Species of common conservation concern working table
Trilateral Meeting
May 17 – 21, 2021

Co-chairs: Maricela Constantino (FWS, USA), Jose Eduardo Ponce Guevara (CONANP, Mexico), and Craig Machtans (Environment and Climate Change, Canada)
Facilitators: Joshua Daskin (FWS, USA) & Angelica Navarez (CONANP, Mexico)

	1300	1320	1340	1400	1415	1435	1455	1515	1530	1550	1610	1630	1645	1705
M	Plenary: Ecosystem restoration & speaker panel with Q&A			Break	Table welcome. Co-chairs country reports		Black-tailed prairie dog, AZGFD; van Pelt et al.	Break	Black-footed ferret, AZGFD; Gonzalez, Rodriguez, Liccioli, Gober	Black-footed ferret cloning, Revive & Restore, Novak	FWS Species Range Mapping; Moskwik	Break	Sonoyta mud turtle, UAZ & FWS AZ, Bogan & Gregeda	Rabies and feral swine, USDA; Nolte, Bergman et al.
T	Jaguar, WCS; Sanderson et al.	Reddish egret & Red-crowned parrot, RioGrande JV; Franco, et al.		Break	Joint with ecosystems: Monarch conservation; CONANP (Tavera), ECCC (Girard), FWS (Wooley)			Break	Traditional ecological knowledge			Break	Tamualipas Conservation, TPWD & DGVS, Celis & Moreno.	Chiricahua leopard frog, UMN & FWS AZ; Denton et al.
W	Joint with ecosystems, including: 1. USGS Climate Adaptation Science Network, USGS; Bisbal; 2. Trilateral Island Initiative, NPS; Little et al.; 3. Shifting from Single Species to Multi-Species and Ecosystem-based Conservation in Canada			Break	Bats, UNAM, CONABIO, FWS; Medellin & Coleman	Barbary sheep and Bighorn sheep recovery, CONANP; Ochoa Espinoza	TTs: Pronghorn antelope recovery in Baja California, CONANP; Sotomayor	Break	TTs: Mexican wolf, FWS, SEMARNAT, et al.; McGee et al.	TTs: Ocelot, FWS Refuges; Sternberg & Lopez-Hernandez	TTs: Sonoran pronghorn, AZGFD; Hervert, Abarca, Soria	Break	TTs: CA condor, FWS + CONANP + SDZoo; Vilchas & Porras	Transboundary translocations (discussion)
Th	Conservation translocations, IUCN; Moehrenschlager	Shared species conservation through nature tourism; TPWD & DGVS		Break	Bison as keystone species, UNAM; List	Bison, NPS; Moynahan	Bison, Wilson & Pearson; Parks Canada	Break	Executive table & Co-Chairs session			Break	Rattlesnake conservation in US and Mexico, DGVS + CONANP et al.; Velázquez	Golden eagles in Baja California, CONANP + FWS; de Leon

Contents

Monday, May 17, 2020

2:15 – 2:55pm Table welcome, co-chair reports

2:55 – 3:15pm Grassland and Black-Tailed Prairie Dog Conservation

DESCRIPTION:

In 2020, the Arizona Game and Fish Department (AGFD) continued with the re-establishment of black-tailed prairie dogs (BTPD) to southeastern Arizona. Despite travel restrictions due to Covid-19 pandemic, 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 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.

In December 2019, AGFD conducted a site visit to Cienega Ranch, a private property south of Wilcox, AZ to determine suitability for a BTPD re-establishment site. The willing landowner has recently acquired additional property such that the potential release sites are in compliance with the two-mile buffer from neighboring unsupportive landowners.

REQUESTED SPECIFIC OUTCOMES:
In 2020, AGFD hopes to continue to monitor the 4 re-established colonies, and aid their success with supplemental feeding and vegetation manipulation as needed. AGFD also plans to move forward with the potential re-establishment site at Cienega Ranch. Next steps will be to complete an environmental assessment of the land with a cultural resource survey and organize a public meeting to talk about the project and address any local concerns.

AGENDA ITEM PRESENTER(s):
Bill Van Pelt, Arizona Game and Fish Department

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

COLLABORATORS & CONTACTS:
AGFD, BLM, ASLD, Pima County, CEDES, UNAM, CONANP, SEMARNAT, USFWS, WAFWA

3:30 – 3:50pm Black-footed ferret recovery update for Mexico, Canada, and the United States

PRESENTATION DESCRIPTION:
Black-footed ferret recovery in Mexico
The Janos Biosphere Reserve (JBR) is located in Chihuahua, MX. The combination of plague epizootics beginning around 2007 and agricultural development have greatly reduced suitable black-footed ferret habitat and likely extirpated the black-footed ferret population many years ago. Plans to increase prairie dog acreage within the Janos Biosphere Reserve in 2021 include habitat restoration and relocations of prairie dogs within the reserve. There are no immediate plans to reintroduce black-footed ferrets on the reserve but staff at Janos remains committed to the conservation of short grass prairie and associated species including black-footed ferrets, bison and pronghorn.

Currently, we are carrying out different activities that are directed to the recovery, management and restoration of native grasslands, as well as the recovery of the area occupied by black-tailed prairie dogs in the JBR. Under the following schemes:

A) Evaluation and distribution of the colonies of black-tailed prairie dogs.
- We have mapped and assessed the distribution of prairie dog colonies and it was updated by 20,000 hectares from 2015 to 2020.
- The area covered by the prairie dog colonies increased 2,000 hectares from the area occupied in 2013, covering almost 4,000 hectares.
-Priority sites were identified for the recovery of the black-tailed prairie dog within the JBR.
-Maximum densities with values of up to 24 ind / Ha were obtained during 2019-2020.

