and Wildlife Service); Martín Sau Cota (CONANP); Topiltzin Contreras MacBeath (International Union for Consevation Nature IUCN), Aaron D. Flesch (University of Arizona, School of Natural Resources and the Environment and the Desert Laboratory on Tumamoc Hill), Debra Colodner (Sonora Arizona Desert Museum), Luis Coronado Guel (University of Arizona and Tucson), Norma Cruz (Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora), Denis Caldwell (Caldwell Design), Verlon José (Governor, Traditional Tohono O'odham Leaders).0

PROJECT DESCRIPTION: For more than 25 years "the Sonoran Desert Native Freshwater Fish Working Group" a binational group comprised by officials of protected areas, professionals, researchers and civil society organizations have worked to protect the freshwater native fishes of the Sonoyta River, particularly Sonoyta pupfish (*Cyprinodon eremus*) and the Mexican Longfin dace (*Agosia chrysogaster*).

The habitat of these species a binational watershed (U.S.-Mexico) that feeds an intermittent river, springs and wetlands, has been facing an alarming environmental degradation. To protect these species between 2007 to 2010 populations of these species collected on the Ramsar site Agua Dulce located in the Biosphere Reserve el Pinacate y Gran Desierto del Altar a Mexican protected area were relocated in ponds along the watershed and stablish the ex-situ conservation network ponds along the watershed.

In the 2021 experts recognized the critical need of monitoring fish populations (size and genetic diversity), enhancing the ponds design and infrastructure, and to promote educational programs that connects the ponds a binational level, taking in consideration the traditional knowledge of the Tohono O'odham nation. The overall objective of this proposal is to enhance protection for the native fish of the Sonoyta River the Quitobaquito pupfish (*Cyprinodon eremus*) and the Sonoyta River Mexican Longfin dace (*Agosia chrysogaster*) under an ex-situ conservation refuge network in the Sonora-Arizona borderlands

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BACKGROUND: The endangered Sonoyta pupfish (*Cyprinodon eremus*) occurs in the United States in Quitobaquito Spring and in the Sonoyta River in Sonora, Mexico where it is sympatric with the longfin dace (*Agosia chrysogaster*). At the present time, these species are at risk due to groundwater withdrawal exacerbated by the ongoing drought and introduced species. This is particularly true in Mexico where the last remaining ~1 km of the Sonoyta River has, for all practical purposes, dried during the summers of 2007-2008.

In 2007 one refuge pond was constructed at Pinacate y Gran Desierto de Altar Biosphere Reserve headquarters near Sonoyta, Sonora and one at the Intercultural Center for the Study of Deserts and Oceans in Puerto Penasco, Sonora. In 2008, a third was constructed at the COBACH high school in Sonoyta. Funding for these activities was provided by Region II, U.S. Fish and Wildlife Service, Ecological Services Office, Tucson. All ponds were stocked with the Sonoyta pupfish and longfin dace from the Sonoyta River. These ponds have been maintained to date by the respective institutions and currently support populations of both species. As these facilities are meant to provide (1) long-term habitats and (2) how they can be used to maintain these species in the Sonoyta River, a management plan is necessary. The refuge network gathers diverse institutions, and together we collaborate in the management, operations and monitor fish populations.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Promote collaboration amongst the members of the freshwater fish working group.
- Follow up on the legal process to update status on NOM-059 (endanger species act, Mexico)
- Assess current status of native population in Agua Dulce
- Field trip to Agua dulce. Monitoring fish population
- Monitor twice a year fish populations in the refuge ponds in Mexico
- Genetic analysis (barcoding) of the Mexican ponds.
- Determine if augmentation is needed to improve gene diversity
- Promote establish a population of the Sonoyta River longfin dace in the United States
- Obtain permits to bring fish from Mexico to USA
- Assess pond infrastructure and renovate equipment and other facilities
- Renovate pond
- Develop a communication campaign about the importance of freshwater desert wetlands and its native fish species
- Develop age appropriate and place-based educational materials (curricula) to share with- the public, and will implement other communication actions (video, social media, and infographics) to inform the general public about this species.
- Train two persons on each refuge pond to conduct nature talks to interpret the endangered aquatic species and habitats, as well as the conservation efforts in the Sonoyta watershed.

12:00 – 12:15 AGENDA ITEM 17._Focus group on endangered Mexican Blindcat (Prietella phreatophila) in the binational Edwards-Trinity Aquifer (Texas and Coahuila)

SUBMITTED BY: Dean Hendrickson (University of Texas at Austin), Claudia Patricia Ornelas García (Instituto de Biología, UNAM).

AGENDA ITEM PRESENTORS: Dean Hendrickson (University of Texas at Austin - deanhend@austin.utexas.edu), Claudia Patricia Ornelas García (Instituto de Biología, UNAM - patricia.ornelas.g@ib.unam.mx).

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COLLABORATORS & CONTACTS: Andy Gluesenkamp (San Antonio Zoo), Suzanne McGaugh (University of Minnesota), José Antonio Dávila Paulín (Distrito Nacional de Riego 004 Don Martín CONANP); Amistad National Recreation Area (National Park Service), Texas

PROJECT DESCRIPTION: The Mexican blindcat is an obligatory and highly adapted cave-dwelling blind catfish recently discovered in Texas, near the border at Del Río, on the Amistad National Recreation Area. Its previously known range extends from near the border in Mexico southward into north central Coahuila near Múzquiz. That distribution substantiates what hydrologists have formally declared to be a binationally shared aquifer, which, especially along the border, is heavily over-exploited for municipal and manufacturing uses. Now with eDNA, the blindcat's distribution could be more rigorously and quickly delineated, and its conservation status better defined. At the same time, a captive population established by Hendrickson 30 years ago is now maintained and growing at San Antonio Zoo, ready to facilitate rigorous binational comparative research (and possibly reintroductions if ever needed). Phylogenetic studies demonstrate that the two Texas blindcats (*Satan eurystomus* and *Trogloglanis pattersoni*) from a separate part of the Edwards Aquifer, and the Mexican Blindcat comprise a monophyletic lineage that has lived and evolved underground in the relatively stable Edwards Aquifer for tens of millions of years. These currently very little-studied species thus have great potential to become a model for study of adaptation to subterranean environments, complementing in many ways the extensively studied model system of the blind Mexican Tetra, which contrasts with the blindcats by consisting of many diverse, independent and very recent (hundreds of thousands of years ago) invasions of caves with rapid adaptation to them. Increased resources to facilitate research in this much older convergent system has great potential to not only promote important evolutionary research with clear potential to directly benefit humans through medical applications and much more, but also to benefit aquifer management in both countries and better assure conservation of this species.

BACKGROUND: Hendrickson's lab web pages have much more information about the Texas and Mexican blind catfishes (https://sites.cns.utexas.edu/hendricksonlab/blind-cave-catfishes), and information about the binational group that formed around the species nearly 10 years ago - the "Blindcat Working Group". That group remains active, continuing to monitor the species' occurrence and its conservation status, as well as promoting research regarding its systematics and phenotypic evolution. A large mural of the Mexican Blindcat in downtown Del Rio helps to raise awareness of the species in that community, as will a beautifully illustrated new children's book about the blindcat and other aquifer organisms that was recently accepted for publication. A very respected professional film production crew based in Texas, but with extensive experience working in Mexico, has committed to production of a movie about Mexican Blindcats, and is planning to do most of the required fund-raising (see their most recent production - https://deepintheheartwildlife.com/#about-film, which includes some footage and discussion of the species). However, some seed funding will be required to further develop the story and the players, start arranging access to sites, permits etc. Meanwhile, overexploitation of the aquifer continues, undoubtedly impacting the species and likely already decreasing its distribution.