B) Reintroduction of black-tailed plains dogs.
- We are currently carrying out, for the second consecutive year, the relocation and translocation of individuals of this species to places where they had disappeared, thereby increasing the number and connectivity between colonies.

C) Voluntary Areas Designated for Conservation (VADC).
- We prepared the ADVC documents in three ranches and with this the JBR would be added and the region's conservation area would be increased by 22,800.00 hectares.

D) Restoration and Recovery of Native Grasslands of the Janos Biosphere Reserve, Chihuahua.
- The recovery of 45 hectares of grasslands and their biodiversity was achieved through strategic alliances with owners and ejidatarios.
- Long-term permanence of 4,000 hectares with colonies of prairie dogs in agricultural and livestock areas was achieved.
- An agreement was made with two ranches for the sowing of 100 hectares of native grasslands and subsequent seed collection for use in future actions for the conservation of native grasslands.
- 30 hectares of native grassland were planted in El Cuervo ranch through the use of intensive agriculture under an irrigation system.
- The Program for the Generation of a Seed Bank and grassland recovery was prepared and executed through the sowing of native grasses, thereby increasing the area of native grasses to 100 hectares.
- Mesquite was mechanically removed from 185 ha, previously occupied by prairie dogs.

E) Livestock Management and Implement sustainable livestock actions.

- The sustainable livestock program (restoration and management) has been strengthened and extended to 4,500 hectares, 500 hectares more than proposed, which includes critical habitat for the prairie dogs.
- With this component and using livestock management techniques compatible with conservation in 3,000 hectares, with which it was positively strengthened.

F) Collaboration Agreements
- A collaboration agreement for the protection, conservation of the grasslands with prairie dogs were achieved in several ranches was formalized between the UNAM and the National Commission for Protected Natural Areas in order to strengthen the Management of this reserve by jointly establishing conservation, operation and management actions that affect the administration of the protected natural area with the character of Janos Biosphere Reserve, Chihuahua.

Black-tailed prairie dog and Black-footed ferret in Canada
1. Plague management
- Grasslands National Park obtained funding to support plague management activities in 2020-2023.
- In 2020, approximately 382.6 ha of BTPD habitat across 6 colonies were treated with SPV baits, using a distribution rate of 100 baits/ha over two distribution rounds separated by ~ 5-6 weeks (September - November). Approximately 197.6 ha of BTPD habitat across 8 colonies were treated with burrow dusting during the same time. Total treatment area for 2020 is ~ 580.2 hectares.
- A revised Plague Management Plan has been prepared and is pending approval. This plan incorporates most recent research on plague and BTPD in Canada (https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.3138)
2. BTPD Population Monitoring
- The average population density in 2020 was 22.5 animals/ha. This was assessed on only 8 plots, due to limited resources caused by COVID 19. The 2018-2020 BTPD density averaged 17.3 animals/ha.
- No colony mapping occurred in 2020 (it will be conducted in 2021). However, field observations during plague management activities suggest some colonies may have expanded significantly
3. Habitat suitability research & Population Genetics
- In 2020 the BTPD Habitat Assessment Index Tool was refined and used it to help choose a suitable release site for the prairie dog translocation (see below).
- A genetics study to assess whether the Canadian BTPD population is an Evolutionary Significant Unit began in 2020. Tissue samples were collected from 56 prairie dogs from 4 colonies including a subset of the translocated prairie dogs (see below). Further sampling and analysis are planned for 2021.
4. BTPD Population Recovery and Management
- In 2020, for the first time, we implemented a mitigation translocation program to relocate prairie dogs that colonized the park campground. Animals were translocated to the edge of an existing BTPD colony. Of 26 animals that were translocated, at least 15 (57.7%) were alive at the release site on October 1st.
- The Recovery Strategy & Action Plan for BTPD is under jurisdictional review and we expect it will be posted on the SAR registry by the end of March. The document includes the commitment to develop, in coordination with ranchers, stakeholders and provincial jurisdictions, a conflict mitigation plan to prevent/mitigate conflict between BTPD and agricultural operations outside Grasslands N.P., while support efforts to BTPD (and thus, BFF) conservation inside the park.

Black-footed ferret recovery in the United States
U.S. Fish and Wildlife Service Black-footed Ferret Recovery Program
2020 Annual Report
Introduction
The Black-footed Ferret Recovery Program (Program) had a busy year in 2020, with Covid-19 and major construction projects at the National Black-footed Ferret Conservation Center (NBFFCC) providing both significant challenges as well as opportunities. This report is a summary of activities by Program activity,

including Managed Care, Field Operations, Outreach, Facility Maintenance, and overall Program Management. Detailed summaries by program are found below.

Managed Care/Veterinary

Due to the threat posed by possible infection of the captive black-footed ferret (BFF) population with SARS-CoV-2, Managed Care/Veterinary staff took a number of precautions to ensure the safety of this population at NBFFCC as well as at partner captive breeding facilities. Managed Care/Veterinary staff developed multiple iterations of a Covid-19 protocol, the most recent of which was finalized on 21 December. This protocol was developed to ensure the safety of both staff and animals, and included physical separation of animals to reduce the likelihood of infection between groups of animals, staggered staff schedules to reduce the likelihood of spread between staff members, elevated cleaning protocols, and revised protocols to reduce the number of people physically on-site at NBFFCC. To date, no Managed Care/Veterinary staff have developed Covid-19, and no instances of captive BFF becoming infected with SARS-CoV-2 have been recorded.