Dr. Hendrickson has studied Mexican Blindcats in the lab and field since the early 1990s. Dra. Ornelas-García at the Colección Nacional de Peces (CNPE-IBUNAM), is currently collaborating with Dr. Hendrickson in the study of phenotypic convergences across different cave-adapted fishes and has participated in the Blindcat Working Group's monitoring of the species and exploration of its occurrences in the field. Dr. Gluesenkamp directs the San Antonio Zoo's Center for Conservation & Research that now includes a small live colony of the Mexican Blindcat, and, together with

National Park Service colleagues at Amistad National Recreation Area, continues exploring (recently greatly facilitated by new LIDAR datasets for the region) caves and monitoring biodiversity in those already known to harbor blindcats. Ing. Dávila directs a large Federal (CONANP) Protected Area and RAMSAR-designated wetland that harbors many localities for the species and has strong relationships with indigenous (Kickapu and Mascogo) landowners in still under-inventoried extents of the species' range.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- We hope that with this agenda we will be able to establish more binational collaboration links to better monitor the species on both sides of the border and help us jointly establish action plans for its conservation and management
- Rejuvenate and expand the Blindcat Working Group to raise awareness of the species' imperilment, and to educate communities using the aquifer about the blindcat and how research on it can help humans better understand and manage the aquifer more sustainably. The San Antonio Zoo captive colony has the infrastructure to allow expansion of that facility and the small colony it now houses, but funding, permits and broader transboundary collaborations at higher levels are required to kickstart new fieldwork and research. In collaboration with the San Antonio Zoo, we ask also for support to stablish a captive colony in Mexico at the Instituto de Biología, UNAM, to help with the species conservation efforts. Implementation of a broadscale eDNA sampling project is a useful near-term goal to refine our knowledge about distribution of the species. Field trips could quickly sample a large number of wells and springs for eDNA, and whenever near any of the now many well-known localities with high probability of producing specimens, we will employ teams trained in the technical caving required for the much more labor- and time-intensive technical work needed for collection of new specimens for the live colony and modern genetics. An eDNA program would allow sample collection by a much more diverse team, potentially including non-profits, schools, indigenous groups and other interested persons, thus facilitating broader outreach and public education about aquifers and biodiversity. Aquifer biota in general are an underutilized system in hydrological studies, and we seek to expand binational collaborations to include researchers from that discipline as well (CONAGUA, Texas Water Development Board, etc.).
- Assistance networking with researchers and other collaborators residing and/or working in the study region and in diverse governmental and other organizations on both sides of the border.
- Assistance obtaining funding for continued fieldwork and eDNA sampling to better document current distribution and aquifer conditions, while at the same time obtaining new specimens to grow and diversify the live colony at San Antonio Zoo, and establish a colony at the Colección Nacional de Peces, UNAM. These colonies will facilitate diversification of research and increase DNA samples available for the genetic characterization of this model system.

12:15 – 12:30 AGENDA ITEM 18: Joint Freshwater fish research and conservation.

SUBMITTED BY: Jose Eduardo Ponce Guevara, Director for Conservation Strategies, CONANP

AGENDA ITEM PRESENTOR(S): Jose Eduardo Ponce Guevara, jponce@conanp.gob.mx, CONANP

PROJECT DESCRIPTION: Support the continuity of collaborative actions to address

concerns of at risk species of freshwater fish in Northern Mexico and Southern U.S.

When appropriate, assist the formalization of collaborative agreements to recover species and facilitate the issuance of required permits.

BACKGROUND: After almost a decade of pursuing the re-launching of the U.S.-Mexico collaboration on freshwater fish research, during the first part of 2023, specialists from both sides of the border gathered in an effort to launch the creation of a binational group of specialists that could address some concerns on imperiled freshwater fish along the U.S.-Mexico border.

PREVIOUSLY PRESENTED TO SPECIES TABLE?: Yes

SPECIFIC REQUESTS OF ACTIONS ON THE PART OF THE CO-CHAIRS:

BACKGROUND: BFFs were thought extinct in 1979 and rediscovered in 1981. A captive breeding program (1987) was started by Wyoming Game and Fish and the FWS. The first BFF reintroduction in the wild was at Shirley Basin, WY, 1991. Mexico reintroduced BFFs at Janos, MX in 2001 and Parks Canada at Grasslands National Park, SK, CN in 2009. BFF sites in CN and MX have had challenges with plague and currently there are no BFFs on those sites. The US sites continue to see BFFs on most

Endorsement from the Executive Table to facilitate the implementation of joint actions to recover imperiled freshwater fish species along the U.S.-Mexico border, including the issuance of pertinent permits and formalization of proper documents.

12:45 – 13:00 AGENDA ITEM 19. Black-footed Ferret Recovery Update for Mexico, Canada, and the United States

SUBMITTED BY: Pete Gober (U.S. Fish and Wildlife Service, Black-footed Ferret Recovery Coordinator.

AGENDA ITEM PRESENTORS: Pete Gober (USFWS – pete_gober@fws.gov), Laura Gardiner (Parks Canada - laura.gardiner@pc.gc.ca), Jesus Pacheco Rodriguez (Laboratorio de Ecología y Conservación de Fauna Silvestre Instituto de Ecología, UNAM – jpacheco@ecologia.unam.mx).

PROJECT DESCRIPTION: All three countries continue recovery efforts with plague being the biggest challenge. CN has ongoing experimental distribution of orally-administered insecticide (Fip-bit) to help advance sylvatic plague management. US continues working with State, Federal, Tribal, and NGO partners in developing plague management techniques and distribution. CN and MX have not recently released any BFFs due to low numbers of prairie dogs on colonies and the challenges of mitigating plague. Last year, FWS reintroduced BFFs on a new site in Colorado bringing the total number of BFF reintroduction sites to 33. The FWS continues to work with cloning partners in the ongoing development of cloning the BFF.

BACKGROUND: BFFs were thought extinct in 1979 and rediscovered in 1981. A captive breeding program (1987) was started by Wyoming Game and Fish and the FWS. The first BFF reintroduction in the wild was at Shirley Basin, WY, 1991. Mexico reintroduced BFFs at Janos, MX in 2001 and Parks Canada at Grasslands National Park, SK, CN in 2009. BFF sites in CN and MX have had challenges with plague and currently there are no BFFs on those sites. The US sites continue to see BFFs on most reintroduction sites, but plague management continues at most sites. The US, CN, and MX continue plague research, prairie dog translocation efforts and monitoring BFF reintroduction sites.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

Black-tailed prairie dog and Black-footed ferret in Canada

- Experimental distribution of orally-administered insecticide (Fip-bit) to help advance sylvatic plague management, in coordination with US partners.
  Experimental distribution of Fip-bits is planned for August 2023 at two study sites, with collection of baseline data (i.e., before treatment) in April-May.

- Continue working with Calgary Zoo/Wilder Institute to implement and refine a habitat assessment index tool to identify prairie dog translocation and colony creation sites.
  A Habitat Suitability Index is being refined by the Wilder Institute/Calgary Zoo and will be applied if/when needed.

- Continue investigating genetic structure and diversity of the Canadian prairie dog population. The Wilder Institute/Calgary Zoo is currently working on getting tissue samples analyzed to assess landscape genetics of the Canadian prairie dog population and is in the process of publishing the preliminary study comparing the genetic diversity and inbreeding levels of the Canadian population with a population in Montana and in South Dakota.

Black-footed ferret recovery in the United States

The Black-footed Ferret Recovery Program continues efforts to meet challenges with plague and working with partners to mitigate plague at reintroduction sites. Continued coordination with the Black-footed Ferret Recovery Implementation Team partners in recovery efforts. The Association of Zoos and Aquariums BFF Recovery Program Review will be finalized Summer 2023.