Precautions taken to prevent SARS-CoV-2 infections at NBFFCC likely caused a reduction in reproductive output for 2020, but the Managed Care/Veterinary program still managed to whelp 101 kits from 29 litters at NBFFCC. Program-wide, production totaled 206 kits from 55 litters. Other Managed Care/Veterinary program accomplishments included pre-breeding assessments and cytology for all potential breeding animals, kit processing and vaccination, distribution of 667 doses of F1-V plague vaccine, the safe transfer of animals to other breeding facilities and to reintroduction sites, and continued investigation of the role of Vitamin E diet supplementation on reproductive success. Managed Care/Veterinary staff are also engaged in the evaluation of potential SARS-CoV-2 vaccines for use in BFF, in partnership with the USGS National Wildlife Health Center.

Preconditioning

Despite reduced preconditioning capacity due to ongoing construction activities at NBFFCC (see description under Facility Management below), Managed Care staff still managed to precondition 89 BFF kits and adults in the NBFFCC preconditioning pens. A notable accomplishment for the Managed Care/Veterinary and Preconditioning programs in 2021 was housing a pregnant BFF female in the preconditioning pens, and whelping a litter of 5 kits. Three of these kits were released into the wild, and two were kept in the SSP breeding population for breeding in 2021. Staff working in the Preconditioning program are in the process of developing a revegetation plan for implementation after preconditioning pen construction is completed.

Facility Management

A major construction project took place at NBFFCC in 2020, which entailed HVAC replacement in the Breeding Building, the construction of 24 additional preconditioning pens, construction of an alcove/enclosure at the Breeding Building, and remediation of foundation problems with the Holding Building. The difficulty of completing these new projects was compounded by Covid-19 concerns, as well as limited staffing and other unresolved maintenance issues such as a failing reverse osmosis water treatment system, delayed deployment of a new phone system, emergency generator cooling system failures, and new foundation settling issues at the Residence. Issues are being addressed as quickly as possible, and will hopefully be resolved in the coming year.

Outreach

Outreach staff had a busy year, with communications with both internal and external partners on Covid-19 issues taking front and center. Other outreach activities included responding to BFF Recovery Program partner requests and inquiries, ongoing coordination with 24 BFF display facilities, maintenance of the NBFFCC Facebook page, and ongoing coordination with the Fort Collins Museum of Discovery, where NBFFCC outreach BFF are housed. A notable highlight of the Outreach program was the finalization of a partnership with Frontier Airlines that resulted in the airline developing and putting into service an aircraft with a BFF image on its tail section. This partnership will continue with other threatened and endangered species highlighted on other aircraft in the fleet.

Field Operations

Field Operations staff worked extensively with external partners to maximize safety for wild populations in the face of the Covid-19 pandemic, and worked with partners to develop the document "Strategies for Black-footed Ferret Field Activities Special Precautions due to Covid-19" to provide information on how best to handle wild black-footed ferrets to avoid possible Covid-19 transmission. As a result of this guidance, most reintroduction sites curtailed their survey efforts in 2020, out of concern for inadvertently spreading SARS-CoV-2 to wild BFF populations. In addition to these efforts, Field Operations staff completed a Species Status Assessment and 5-year review, assisted the Wildlife Ecology Institute with the development of the Black-footed Ferret Information Repository, evaluated BFF allocation requests, reviewed research proposals on the development of new survey techniques and plague management tools, assisted four reintroduction sites with annual BFF survey efforts, evaluated potential reintroduction sites with state and NGO partners in CO, KS, and MT, participated in state-led BFF working group meetings, and administered financial assistance agreements with external partners to advance BFF recovery efforts. Despite below average numbers of kits available for release at reintroduction sites, Field Operations staff assisted in the release of 84 kits and 43 adults at nine reintroduction sites in CO, KS, MT, NM, SD, UT, and WY.

Program Management

The BFF Recovery Coordinator continued coordination activities with Black-footed Ferret Recovery Implementation Team (BFFRIT) partners, and worked with the Association of Zoos and Aquariums to re-initiate the BFF Recovery Program Review, which will be completed in 2021. Investigations with several external partners continue regarding the development of assisted reproductive techniques to help alleviate concerns over declining genetic diversity in the captive BFF population, and BFFRIT will likely convene an Executive Committee meeting in 2021, pending Covid-19 safety concerns.

AGENDA ITEM PRESENTER(S):

Dr. Gerardo Ceballos González
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Pete Gober, U.S. Fish and Wildlife Service Black-footed Ferret Recovery Coordinator (pete_gober@fws.gov)

SUBMITTED BY: Pete Gober, U.S. Fish and Wildlife Service Black-footed Ferret Recovery Coordinator
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3:50 – 4:10pm Genetic Rescue for the Black-Footed Ferret

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
*We are prioritizing presentation time for new activities, ideas, and collaborations. If you primarily need to report and receive Species Table endorsement of continuing activities, this may be possible by review of your goals for the coming year, to be included in the 2021 Action Item Plan. Please make sure to include your goals here, along with any other outcomes desired from your presentation at the Species Table.

We are currently pursuing progress along two fronts: 1) developing methods to increase the genetic diversity of black-footed ferret populations to improve the long-term management and viability of the species and 2) creating genetic immunity/resistance to sylvatic plague, so that the species is not dependent upon vaccination to survive plague outbreaks. Work towards both of these goals is ongoing, with initial stages currently operating under USFWS permit number TE59243C-0.