13:00 – 13:15 AGENDA ITEM 20. Grassland and Black-Tailed Prairie Dog Conservation

SUBMITTED BY: Bill Van Pelt (Arizona Game and Fish Department AGFD), Francisco Abarca (AGFD), Jennifer Presler (AGFD), Holly Hicks (AGFD).

AGENDA ITEM PRESENTOR: Bill Van Pelt (AGFD).

COLLABORATORS & CONTACTS: Francisco Abarca (AGFD), Jennifer Presler

(AGFD), Holly Hicks (AGFD).

PROJECT DESCRIPTION: This presentation will be an update on the progress of black-tailed prairie dog conservation in AZ and Sonoran grasslands and results on Grassland mapping effort throughout range of the species.

BACKGROUND: In 2022, the Arizona Game and Fish Department (AGFD) continued with the re-establishment of black-tailed prairie dogs (BTPD) to southeastern Arizona, which began in 2008. As travel restrictions due to Covid-19 pandemic, were lifted efforts were continued to assess the population demographics and individual health at four re-established colonies. There are currently three established colonies at Las Cienegas National Conservation Area (LCNCA) and one on Pima County land at Sands Ranch. Additional monitoring efforts included visual counts and colony perimeter mapping by AGFD employees and volunteers. After facing population declines in 2018 related to natural rain cycles and a very dry spring, 2019 and 2020 was a year of intra-colony growth and restoration. In 2021, expansion levels allowed for translocation of animals into a third county in AZ.

In addition to the four re-established colonies, the BTPD have dispersed to create 3 known small colonies on private land. Two of the colonies were first discovered in 2017 and have grown to 13 and 32 individuals. The third colony was discovered in 2019 and has 2 individuals. These small colonies have landowner support and will continue to be passively monitored. Monitoring was challenging during the pandemic. However, in 2022 colony levels increased to as many as 100 individuals.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- In 2023, AGFD will continue to monitor the 4 re-established colonies, and aid their success with supplemental feeding and vegetation manipulation as needed. AGFD will also coordinate with Mexico to allow for translocation of animals, if desired.
- Continue with international coordination with assessing and promoting conservation efforts associated with black-tailed prairie dog and grassland efforts.
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13:15 – 13:30 AGENDA ITEM 21. Sonoran Pronghorn Recovery

SUBMITTED BY: Clay Crowder (AZGFD), Jill Bright (AZGFD), Francisco Abarca (AZGFD), Cynthia Soria (AZGFD), Stephanie Fuest (Cabeza Prieta National Wildlife Refuge, USFWS), Erin Fernandez (Arizona Ecological Services Office, USFWS), Elaine Johnson (Southwest Arizona National Wildlife Refuge), Jesus Armando Barajas Torres (CEDES), Norma Cruz (CEDES), Martin Sau (CONANP).

AGENDA ITEM PRESENTORS: Stephanie Fuest (USFWS - stephanie_doerries@fws.gov), Francisco Abarca (AGFD - fabarca@azgfd.gov).

COLLABORATORS & CONTACTS: Stephanie Fuest (Sonoran Pronghorn Recovery Team Lead, Cabeza Prieta National Wildlife Refuge USFWS), Erin Fernandez, (Arizona Ecological Services USFWS), Clay Crowder (AZGFD), Jill Bright (AZGFD), Francisco Abarca, (AZGFD), Cynthia Soria (AZGFD), Christa Weise (Kofa National Wildlife Refuge USFWS), Tyler Coleman (Organ Pipe Cactus National Monument NPS), Bureau of Land Management (BLM), Arizona

Antelope Foundation, Melanie Culver (University of Arizona), Arizona State University, US Border Patrol, Aaron Alvidrez, Barry M. Goldwater Range (DOD), Yuma Proving Ground (DOD), The Phoenix Zoo, Los Angeles Zoo, Armando Barajas (CEDES), Norma Cruz (CEDES), Dirección General de Vida Silvestre (SEMARNAT), Martin Sau (Gran Desierto del Altar y Carlín Pinacate Biosphere Reserve CONANP), Horacio Ortega (Gran Desierto del Altar y Carlín Pinacate Biosphere Reserve CONANP).

PROJECT DESCRIPTION: A binational translocation of six pronghorn (3M, 3F) from the Cabeza Prieta NWR semi-captive breeding pen to a pre-release pen at El Pinacate Biosphere Reserve took place on December 13th, 2022. The six pronghorns were fitted with GPS radio collars and transported via trailer to the pre-release pen where they remained for a month; they were successfully released into the wild on January 10th, 2023. The annual capture event at Cabeza Prieta NWR took place on December 13th and 14th. In total 49 pronghorn out of 72 were captured and processed. The Kofa boma capture and release operation took place on December 6th, 2022. Twenty-four of the 33 pronghorn were captured in the bomas. Eight (4M, 4F) were processed, fitted with GPS collars, and transported to the holding pen on the YPG East Arm for release. The rest of the pronghorn were vaccinated, marked if needed, and returned to the Kofa pen. There were no injuries or mortalities.

A range-wide survey was conducted on the wild pronghorn from the Cabeza/ORPI/BMGR subunit in late November 2022. The estimated population in that subunit, based on animals seen on the transects, is 185. A range-wide survey of the wild pronghorn in the Sauceda subunit took place on December 18th and 19th; the estimated population at this subunit is 29 pronghorns. Additionally, a range-wide survey of the wild pronghorn in the Kofa subunit was conducted in January of 2023; the estimated population in this subunit is 212. In Mexico, a range-wide survey was also conducted on January 4-7, 2022. The total estimated Sonoran pronghorn population in Sonora is 552. At the Pinacate subunit, the estimated population is 102, and at the Quitovac subunit, the estimated population is 449 pronghorns.

To continue working towards the recovery of the Sonoran pronghorn range wide, the collaborators propose to continue binational monitoring efforts (including aerial surveys and telemetry), continue operating a captive breeding program within the CPNWR and KNWR with subsequent releases in the wild, and continue conducting training efforts in survey methodology and other important wildlife management practices for collaborators in Mexico. This agenda item is an update on progress made on binational conservation activities.

BACKGROUND: The USFWS finalized and approved the Sonoran Pronghorn Recovery Plan in 2016. The revised recovery plan lays out a strategy that includes protecting habitat; increasing and/or maintaining existing populations in the U.S. and in Mexico while managing for genetic diversity; removing, reducing, or managing threats to the species; and, identifying and addressing priority monitoring and research needs. Achieving the recovery criteria will ensure the long-term conservation and protection of the pronghorn and its habitat and could prompt removing it from the list of endangered species. The plan estimates that the delisting goals could be met by 2036.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Continue working on binational Sonoran pronghorn recovery.
- Conduct population surveys in Arizona and Sonora.
- Continue releasing Sonoran pronghorn into selected areas in the U.S.
- Maintain water and forage enhancement projects, provide supplemental forage when

necessary.

- Continue discussions on restoring linkages between the populations in Mexico and between the populations in the U.S. and Mexico to benefit pronghorn populations that are currently largely isolated.
- Assess the genetic structure of the existing populations to determine the extent of genetic isolation.
- Continue discussions on establishing a third population in Sonora.

13:30 – 14:15 AGENDA ITEM 22. Bison Conservation Activities

SUBMITTED BY: Brendan Moynahan (Widllife Conservation Branch, National Park Service), Cuenca Los Ojos A.C., Alejandro Espinoza (CEMEX).

AGENDA ITEM PRESENTORS: Brendan Moynahan (US NPS), Greg Wilson (Parks Canada), Jose Manuel Pérez (Cuenca Los Ojos), José Eduardo Ponce Guevara (CONANP).

COLLABORATORS & CONTACTS: Ana Laura Barillas Gómez (Fondo Mexicano para la Conservación de la Naturaleza), Alejandro Espinosa Treviño (CEMEX).

PROJECT DESCRIPTION:

U.S.
Present progress toward the LOI expected to be signed at this 2023 Trilateral meeting; issuance of the US Secretary of the Interior's Order 3410 on Restoration of Bison and Prairie Grasslands; progress toward a CA bison conservation plan; and next focal action items under the anticipated bison LOI. The US will also provide updates on development of a metapopulation management strategy and initiation of a shared stewardship strategy.

Mexico.
Rancho El Uno (ReU) is a private property encompassing 18,500 ha (45,715 acres) of native grasslands in the Chihuahuan Desert. ReU is located in the heart of the Janos Biosphere Reserve and is known as the "last prairie." The Janos Biosphere Reserve is characterized by its natural beauty, wide areas of native grassland, and the mountains of Sierra Madre Occidental, Sierra de Enmedio, and Sierra del Capulín. ReU represents one of the most important migratory bird conservation sites, along with habitat for emblematic species, such as the American bison (Bison bison), the black-tailed prairie dog (Cynomys ludovicianus), and the golden eagle (Aquila chrysaetos). ReU is owned by the Mexican Fund for the Conservation of Nature, A.C. (FMCN) -a Mexican conservation finance Non-Government Organization (NGO)- and it is managed by Cuenca de Ojos (CLO) -a binational NGO with experience in regenerative land management in northern Mexico. In collaboration with local partners, both organizations work to maintain this critical landscape for the binational biological corridors that connect the great plains in the United States with those of the Mexican highlands.

Rancho El Uno has been working to conserve bison genetics since 2009. The Project is successful, and its needs increase each year. Among the main issues is the activation of management strategies that allow maintaining the health of the herd because semi-captive management avoids natural selection and migration. Without limiting factors, the female-male ratio is close to 1:1 (151 females-169 males-6 unknow). The effects observed by this relationship is the stress in the males that we

assume are the ones that are left out of the competition for females and space. The manifestation of stress is the escape of individuals to neighboring ranches, which do not have better habitat conditions in our perception, which is why stress or migration instinct is what moves groups of adult males or adult males leading juveniles to leave the premises. The females for their part are kept together with young and juveniles and no escapes have been recorded.
The problem generated by the above is the increase in resources for the maintenance of the herd, discomfort on the part of the neighbors and damage to their property, risks due to collisions on neighboring roads and the increase in genetic problems of a closed population. The solutions are to establish and activate herd management strategies in the short term.

Canada
Bison conservation activities have been presented annually in recent years. Bison conservation is exceptionally active, positive, and collaborative in recent years, and members wish to highlight both actions and next steps toward further integrated support for bison and grassland system restoration through linking ecological and cultural objectives.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS

- Accomplish final signing of the Bison LOI
- Establish a mechanism for specific, demonstrable collaboration on a conservation genetics database in support of metapopulation management.
- Foster critical discussions on institutionalizing a framework for ecocultural restoration approaches across complex landscapes and jurisdictions.
- Garner support for and awareness of active opportunities for international collaboration.

14:15 – 14:30 AGENDA ITEM 23. Bison Integrated Genomics (BIG) – A Parks Canada and University of Saskatchewan Project

SUBMITTED BY: Heather Gosselin (Species Conservation, Parks Canada).

AGENDA ITEM PRESENTORS: Greg Wilson (Parks Canada - Greg.Wilson@pc.gc.ca), Todd Shury (Health and Management, Parks Canada - Todd.Shury@pc.gc.ca).

COLLABORATORS & CONTACTS: Gregg Adams (Department of Veterinary Biomedical Sciences, University of Saskatchewan - Gregg.adams@usask.ca).

PROJECT DESCRIPTION: Two major barriers to bison conservation are the presence of diseased bison in northern Canada, infected with bovine tuberculosis (bTB) and brucellosis, and the fact that most conservation herds are geographically separated and small. Current conservation efforts are severely hampered by consequent threats of bTB and brucellosis spillover, genetic isolation amongst herds, and the potential for catastrophic loss in small geographically segregated herds. Two wood bison herds were designated as being under imminent threats to their recovery in 2020, in part from a lack of tools for disease management. The Bison Integrated Genomics (BIG) project seeks to ensure the existence of healthy, genetically pure bison, without domestic cattle or subspecies introgression, and with long-term sustainable genetic diversity in Canada's bison herds. Specific objectives are to: 1) Develop more sensitive and specific diagnostic tuberculosis tests for bison using advanced proteomic and transcriptomic tools; 2) Develop a combined Brucella/bTB vaccine for use in bison; 3) Refine and validate genomic tools to identify genetic composition of

existing bison herds (SNP chip development), and 4) Rescue and transfer of healthy germplasm between wild and genetically degraded herds. The rescue and transfer of germplasm requires the support of multiple jurisdictions in order to access genetically valuable bison herds.

BACKGROUND: This presentation is meant for information sharing and to support the justification of the trilateral signing of a Letter of Agreement between the 3 countries. The purpose of this Letter of Agreement is to document that federal departments and agencies directly responsible for bison conservation and management on their respective federal lands, including Mexico's Ministry of Environment and Natural Resources (SEMARNAT) through its National Commission for Natural Protected Areas (CONANP); the U.S. Fish and Wildlife Service (USFWS); the U.S. National Park Service (USNPS); and the Parks Canada Agency (PCA), hereinafter "the Agencies", have the intention to enhance collaboration on the conservation and restoration of North American Bison in Canada, the United States of America, and the United Mexican States. The BIG project will develop conservation tools for bison recovery that could be leveraged by all three countries to restore and reconnect healthy bison populations.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Develop trinational cooperation and coordination of continental-scale projects to examine the impact and possibility of movement of genetic diversity among conservation herds in all three countries, without the risk of disease transfer.

14:30 15:00 AGENDA ITEM 24._IUCN Species Specialist Committee (SSC) Bison Specialist Group Update

SUBMITTED BY: Greg Wilson (Bison Specialist Group Red-List Co-ordinator, Parks Canada).

AGENDA ITEM PRESENTORS: Dustin Ranglack (IUCN SSC Bison Specialist Group - dustin.ranglack@usda.gov), Greg Wilson (Red-List Co-ordinator, Parks Canada - Greg.Wilson@pc.gc.ca).

COLLABORATORS & CONTACTS: Glenn Plumb (IUCN Bison Specialist Group).

PROJECT DESCRIPTION: We request to present an update (~10 min) in powerpoint format describing relevant BSG activities, including updating the 2017 American Bison Red List Assessment, completion of the first American bison Green Status Assessment, with short Q&A to follow. We are proposing to update the criteria used to determine if a bison herd should count as wild, and therefore should be considered in the updated American Bison Red List Assessment. While the Red List is the global standard for assessing the extinction risk of species, it is complemented by the Green Status, which assesses the recovery of species' populations and measures their conservation success. A Green Status Assessment was recently completed for bison.

BACKGROUND: The International Union for Conservation of Nature (IUCN) is the world's oldest and largest global environmental organization, and the IUCN Bison Specialist Group (chartered in the 1990s) is now the world's leading body of scientific and

practical management expertise on the status and conservation of bison as wildlife, inclusive of the North American bison (*Bison bison)* and the European bison (*Bison bonasus)*.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- To share the outcomes of specific BSG activities that are intended to benefit trinational cooperative bison conservation management.

Friday, June 30, 2023

11:00 – 11:30 AGENDA ITEM 25: Ocelot Recovery Action

SUBMITTED BY: Laura de la Garza (USFWS), Janess Vartanian (USFWS).

AGENDA ITEM PRESENTOR(S): Laura de la Garza (USFWS - laura_delagarza@fws.gov).