One of our 2021-2022 goals is to attempt to clone a potential 9th founder for the captive breeding program from historic cells of individual Studbook # 2 (SB2), currently contaminated with canine distemper viral particles. The first milestone will be to remove the viral particles from the SB2 cell line so that SB2 may be cloned using the same method that successfully cloned SB10. The living clone(s) of SB 10 represent the genetic equivalent of a potential 8th founder.

Another of our 2021-2022 goals is to develop methods for introducing additional genetic diversity, we are evaluating the potential to use gene-editing to recover large regions of the genomes of historic individuals. The sources of lost genetic diversity will be identified using ancient DNA sequencing of museum specimens to identify adaptive genetic variants absent from the living population due to its severe population bottleneck.

We also anticipate conducting our first experimental tests of plague resistance in transgenic mouse models that express plague-neutralizing antibodies. In 2021 we will be conducting research activities to enable the translation of this work from mice to black-footed ferrets, using domestic ferrets as an intermediate model. In parallel we plan to develop prototypes of genetic vaccines in the domestic ferret model system, with the intention of subsequently introducing a gene-encoded plague vaccine to the black-footed ferret genome.

PRESENTATION DESCRIPTION: (up to 250 words, please)
*Please be sure to indicate the new projects, activities, or desired collaborations that go beyond reporting 2019–2020 activities and their continuation.

On December 10th, 2020, the world's first cloned black-footed ferret, named Elizabeth Ann, was born. Elizabeth Ann is a genetic twin to Willa, a wild-born ferret captured near Meeteetse, Wyoming, alongside the founders of the captive breeding program. Willa has no living descendants, therefore her clone, Elizabeth Ann, is a potential 8th founder for the population. Whole genome sequencing of Willa revealed that her clones possess significantly more unique variation than recent generations. In this talk, Pete Gober of USFWS and Ryan Phelan of Revive & Restore, the organizations that lead and coordinated this genetic rescue cloning effort, will co-present the conceptual development, technical process, and results of cloning research to date. They will also discuss the next steps for the program's genetic rescue efforts to further increase genetic diversity and establish genetic immunity/resistance to sylvatic plague.

AGENDA ITEM PRESENTERS:
- Pete Gober, USFWS
- Ben Novak, Revive & Restore

SUBMITTED BY:
Pete Gober, USFWS
Ben Novak, Revive & Restore

PREVIOUSLY PRESENTED TO SPECIES TABLE?:
Yes, Pete Gober has presented numerous times
No, Ben Novak has not presented previously

BINATIONAL/TRINATIONAL:
Trinational

COLLABORATORS & CONTACTS:
Revive & Restore, Ryan Phelan
Revive & Restore, Bridget Baumgartner
National Black-footed Ferret Conservation Center, Robyn Bortner
National Black-footed Ferret Conservation Center, Della Garelle
ViaGen Pets & Equine, Shawn Walker
ViaGen Pets & Equine, Kerry Ryan
San Diego Zoo Global, Nadine Lamberski
San Diego Zoo Global, Oliver Ryder
Association of Zoos and Aquariums, Steve Olson
United States Geological Survey National Wildlife Health Center, Toni Rocke
University of Florida, Gainesville, Samantha Wisely
Smithsonian-Mason School of Conservation, George Mason University, Klaus-Peter Koepfli

4:10 – 4:30 USFWS Species Range Project

PRESENTATION DESCRIPTION:
Endangered Species Act (ESA) listed species have individual pages in the United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS). These pages are provided to the public and provide: 1). general information about the species; 2). its current ESA status; 3). a current range map that depicts where it's found within the jurisdictional boundaries of the United States; 4). and published federal register documents, such as species status assessments (SSA), recovery plans, and listing petitions. In addition to providing information to the public, these data are also used by nongovernmental organizations (NGO) and academic universities for conservation decisions/actions and research.

Many of the current range maps available in ECOS are coarse and in need of updating, so an effort has been undertaken at USFWS to update these maps by using the latest mapping techniques. In its second year now, the project has successfully updated the current range maps for over 500 species, and has a goal to complete 750 species by October 1, 2021. This has been accomplished by establishing a team in USFWS headquarters that works with recovery and consultation biologists, as well as other interested parties from state and other federal agencies, academic institutions, and nonprofit groups.

AGENDA ITEM PRESENTER(S):
Michaelle Shultz, USFWS
Matthew Moskwik, USFWS

SUBMITTED BY:
Michaelle Shultz, USFWS
Matthew Moskwik, USFWS

4:45 – 5:05 Population and trophic ecology of the Sonoyta mud turtle at remaining populations in Sonora, Mexico

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Requested Specific Outcome: We seek the endorsement of the Trilateral Committee to work with governmental and non-governmental partners at local, state, and Federal levels in México and the U.S. to conserve and recover the Sonoyta mud turtle.
Project Goals: Because of the current dire situation of the Sonoyta mud turtle in both the US and Mexico, our primary goal is to increase awareness of immediate needs for this species and highlight work that has occurred over the past year to keep it from disappearing at remaining sites in Sonora.

PRESENTATION DESCRIPTION:
The Sonoyta mud turtle (*Kinosternon sonoriense longifemorale*) is an endangered subspecies that inhabits in a small portion of the Río Sonoyta basin in Sonora, México and Arizona, USA. Groundwater overuse has affected the Sonoyta regional aquifer and reduced flow in the Río Sonoyta and Quitobaquito springs, which has resulted in decreased habitat available for the Sonoyta mud turtle and two native species of fish. In 2003, there were seven locations with populations of Sonoyta mud turtle, but now there are only four in México and one more in the United States (Quitobaquito). In this presentation, we will discuss our study of the population and trophic ecology of the Sonoyta mud turtle at some of these remaining populations. We have conducted preliminary genetic analyses to help guide population management efforts and diet analyses to better understand what might be limiting populations. We are also using mark-recapture and telemetry techniques to estimate population sizes and study potential connectivity among sites. Finally, we are assessing the potential a new reach of the river, supported by secondary treated wastewater, to provide new habitat for Sonoyta mud turtles.

AGENDA ITEM PRESENTER(S): Dr. Michael Bogan and Miguel Grageda, University of Arizona

SUBMITTED BY: Cat Crawford, U.S. Fish and Wildlife Service

COLLABORATORS & CONTACTS: USFWS, SEMARNAT, CONANP-Reserva de la Biosfera del Pinacate y Gran Desierto de Altar (RBPGDA) and Priority Species, DGVS, INE, CONABIO, Arizona Game and Fish Department (AGFD), Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora (CEDES), University of Arizona, and National Park Service-Organ Pipe Cactus National Monument (OPCNM)

5:05 – 5:25 North American Management of Feral Swine and Rabies

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

Feral swine

- Further develop cooperative partnerships with other pertinent federal, state, provincial, tribal, and 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.
- 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.

Rabies

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
- Continued support of technological training programs to address human-wildlife conflict, especially through diagnostics and wildlife handling
- 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.

PRESENTATION DESCRIPTION:

Feral swine

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.

Rabies

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

AGENDA ITEM PRESENTER(S): David Bergman, USDA APHIS Wildlife Services

SUBMITTED BY: Feral swine: Dale Nolte, USDA APHIS WS, David Bergman, USDA APHIS WS, John Tomecek Texas A&M University
Rabies: 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

COLLABORATORS & CONTACTS:

Feral swine: US Fish and Wildlife Services, USDA APHIS including Wildlife Services, Veterinary Services, and International Services, USDA NRCS, Association of Fish and Wildlife Agencies, US universities, Wild Pig Task Force, US State wildlife and agriculture agencies, SAGARPA, SEMARNAT, National Autonomous University of Mexico, Instituto Politécnico Nacional, University of Saskatchewan, Government of Alberta, and Government of Saskatchewan.

Rabies: 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; 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

Tuesday, May 18, 2021

1:00 – 1:40pm Binational Jaguar Conservation in the Northwestern Recovery Unit: Habitat Assessments, Climate Change, and the Importance of Cooperation between Mexico and the United States.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Renewed cooperation between the United States and Mexico is essential for jaguar conservation in the northern range and for the species as a whole
- Substantial potential jaguar habitat has been recognized in the United States north of the Interstate-10 freeway that should be considered in a revision to the US Jaguar Recovery Plan. We propose a dialogue be opened with Federal, Native American, and State Game and Fish Agencies to explore this possibility
- Recovery planning parallel to US efforts is needed in the northwestern part of Mexico to ensure a secure basis for cooperation
- Research efforts are required to understand the status of populations in Sonora and Sinaloa, including threats and potential conservation measures for these populations, and to understand connectivity of jaguar populations throughout this area, including into the US
- Research must also be directed toward understanding the ways that climate change may influence jaguars and people in the Northwestern Jaguar Recovery Area, and how jaguar conservation actions support other conservation and sustainable development objectives

PRESENTATION DESCRIPTION:
The northernmost part of jaguar (*Panthera onca*) range, spanning northwest Mexico and the southwest United States, supports a unique and critically important set of habitats for the species. The US Fish & Wildlife Service's Recovery Plan for the Jaguar, released in 2019, recognized the importance of conserving this area as a single unit and for binational cooperation. However, the US recovery plan did not acknowledge a sizeable area of potential habitat north of the Interstate-10 highway, in the central mountains of Arizona and New Mexico, an area we informally term the "Central Arizona / New Mexico Recovery Area" (CANRA). We identified the CANRA by comparing twelve potential habitat models, including extending the USFWS's own jaguar model over all of Arizona and New Mexico. We found that this habitat block covers over 82,000 km^2, an area equivalent in size to South Carolina. Applying the USFWS's population assessment methods indicates an increased potential carrying capacity from six to 90–150 individuals in the US. In light of this finding, the US jaguar recovery plan should be revised and discussed with other agencies, with consideration given to an eventual reintroduction program. Parallel initiatives are required throughout northern Mexico and the southwestern US to assess the status of jaguar populations and their interconnectivity and to plan transboundary cooperative efforts. Since climate change will affect this singular jaguar conservation unit, we are currently studying how to incorporate climate into adaptive management as it relates to species conservation, ecosystem service provision, and protected area management.

AGENDA ITEM PRESENTER(S): Eric W. Sanderson and Paul R. Elsen, Wildlife Conservation Society

SUBMITTED BY: Eric W. Sanderson, Wildlife Conservation Society, 2300 Southern Blvd., Bronx NY 10464 USA. Email: esanderson@wcs.org

COLLABORATORS & CONTACTS: Laura Paulson and Cristina Mormorunni, Wildlife Conservation Society; numerous co-authors on upcoming publications

1:40 – 2:00pm Conservation of Reddish Egret (*Egretta rufescens*) in the U.S. and Mexico and of Red-crowned Parrot (*Amazona viridiginalis*) in Tamaulipas, Mexico.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Reddish Egret

- Improved SCCC Working Table awareness and recognition regarding ongoing strategic collaboration among partners in the U.S. and Mexico to plan for and promote Reddish Egret conservation at ecologically meaningful scales.
- Seek executive support and endorsement through the SCCCWT and Trilateral Committee in furthering the relevancy and capacity of the Reddish Egret International Working Group.
- Seek guidance from the SCCCWT regarding priorities or initiatives with potential linkages to Reddish Egret conservation, and where there may be opportunities for synergy or enhanced capacity in working toward common goals.
- Discuss viable opportunities to enhance fiscal and institutional support for the implementation of the business plans and continued international coordination on Reddish Egret conservation.