COLLABORATORS & CONTACTS: Laura de la Garza (USFWS), Janess Vartanian (USFWS), Seth Willey (USFWS), Grant Harris (USFWS), Angela Anders (USFWS), Beth Forbus (USFWS), Chuck Ardizzone (USFWS), Sarah Lehnen (USFWS), Ashley Reeves (East Foundation), Arturo Caso (Predator Conservation AC), Bill Swanson (The Cincinnati Zoo), Fernando Najera (University of California Davis), Jan Janecka (Duquesne University), Jason Lombardi (California Department of Fish and Wildlife), Ken Kaemmerer (Pittsburgh Zoo & PPG Aquarium: retired), Michael Tewes (Texas A&M University), Roel Lopez (Texas A&M University), Mike Brennan (Texas A&M University), Clayton Hilton (Texas A&M University), Lisanne Petracca (Texas A&M University), Lindsay Martinez (Texas A&M University), Tyler Campbell (Texas Parks and Wildlife Department), Neal Wilkins (Texas Parks and Wildlife Department), Daniel Kunz (Texas Parks and Wildlife Department).

PROJECT DESCRIPTION: This project addresses the Species of Common Conservation Concern Worktable's goal of management and conservation of small and isolated populations at-risk. The endangered ocelot (*Leopardus pardalis*) would benefit from binational conservation efforts to support wild populations within the USA. Within the USA, Federal (USFWS), state (Texas Parks and Wildlife), University, NGO's and private landowners are embarking on an ambitious plan to start a new ocelot population in Texas. This project will build population redundancy while forming a climate change mitigation strategy, as it would be inland from coastal storms which are becoming increasingly violent, and buffers existing ocelot populations susceptible to rising aridity and fire risk. This new population would be supported by a captive breeding facility for ocelots, with the potential for ocelots within Texas, zoological institutions and hopefully from Mexico forming the nexus of the breeding program. Captive breeding will maintain the appropriate genetic composition on the northern ocelot subspecies for Texas reintroductions. These ocelots would be rewilded and introduced onto private ranch(es) within Texas. Ocelots will also be propagated for release into existing Texas populations to increase their genetic diversity.

USFWS would like to partner with Mexico to explore the translocation of live ocelots (perhaps permanently or loaned), and genetic material (semen), as artificial insemination is a promising recovery tool. USFWS is committed in helping to ensure such recovery actions are beneficial to ocelot conservation in Mexico, perhaps by information and technology transfers and/or exporting ocelots back to support other populations in Mexico.

BACKGROUND: The USFWS approved the Recovery Plan for the Ocelot in 2016, whereby genetic augmentation of existing populations and establishing a new ocelot population became primary objectives. Within the United States, the intent is to establish a captive breeding facility for ocelots to maximize the contribution of novel ocelot genetics and meet both objectives. Specifically, ocelots would be bred in the facility (through live breeding or artificial insemination), rewilded and introduced to a new site or to supplement existing populations. This approach gives greater assurance that any live ocelots imported from Mexico (permanent or loan) would not be impacted from road mortality, and their genetic contributions (including semen via artificial insemination procedures) widely incorporated. USA based partners have performed robust assessments of remaining habitat and population viability analyses to identify candidate locations for ocelot reintroduction, and private donors solicited for supporting the breeding facility. Within the existing populations, the Texas Department of Transportation has implemented an aggressive strategy of building underpass structures which has reduced ocelot road mortalities in South Texas. The situation within Texas is optimized for successful recovery of ocelots. The USFWS is actively working with partners and academia to further ocelot conservation in the US and Mexico. This partnership would highly welcome engagement with Mexico to support this recovery work by importing live ocelots and/or genetic material using a collaborative and mutually beneficial strategy.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- The establishment of project goals and outcomes to support ocelot recovery within the United States in collaboration with Mexico will require discussion between high-level government officials within Mexico and the United States. The USFWS anticipates these discussions being introduced within the next few months. That said, goals of this work include exploring the potential to translocate live ocelots and/or genetic material (semen) from Mexico into the United States, to support a new ocelot population and bolster the genetic composition of existing ocelot populations. Live ocelots or genetic material from Mexico would be used in the captive breeding setting to maximize their genetic contributions.

11:30 – 11:45 AGENDA ITEM 26. Jaguar Recovery – Examples of Collaboration between the U.S. and México

SUBMITTED BY: Marit Alanen (US Fish and Wildlife Service).

AGENDA ITEM PRESENTOR: Marit Alanen (Arizona Ecological Services Office USFWS - marit_alanen@fws.gov).

COLLABORATORS & CONTACTS: Amanda Gonzales (International Affairs USFWS - amanda_gonzales@fws.gov).

PROJECT DESCRIPTION: The USFWS continues to implement recovery actions described in the 2018 binational Jaguar Recovery Plan primarily by funding projects with partners in México to promote human-jaguar coexistence and secure connectivity in strategic locations. We will present information about these projects to further collaboration with our partners in México and continue working towards jaguar recovery.

BACKGROUND: In 2018, the USFWS, in collaboration with the binational Jaguar Recovery Team, completed the Jaguar Recovery Plan. This plan includes multiple recovery actions aimed at reducing human-jaguar conflicts and maintaining and increasing jaguar habitat primarily in northwestern México, but also throughout the species' range. The International Affairs branch of the USFWS continues to fund jaguar recovery actions in México and elsewhere, while the Arizona Ecological Services Office of the USFWS continues to implement the Endangered Species Act as it applies to jaguars in the United States.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- We continue to look to the 2018 Jaguar Recovery Plan to guide recovery priorities and implementation.
- We continue to work with governmental and non-governmental partners at local, state, and Federal levels in México and the U.S. to conserve and recover jaguars.
- We desire to use Trilateral support, as requested, to assist with coordination between jaguar partners and stakeholders throughout the Northwestern Recovery Unit of the jaguar and other areas supporting jaguars in México.
- We seek the endorsement of the Trilateral Committee for the goals described above.

11:45 – 12:00 AGENDA ITEM 27. Securing connectivity for jaguars in strategic regions of Northwestern Mexico

SUBMITTED BY: Mirna Manteca (Wildlands Network).

AGENDA ITEM PRESENTOR: Mirna Manteca (Wildlands Network - , mirna@wildlandsnetwork.org)

COLLABORATORS & CONTACTS: Amanda Gonzalez (US Fish and Wildlife Service), Juan Carlos Bravo (Wildlands Network).

PROJECT DESCRIPTION: Securing Connectivity for Jaguars in Strategic Regions of Northwestern Mexico aims to mitigate site-specific sources of mortality and highway infrastructure barriers to jaguar movement and dispersal within and into Sonora that currently impede range-wide recovery for jaguars in North America. By identifying and addressing wildlife mortality hotspots on roads and highways that cut across jaguar habitat and movement corridors, the project intends to create a connected network of lands through which jaguars (and their prey) can roam without the risk of wildlife-vehicle collision.

To achieve these outcomes, Wildlands Network aims to (1) identify road mortality hotspots using roadkill data; (2) analyze jaguar proxies (including ocelots and cougars), and jaguar prey movement patterns near target stretches of highways and on bridges and culverts, through camera trap research; (3) work with partners to advocate for mitigation measures, to include appropriate wildlife crossings

for priority hotspots; (4) engage local communities, federal and state transportation officials, at each step of the process to gain political buy-in and support for implementation; (5) bring together jaguar conservation practitioners in late 2023 to review the connectivity status for the species in northwest Mexico; and (6) expand the Viviendo con Felinos model, which pays ranchers for photos of any of the native wild felines obtained in their ranches via camera-traps under a signed agreement where they commit to protecting jaguars in particular and biodiversity in general.

BACKGROUND: One of the critical needs to protect existing jaguars is maintaining and restoring the land corridors through which they move. Corridors that were mapped by the Wildlife Conservation Society with extensive expert input and included in the 2018 FWS Recovery Plan for the species which identified highways as significant fragmenting infrastructure within the corridors. The Sky Islands region in southeast Arizona, USA, and northeast Sonora, Mexico, is highly biodiverse due to the convergence of six biotic provinces and the union of the Subtropics and Nearctic bioregions, making it a unique place in the world where you can find black bears and pronghorn living in the same habitat with jaguars, coati, and javelina.