Red-crowned Parrot

- Update the SCCCWT on the goals and objectives of the Red-crowned parrot Conservation Action Plan in Tamaulipas.
- Endorsement by the Trilateral Committee of collaborative conservation efforts for Red-crowned parrot.
- Discuss opportunities and next steps for binational collaboration.
- Discuss potential sources of financial and institutional support for the implementation of the plan's recommended conservation actions.

PRESENTATION DESCRIPTION:

The Reddish Egret International Working Group (REEG WG) includes partners from the U.S., Mexico and a number of nations in the Caribbean and Central America, where REEG is listed as an endangered species (Mexico), a species of special conservation concern (U.S) or near threatened (IUCN). REEG is an international resource, with Mexico and the U.S. appearing to support about equally the bulk of the global breeding population. First developed in 2014, the REEG Conservation Action Plan served as the foundation for the development of the REEG Conservation Business Plan for Mexico. The plan articulates a portfolio of strategies and actions to advance REEG conservation in Mexico. In 2020 the REEG WG is completed the development of a Business Plan for the U.S., as well as the update to the 2014 range-wide REEG Conservation Action Plan. The updated plan includes new biological, demographic, genetic, migratory connectivity, and other pertinent planning information that had become available since the original publication. Whereas the Conservation Action Plan establishes the context, objectives, and expectations related to conserving sustainable populations of REEG range-wide, the two Business plans communicate "what it will take" to accomplish key supporting actions in Mexico and the U.S. Active support from interested stakeholders is needed for the implementation of both the Mexico and U.S. conservation business plans, which will require the integration of a strong human dimensions, and increased coordination and information sharing.

The Rio Grande Joint Venture, Terra Asesoría Ambiental, Texas Parks and Wildlife Department, and the U.S. Fish and Wildlife Service have partnered to implement a monitoring plan and to develop a conservation action plan for the Red-crowned Parrot (RCPA) in the core of its remaining critical habitat in the Tamaulipan Brushlands Bird Conservation Region in central Tamaulipas, Mexico. With more than 50% of its native habitat gone, RCPA are now only found in fragmented areas where they feed, roost, and breed. RCPA is considered endangered in Mexico (NOM 059), as well as by Birdlife International and

IUCN. In 2020, Texas listed RCPA as a state threated species. The objectives of the monitoring plan included identification of RCPA population size, status and threats, local movements, and general distribution, as well as habitat condition, use, and threats. The baseline biological and technical information generated was then used as the foundation for the development and completion of the RCPA conservation action plan for the project area. Priority nesting, feeding, and roosting sites, as well as threats to them have been identified. Active support from interested stakeholders is now needed for the implementation of the plan's recommended conservation actions. Critical threats to the species that need to be addressed include loss of habitat due to agricultural expansion, poaching of juvenile birds, illegal logging, and destruction of nesting cavities. Effective implementation of priority next steps to reduce threats will require the integration of a strong human dimensions component and increased coordination and sharing of information.

AGENDA ITEM PRESENTER(S): Jesús Franco, Rio Grande Joint Venture, American Bird Conservancy.

SUBMITTED BY Jesús Franco, Rio Grande Joint Venture, American Bird Conservancy

2:15 – 3:15pm Joint session with ecosystems: Monarch conservation

2:15 – 2:30pm: Mexico Domestic Update on Monarch Conservation

COLLABORATORS & CONTACTS: Gloria Tavera (CONANP), Fernando Camacho, (CONANP)

DESCRIPTION: An update will be provided on domestic efforts for the conservation of the Monarch butterfly in Mexico, including information about the country's high-level working group and efforts to support enhanced science, research, and monitoring, both in the overwintering grounds and throughout the monarch's migration in Northern Mexico.

REQUESTED SPECIFIC OUTCOMES: To share information on national-scale planning and conservation efforts in Mexico. To identify areas of collaboration between the three countries with regards to monarch conservation.

2:30 – 2:45pm: Canadian Domestic Update on Monarch Conservation

COLLABORATORS & CONTACTS: Judith Girard, Environment and Climate Change Canada (ECCC), Greg Mitchell (ECCC).

DESCRIPTION: ECCC will provide update on current status of Monarch in Canada, including background on the Assessment, Listing and Recovery Planning Process and upcoming steps under the Species at Risk Act.

BACKGROUND: Monarch is currently listed as Special Concern under the federal Species at Risk Act (SARA). In 2016, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) reassessed the Monarch as Endangered. The Government of Canada sought input from the public on the proposed status change, and is currently compiling these comments and undertaking an impact analysis for the uplisting. Based on these, the government may then decide to uplist the status of the Monarch from Special Concern to Endangered on the List of Wildlife Species at Risk set out in Schedule 1 of SARA, or refer the matter back to COSEWIC for further information or consideration. If Monarch is uplisted, protection prohibitions apply automatically on federal land, and a Recovery Strategy, including identification of critical habitat, is legislated to be completed within one year of listing.