Since 2016, we have monitored roadkill on Mexico's Federal Highway 2, which runs east-west parallel with the USA-Mexico border, dividing the Sky Islands region in half. Our Highway 2 work has focused on the section from Ímuris to the Chihuahua state border. With our wildlife data, we have provided reliable information to decision-makers and engineers at the state level on how roads affect wildlife movement and what kind of mitigation measures are needed where. In October 2019, thanks to the media efforts of Wildlands Network, the Sonora State Congress approved a bill that now requires the construction of wildlife crossings in all new highway projects and those undergoing widening processes. The success of the initial stages of this project has directed us to expand our efforts beyond Federal Highway 2 into other highways emphasized by the USFWS Jaguar Recovery Plan.

Our previous project outcomes have raised the visibility of this issue and its importance for local elected and appointed officials in Sonora and Mexico. Continued positive momentum and concrete results that benefit jaguars are possible with sustained and increased engagement. We believe there is significant potential for similar outcomes in neighboring states in Northern Mexico.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Generate baseline wildlife movement data for priority highways in northwestern Mexico (ongoing)
- Engage and educate decisionmakers and general public through workshops, outreach materials, webinars, and informative in-person talks (ongoing)
- Explore collaborations with the Mexican Association of Terrestrial Roadway Engineering (ongoing)
- Provide specific wildlife crossing recommendations for Federal Highway 14 (programmed for 2023)
- Provide specific wildlife crossing recommendations for Federal Highway 16 (long term)
- Participate during the next update of the Sonoran Regional Territorial Ordinance Programs (long term)
- Ensure adequate wildlife crossings are built in the Peloncillos and Sierra Azul-Pinito corridors.

12:00 – 12:15 AGENDA ITEM 28. Communities and jaguar coexistence in Western Mexico under the impacts of COVID 19

SUBMITTED BY: Paola Bauche Petersen (FONNOR AC).

AGENDA ITEM PRESENTOR: Paola Bauche Petersen **(**FONNOR AC - paola.bauche@fonnor.org).

COLLABORATORS & CONTACTS: María de Jesús Garibay Campos (FONNOR AC), Blanca Idalia González Garza (FONNOR AC), Leonardo Campos Cordero (FONNOR AC), Hilda Gonzalez (CONAFOR), Sandra Petrone (WWF-México), Amanda Gonzales (USFWS), Sandra Gallo (SEMADET).

PROJECT DESCRIPTION: The project seeks to engage, strengthen, and raise awareness among local communities in Western Mexico for decision-making and action in favor of the jaguar and its habitat in response to the COVID struggle by local communities.

BACKGROUND: Jaguars in Mexico are an endangered species (NOM-059-SEMARNAT-2010). The Western region, which holds 9% of the jaguar population in the country, faces grave threats to the jaguar population and their habitat, which include the hunt of the animal itself and its prey, illegal trafficking, territory fragmentation, and the jaguar-human conflict. Experts assure that, with current threats, the jaguar population will decrease in the region by 50% within 20 years, and if the existing anthropogenic threats continue in the West of Mexico, the jaguar population could be extinct in 40 years. The economic and social impacts from the COVID-19 pandemic have worsened these scenarios, increasing the risk to jaguar populations. As reported by ECLAC (2020), activities related to biodiversity such as nature tourism and surveillance capacity decreased during the pandemic, while illicit activities and direct use of resources for subsistence increased.

To tackle this issue, the National Forestry Commission in Mexico implements the Biodiversity Endowment Fund, an incentive-based conservation program with communities and private lands in the Mexican states of Jalisco, Nayarit and Durango. During the 2017 – 2020 period, the “Integrated Managements of Jaguar Habitat in Western Mexico” Project (MiJO due to its abbreviation in Spanish), sought to strengthen the conservation reach of the Biodiversity Endowment Fund (BEF) with financial support from USFWS.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

12:15 – 12:30 AGENDA ITEM 29: Promoting Human-Jaguar Co-existence in the Mayan Forest of Mexico

SUBMITTED BY: Lizardo Cruz (WWF México).

AGENDA ITEM PRESENTOR: Lizardo Cruz (WWF México - lcruz@wwfmex.org).

COLLABORATORS & CONTACTS: Animal Karma, ENDESU, Fondo para la Paz, CONANP - RB Calakmul, USFWS.

PROJECT DESCRIPTION: The purpose of WWF's proposed project is to help secured the future of the jaguar in Mexico's Maya Forest in the Yucatan Peninsula. This project will identify producers most affected by jaguar predation and help them protect their livestock. We will do this by enclosing the livestock pastures with fences, installing systems of lights to ward off predators, and providing water sources for jaguars and their prey, separate from the water sources for livestock. These measures will provide economic benefits to landowners in the form of reduced loss of livestock. We will also help landowners increase the productivity of their livestock operations through the adoption of targeted practices. The beneficiaries of the project will be the small-scale livestock producers. The deliverables of the project include the following: on the properties of participating small-scale agricultural producers, the number of livestock killed by jaguars will be reduced by 80% and livestock productivity will be increased by 15%.

BACKGROUND: WWF has developed a Jaguar Strategy identifying the sites that collectively can secure the future of this iconic predator. Livestock grazing in jaguar corridors connecting protected areas are vulnerable to predation by jaguars. The livestock owners sometimes respond by killing jaguars. The species is under threat due to loss and degradation of habitat and intentional killings. Jaguars are killed for a number of reasons; for trade of their parts, in retaliation for depredations of livestock and because people are afraid of them. In Mexico's Maya Forest, there are many small-scale agricultural producers who raise sheep and to a lesser degree, cattle.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Inform the trilateral committee about this Project supported by the USFWS.
- Increase awareness and support about the coexistence with wildlife efforts in North America.
- Promote cooperation for jaguar conservation in North America.

12:30 – 12:45 AGENDA ITEM 30: Jaguar Ilegal Trade

SUBMITTED BY: Lizardo Cruz & Sandra Petrone -WWF Mexico,
Javier Enrique Sosa Escalante -AMMAC

AGENDA ITEM PRESENTOR(S): Lizardo Cruz WWF/ Javier Enrique Sosa Escalante AMMAC

COLLABORATORS & CONTACTS: Lizardo Cruz -WWF, lcruz@wwfmex.org
Javier Enrique Sosa Escalante - AMMAC, javiersosae@hotmail.com
Eduardo Ponce - CONANP, jponce@conanp.gob.mx

PRESENTATION/PROJECT DESCRIPTION:
During the previous trilateral meeting, AMMAC and WWF Mexico presented the diagnosis of jaguar trafficking in the Yucatan Peninsula, now the diagnosis at national level has been

finished. It is needed improve collaboration among agencies in the region and involvement of civil society, academy and local communities to contribute to the conservation of this species, to face some of the more important threats for the species.

BACKGROUND:

Species trafficking is one of the main causes of loss of specimens worldwide. It is an activity linked to organized crime that involves a large amount of resources and permanent damage to wild populations. However, there is little information on the ways in which wildlife trafficking and trade operate. During 2022 Trilateral meeting, AMMAC and WWF Mexico, within the framework of the project Saving the Jaguar: Ambassador of America, presented the results of the collaboration to assess the situation of jaguar trafficking in the Yucatan Peninsula, in this effort a methodology was designed to identify forms of extraction, risk sites and trading mechanisms for specimens, parts and derivatives. During the recent months AMMAC and WWF finalized the National study, with extra information to expand the knowledge about the traffic of jaguars in the country, routes, mechanism of illegal trade and further opportunities to face this threat to jaguars, the plan is to present the results in the following meeting and expand the collaborations among agencies.