REQUESTED SPECIFIC OUTCOMES: To share information on the Canadian listing and recovery planning processes and the approximate timeline for next steps.

2:45 – 3:00pm: United States Domestic Update on Monarch Conservation

COLLABORATORS & CONTACTS: Charles Wooley (USFWS), Lori Nordstrom (USFWS) and William Moritz, Midwest Association of Fish and Wildlife Agencies (MAFWA)

DESCRIPTION: USFWS will provide an update on the status of monarch conservation in the United States, including updates on the Endangered Species Act listing decision status, the Species Status Assessment, and an overview of domestic conservation efforts. MAFWA will provide an update on state-led conservation/planning efforts, including the Mid-American Monarch Conservation Strategy.

REQUESTED SPECIFIC OUTCOMES: To share information on national-scale planning and conservation efforts being implemented in the United States, along with updates on the listing status.

3:00 – 3:15pm: Joint Session Discussion

3:30 – 4:30pm Traditional ecological knowledge

4:45 – 5:05pm Tamaulipas Biodiversity Conservation

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- To request collaboration to develop adequate species recovery plans for species of common concern.
- To invite government agencies, academia, and nongovernmental organizations to coordinate with the Tamaulipas Parks and Biodiversity Commission on biodiversity projects interested in conducting in the state so that results can be optimized given Tamaulipas' broadened wildlife conservation efforts.

PRESENTATION DESCRIPTION: (up to 250 words, please)
With the restructuring of the Tamaulipas Wildlife Commission into the Parks and Biodiversity Commission and the Hunting and Fishing Commission, the Parks and Biodiversity Commission is developing the Tamaulipas Biodiversity Plan (Estudio de Estado). Though the restructuring is recent, Tamaulipas has years of work with priority species. Jaguar research began proactively to avoid human-wildlife conflicts. We'd like to apply the jaguar monitoring techniques to ocelot research and are looking for partners for this work. For Monarch butterfly, we engage in habitat projects with landowners and organize Monarch festivals and tagging for conservation education, which has strong community support partly thanks to Tamaulipas governors participating and tagging Monarchs. Morelet's crocodile, a species that the Trilateral's CITES table collaborated on to delist, is being monitored and has recovered to the point of potential human-wildlife conflicts. Red-crowned Parrot collaboration is ongoing with American Bird Conservancy and other partners. With Texas, we have updated and signed a cooperative agreement, will coordinate the Tamaulipas Biodiversity Plan, and are exchanging information on animal disease issues such as rabbit hemorrhagic disease (RHD) and white-nose syndrome (WNS) on bats. We are striving for a regional multi-species conservation strategy for shared species that encompasses the Northeast Mexico states, Texas and other states in the U.S., National Wildlife Refuges in Texas and other entities interested in partnering in this effort so that we can jointly support the conservation goals of the Species of Common Conservation Concern Table.

AGENDA ITEM PRESENTER(S): René Celis
SUBMITTED BY: René Celis (CPBT) / Maria Araujo (TPWD).
PREVIOUSLY PRESENTED TO SPECIES TABLE?: NO
BINATIONAL/TRINATIONAL: BINATIONAL

COLLABORATORS & CONTACTS:

- Comisión de Parques y Biodiversidad de Tamaulipas (CPBT)
  - René Celis Gurría
- CONABIO, Erika Daniela Melgarejo
- CONANP, José Carlos Pizaña Soto
- SEMARNAT (DGVS), Jorge Alberto Duque Sánchez
- U.S. Fish and Wildlife Service, Mitch Sternberg
- Texas Parks and Wildlife Department
  - Tony Henehan
  - María Araujo
- Rio Grande Joint Venture/American Bird Conservancy, Jesús Franco
- NGO, Rancho San José 1960, A.C., José Luis Dávila

- Wildme Conservation Meets Machine Learning, Jason Holmberg

5:05 – 5:20pm Developing a Genetics Management Plan for the Chiricahua Leopard Frog

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Requested Specific Outcome: We seek the endorsement of the Trilateral Committee to work with partners in México to achieve our project goals.
Project Goals: This is a newly funded project and our primary goal is to create awareness and see if we can get additional samples of the species from locations in Mexico.

PRESENTATION DESCRIPTION:
The Chiricahua leopard frog (*Rana chiricahuensis*) is a threatened species in the US and on Mexico's list of species-at-risk. The Chiricahua leopard frog is a highly recoverable species with successful programs and partnerships already in place. Dr. Rob Denton (University of Minnesota Morris) received a grant from the U.S. Fish and Wildlife Service to develop a genetic management plan for the species, one of the greatest limiting factors for recovery and a tool for managers that provides options to facilitate self-sustaining wild populations. Our goal is to develop a data-driven genetic management plan that will provide a road-map to maintain and enhance genetic diversity of the CLF across the range of the species. We have five objectives to fulfill this goal: 1) Identify genetic management units within and among recovery units, 2) Determine the genetic diversity within units and the relative levels of inbreeding, 3) Measure the genetic diversity of captive breeding programs, 4) Develop guidelines for ongoing reintroduction, augmentation, and translocation recovery decisions across the range of the species, and 5) Better understand the likelihood and implications of hybridization with congeners. Preliminary genetic studies of these frogs lack data from Mexican populations, which could provide valuable insights into the genetic resources available in remaining unmanaged populations.