PREVIOUSLY PRESENTED TO SPECIES TABLE?: Yes

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS TO BE INCLUDED IN 2023 ACTION ITEM PLAN:

- Inform the trilateral committee about this Project and its progress.
- Make the results of the national study available to the agencies.
- Promote cooperation for jaguar conservation in North America.

SPECIFIC REQUESTS OF ACTIONS ON THE PART OF THE CO-CHAIRS:

Propose and expose this topic in a joint session between the conservation and law enforcement tables.

Information exchange.

13:45 – 13:15 AGENDA ITEM 31: Mexican Wolf Recovery in the United States and México

SUBMITTED BY: Brady McGee (USFWS), Eduardo Ponce (CONANP), Carlos Lopez Gonzalez (UAQ), Jim deVos (AGFD), Stewart Liley (NMDGF), Dave Bergman (WS).

AGENDA ITEM PRESENTOR: Brady McGee (USFWS), Carlos Lopez Gonzalez (UAQ).

COLLABORATORS & CONTACTS: United States Fish and Wildlife Service (USFWS);

Dirección General de Vida Silvestre (SEMARNAT); Dirección de Estrategias de Seguimiento de Proyectos de Conservación (CONANP); Universidad Autonoma de Queretaro (UAQ); Arizona Game and Fish Department (AGFD); New Mexico Department of Game and Fish (NMDGF); and USDA APHIS Wildlife Services (WS)

PRESENTATION/PROJECT DESCRIPTION: We propose to continue to work with our governmental and non-governmental partners at local, state, and federal levels in México and the U.S. on the conservation and recovery of the Mexican wolf along the U.S./Mexico border and throughout its historical distribution and on the implementation of the Mexican Wolf Recovery Plan and agreed to in the multi-agency Letter of Intent.

BACKGROUND: In November 2017, the USFWS completed the Mexican Wolf Recovery Plan, First Revision, with the assistance of CONANP, SEMARNAT, AGFD, NMDGF, and other agencies and scientists from both countries. The recovery plan provides guidance on how best to achieve recovery of the Mexican wolf under the U.S. Endangered Species Act. Key to Mexican wolf recovery is the establishment of an average annual population of 320 Mexican wolves in the U.S., and an average annual population of 200 Mexican wolves in México. Both populations are reliant on the Mexican Wolf Species Survival Plan Captive Breeding Program. México is in the early phase of establishing a population and thus relies on the breeding program to release paired adult wolves or paired adults with pups. Both the U.S. and México rely on the captive breeding program to improve the gene diversity of the wild populations. México and the U.S. collaborate to manage the approximately 61 captive breeding facilities in the United States and México, which house 350 to 400 wolves for potential release into the wild. All these wolves are managed in accordance with the Mexican Wolf SSP. The USFWS, SEMARNAT, CONANP, AGFD, NMDGF, and UAQ collaborate on the implementation of recovery actions for the Mexican wolf in the United States and México. In 1998, the U.S. completed the first release of Mexican wolves into the Mexican Wolf Experimental Population Area; in 2022, the U.S. wild population had at least 241 Mexican wolves. In 2011, CONANP completed the first release of wolves in México, since their extirpation; in 2022, the México wild population had approximately 30-40 Mexican wolves.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Continue working among USFWS, SEMARNAT, CONANP, Arizona Game and Fish Department, New Mexico Department of Game and Fish, UAQ, and USDA APHIS Wildlife Services for binational collaboration in the implementation of Mexican wolf recovery actions as outlined in the Mexican Wolf Recovery Plan and agreed to in the multi-agency Letter of Intent.
- Continue to seek additional funding to implement recovery actions for release and management of Mexican wolves in México and for depredation compensation and payments for presence in both countries.
- Continue México/U.S. collaboration to manage the binational Mexican wolf Saving Animals From Extinction (SAFE) captive breeding program to provide Mexican wolves for release in both countries.
- Continue collaboration among USFWS, SEMARNAT, CONANP, AGFD, NMDGF, UAQ, SENASICA, and USDA APHIS Wildlife Services on the release of wolves in the U.S. and México.
- Continue collaboration among USFWS, SEMARNAT, CONANP, AGFD, NMDGF, and UAQ on the identification of additional release sites in Mexico.
- Coordinate among USFWS, CONANP, AGFD, NMDGF, UAQ, and USDA APHIS Wildlife Services should wolves disperse from México into the U.S.

- Continue collaborating on implementing the Mexican Wolf Recovery Plan and agreed to in the multi-agency Letter of Intent.
- Continue México/U.S. collaboration to manage the binational Mexican wolf Saving Animals From Extinction (SAFE) captive breeding program to provide Mexican wolves for release in both countries.
- Continue managing the current wild population in Chihuahua, Mexico, with multiple reintroductions and recapturing wolves for putting and replacing radio-collars.

APPENDIX

AGENDA ITEM 32: Translocation of Black-footed Albatrosses from Midway Atoll National Wildlife Refuge, USA to Create a Breeding Colony on Guadalupe Island Biosphere Reserve, Mexico

SUBMITTED BY: Eric VanderWerf (Pacific Rim Conservation), Federico Méndez Sánchez (Grupo de Ecología y Conservación de Islas).

COLLABORATORS & CONTACTS: Eduardo Ponce Guevara (CONANP), Humberto Berlanga García (CONABIO), Eric VanderWerf (Pacific Rim Conservation), Robby Kohley (Pacific Rim Conservation), Federico Méndez Sánchez (Grupo de Ecología y Conservación de Islas), Julio Hernández Montoya (Grupo de Ecología y Conservación de Islas), Israel Popoca Arellano (CONANP), Annie Little (National Park Service), Jared Underwood (USFWS, Papahanaumokuakea Marine National Monument), Jonathan Plissner (USFWS).

PRESENTATION/PROJECT DESCRIPTION: In collaboration with many partner agencies in the USA and Mexico, under the CAN/USA/MEX Trilateral Island Initiative (TII), during 2020 we developed a 4-year program (2021-2024) to translocate Black-footed Albatross (*Phoebastria nigripes*) from Midway Atoll to Guadalupe Island, Mexico to create a new breeding colony. Up to March 2023, we have conducted three years of translocations as follows; 2021: 21 eggs and 12 chicks, with a total of 27 fledged chicks; 2022: 36 eggs, with 34 fledged chicks; 2023: 36 eggs, with 33 chicks currently growing and being raised by foster Laysan Albatross parents with aid of hand feeding when needed. We expect that these 33 chicks will fledge by the end of June 2023. With this, a total of 94 BFAL chicks will have been produced on Guadalupe. Next year 2024 will be the last translocation of the program, with plans to transport 36 more eggs.

BACKGROUND: The Black-footed Albatross (*Phoebastria nigripes*) has a total breeding population of about 57,500 pairs, 95% of which nest on low atolls in the Northwestern Hawaiian Islands. Inundation of breeding colonies from sea level rise and storm surge associated with climate change is its most serious long-term threat. Protection of suitable nesting habitat and creation of new colonies on higher islands are among the highest priority conservation actions. Guadalupe is a large, high island that is protected as a Biosphere Reserve and already supports a thriving colony of Laysan Albatrosses. Black-footed Albatrosses already forage in the cold waters of the California Current around Guadalupe,

which are less likely to be affected by climate change than most other regions of the Pacific. Creation of a breeding colony in the eastern Pacific would increase the breeding range of the species and enhance its resiliency to climate change.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- To report on the progress of three years (2021-2023) of Black-footed Albatross translocations from Midway Atoll to Guadalupe Island. Also, we seek continued support and endorsement by the MBWT for this translocation project, which will continue for one more year.

AGENDA ITEM 33: Cactus Ferruginous Pygmy-Owl Status Update and Conservation Actions

SUBMITTED BY: Scott Richardson (U.S. Fish and Wildlife Service).

COLLABORATORS & CONTACTS: Shawn Lowery (AGFD - slowery@azgfd.gov), Michael Ingraldi (AGFD - mingraldi@frontiernet.net), Francisco Abarca (AGFD - fabarca@azgfd.gov), Kenneth Jacobson (AGFD - kjacobson@azgfd.gov), Keith Knutson (AGFD - KKnutson@azgfd.gov), Paula Lidia Enríquez (Departamento Conservación de la Biodiversidad, El Colegio de la Frontera Sur - penrique@ecosur.mx), Martha J. Roman (cedes - avoceta63@gmail.com).

PROJECT DESCRIPTION: Continuation of project presented in 2022 that included continued updates on the current legal status of the cactus ferruginous pygmy-owl in the United States following a petition to list the pygmy-owl under the Endangered Species Act (ESA). This project continues to investigate the factors included in our analysis of the status of the species in both the United States and Mexico, and to outline the process we undertook to complete the analysis and the determination we made under the ESA. It also provides an update of conservation activities in both the United States and Mexico, including the continued evaluation of a captive breeding program, additional genetic analysis, and recent surveys and monitoring. We will continue to discuss areas of potential binational coordination and cooperation for future cactus ferruginous pygmy-owl conservation activities in the United States and Mexico.

BACKGROUND: Conservation activities related to the cactus ferruginous pygmy-owl were undertaken primarily as a result of being listed as endangered under the ESA in Arizona from 1996 – 2006 when the species was delisted. Subsequent to delisting, some ongoing research and monitoring were conducted, but at a reduced level. The U.S. Fish and Wildlife Service was petitioned to relist the subspecies and litigation ensued which resulted in Fish and Wildlife proposing to list the cactus ferruginous pygmy-owl as threatened throughout its range in December 2021. More extensive survey and monitoring, as well as some additional genetic sampling was conducted in 2020 and 2021 to inform this listing proposal. A final listing decision is expected in early 2023 and we seek input to and support of continued implementation of conservation activities in both the United States and Mexico.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Identify key agencies and individuals in the United States and Mexico to initiate coordination and planning of key cactus ferruginous pygmy-owl conservation activities.
- Determine current population status of both the eastern and western populations of the cactus ferruginous pygmy-owl.
- Assess the value of improving population and genetic health through cross-border translocations.

AGENDA ITEM 34: Roadmap to Recovery for the Sunflower Sea Star (*Pycnopodia helianthoides*)

SUBMITTED BY: Vienna Saccomanno (The Nature Conservancy).

COLLABORATORS & CONTACTS: Norah Eddy (The Nature Conservancy - norah.eddy@tnc.org), Walter Heady (The Nature Conservancy, California), Rodrigo Beas, (Universidad Autónoma de Baja California), Michael Dawson (University of California) Merced Norah Eddy (The Nature Conservancy, California), Kristen Elsmore (California Department of Fish and Wildlife), Fiona Francis (Fisheries and Oceans Canada), Taylor Frierson (Washington Department of Fish and Wildlife), Alyssa Gehman (Hakai Institute), Tracey Gotthardt (Alaska Department of Fish and Game), Sarah Gravem (Oregon State University), Joanna Grebel (California Department of Fish and Wildlife), Sara Hamilton (University of California, Davis), Lucie Hannah (Fisheries and Oceans Canada), Drew Harvell (Cornell University and Friday Harbor Labs, University of Washington), Jason Hodin (Friday Harbor Labs, University of Washington), Ian Kelmartin (California Department of Fish and Wildlife), Chris Krenz (Alaska Department of Fish and Game), Lynn Lee (Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve, and Haida Heritage Site), Julio Lorda (Universidad Autónoma de Baja California), Dayv Lowry (National Marine Fisheries Service), Sonke Mastrup (California Department of Fish and Wildlife), Erin Meyer (Seattle Aquarium), Peter Raimondi (University of California, Santa Cruz), Steven Rumrill (Oregon Department of Fish and Wildlife), Vienna Saccomanno (The Nature Conservancy California), Lauren Schiebelhut (University of California), Merced Chris Siddon (Alaska Department of Fish and Game), Ashley Kidd (Sunflower Star Laboratory).

BACKGROUND: The Roadmap to Recovery, published in late 2022, articulates a multi-faceted and multi-partner recovery plan for the sunflower sea star (*Pycnopodia helianthoides*) along the West Coast of North America. The species has experienced catastrophic declines across much of its range, principally due to sea star wasting disease. This Roadmap provides an overview of key near- and medium-term steps to arrest further declines and to foster recovery of populations that in turn can support species-level viability. This Roadmap also provides a range-wide overview of regional differences in declines to promote linkages among federal, state, and tribal efforts throughout the range of sunflower sea stars, which includes Mexico, the US, Canada, and the lands and waters of American Indian tribes and indigenous First Nations.

The Nature Conservancy and our partners are actively fulfilling core elements of this

recovery plan by advancing epidemiological research to determine the causative agent of Sea Star Wasting Disease, genomics research on population structure, captive rearing efforts, behavioral research on the impacts of *Pycnopodia* presence on sea urchins, and assisted recovery outplanting experiments in the summer of 2023. The Nature Conservancy also convenes the Pycnopodia Recovery Working Group – an international group of approximately 100 topical experts – on a quarterly basis to align the science and policy efforts of the broader community with the Roadmap to Recovery; this includes the proposed rule to list the Sunflower Sea Star as Threatened under the U.S. Endangered Species Act.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS

- Demonstrate outplanting of lab reared *Pycnopodia* and develop best practices for future outplanting and perhaps translocation.
- Document the behavioral effect of *Pycnopodia* presence on sea urchin.
- Expand captive rearing efforts along the West Coast of North America to capture and maintain genetic diversity.
- Continue ongoing research to determine the causative agent of Sea Star Wasting Disease.

AGENDA ITEM 35: Transboundary Movements of Wildlife

SUBMITTED BY: Jim Devos (Arizona Game and Fish Department),
Angelica Narvaez (CONANP).

AGENDA ITEM PRESENTORS: Jim Devos (Arizona Game and Fish Department - jdevos@azgfd.gov), Angelica Narvaez (CONANP - angelica.narvaez1@undp.org).

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PRESENTATION/PROJECT DESCRIPTION: The number and type of issues that can inhibit successful translocation of wildlife and, as a consequence, negatively affect implementation of a recovery program can be significant, depending on the type, status, origin and destination of each issue. Changes in responsible authorities, regulations, disease outbreaks, etc. can make this process cumbersome and make progress very hard to attain.

The creation of the Transboundary Translocation Coordination Group aims to facilitate the identification, negotiation of strategies and implementation of actions that can ease these procedures.

BACKGROUND: In an effort to facilitate the translocation of endangered transboundary species between Mexico and the United States, representatives from various institutions proposed the creation of a binational group that could begin a dialogue among participants of the Trilateral to identify obstacles that may need to

be addressed with pertinent authorities in both countries and, in a timely fashion, negotiate at any required level and expedited procedure that could facilitate the translocation of species at risk, in compliance with national and international laws and regulations.

The Transboundary Movements Coordination work group intends to continue dialogue among participants and pertinent authorities to identify roadblocks that may cause a negative impact on the successful translocation of species. Will develop strategies and cost estimates that could lead to more effective regulations that may facilitate the transboundary movements and recovery of the related species and approach for managing to resolve each of the impediments.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Request endorsement from the Executive Table to **c**ontinue negotiating additional strategies to ease the translocation of transboundary wildlife.
- Request from the Executive Table a Letter of endorsement that can be shared with regulatory entities to include all permitting entities within the United States and Mexico.

14:30 – 14:45 Executive Table Closing Remarks