AGENDA ITEM PRESENTER(S): Dr. Rob Denton, University of Minnesota Morris

SUBMITTED BY: Cat Crawford, U.S. Fish and Wildlife Service

COLLABORATORS & CONTACTS: USFWS, SEMARNAT, CONANP-Reserva de la Biosfera del Pinacate y Gran Desierto de Altar (RBPGDA) and Priority Species, DGVS, INE, CONABIO, Arizona Game and Fish Department, New Mexico Department of Game and Fish, University of Minnesota-Morris, Turner Endangered Species Fund

Wednesday, May 19, 2021

1:00 – 1:20pm Joint with ecosystems: The Climate Adaptation Science Center Network at the U.S. Department of the Interior

COLLABORATORS & CONTACTS: Gustavo Bisbal and Doug Beard (National Climate Adaptation Science Center, U.S. Geological Survey)

REQUESTED SPECIFIC OUTCOMES:

- To introduce the CASC Network more broadly and explore how it may support Trilateral objectives.
- Explore opportunities to link climate adaptation science to priority transboundary conservation concerns.
- Exchange information to create connections between CASC projects and natural and cultural resource management work in the three countries.
- Identification of new partners and discuss opportunities for future collaboration at a Trilateral level.
- Foster and nurture continental communication in North America.

DESCRIPTION: (250 word limit) The Climate Adaptation Science Center (CASC) Network was launched by the U.S. Department of the Interior (DOI) in 2009 with the mission to develop scientific information necessary to effectively manage natural and cultural resources in response to evolving climate conditions in every state in the nation. We accomplish this goal by working with managers of land, water, fish and wildlife, as well as nearshore, coastal, and cultural heritage resources in order to identify high priority decisions for which scientific information on climate/global change, impacts, and adaptation is needed. Ideally, our scientific products and services are actionable and can help those managers develop strategies and programs for the natural and cultural resources under their administrative responsibility. The science products and services we deliver help address some of the most urgent and devastating environmental concerns in America (e.g., wildfires, drought, invasive species, flooding).

The CASC Network is comprised of a National CASC and eight (soon-to-be nine) Regional CASCs, covering the continental U.S., Alaska, Hawai'i, and the U.S. Affiliated Pacific Islands. Each Regional CASCs is configured as a Federal-Academic partnership containing both a federal USGS component and a parallel university-based consortium component. In every case, they convene a Stakeholder Advisory Committee that includes representatives of government entities (state, Federal, tribal, sovereign) from the region, who provide input on regional management and science priorities. We are housed within the Ecosystems Mission Area of the U.S. Geological Survey (USGS). This arrangement allows for collaborative multidisciplinary endeavors involving all other USGS Mission Areas.

AGENDA ITEM PRESENTER(S): Gustavo Bisbal, National Climate Adaptation Science Center, U.S. Geological Survey, presenting remotely.

1:20 – 1:40pm Joint with ecosystems: Trilateral Island Initiative: Conservation and Restoration of the Islands of Canada, the United States, and Mexico

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.

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, priorities, and efforts to promote the LOI. We will highlight island conservation efforts that in particular relate to the 2021 SCCWT priorities, including technological innovation, connectivity, climate change, invasive species, and habitat restoration.

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

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

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), John Randall (The Nature Conservancy), Nick Holmes (The Nature Conservancy), Eduardo Ponce (CONANP), Eric VanderWerf (Pacific Rim Conservation), Robby Kohley (Pacific Rim Conservation)

1:40 – 2:00pm: Joint with ecosystems: Shifting from Single Species to Multi-Species and Ecosystem-based Conservation in Canada

2:15 – 2:35pm: North American Bat Conservation Alliance

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Collaboration and continuity in the work and endorsement by the ET across the three countries is absolutely crucial to maintain the momentum that NABCA has achieved to this day. Over the past year we have had very significant advances that will be very relevant and interesting to all in the SCC Table. Informing Trilateral participants about this pressing, concerning issues is paramount: 1) White Nose Syndrome/ fungus surveillance. The fungus that causes the White Nose Syndrome, Pseudogymnoascus destructans, continues its expansion to the south and west and in 2019-2020 it was found in Val Verde county in Texas, just across from Mexico on the Rio Bravo. Only enlisting the interest, support and participation on this ongoing and growing threat is the only way to ensure proper actions will be taken The Mexican team has broadly expanded its surveys in central and northern Mexico, and although all the results have been negative so far, this year´s samples have not been processed yet. Expanding the collaboration and sampling on this front is crucial. Over the past 2 years we have more than tripled the findings on hibernacula of bats in Mexico and we are working to protect all important hibernacula. Our objectives are to continue expanding the number of known hibernacula in Mexico, and monitoring these for presence of the fungus is crucial. The goal is to create an early warning system to detect, control, and mitigate the advancement of th pathogenous fungus. 2) Wind energy mortality mitigation across North America. The three countries must take action to mitigate this serious threat. New initiatives and technological advances are becoming more and more available and exchanging information across North America on these is crucial. The goal is find ways for the three countries to work hand in hand towards bat-friendly wind energy. 3) NaBat and SIMMA expansion and application. New technology is allowing the three countries to scale up acoustic monitoring of bats across the continent. As the efforts expand, the government agencies are picking them up as a crucial monitoring protocol for management of protected areas. The goals are to have the agencies adopt these protocols for their own management plans and have the three countries share information on these. 4) Expert conservation assessment of all bat species in North America. A new initiative launched recently in which cooperation is essential is the on-going extinction risk assessments of ALL the bat species in North America. The U.S. has made head progress and Mexico will begin its assessments very soon. Endorsement by the trilateral on these items is what we need to be able to raise the necessary funds to continue moving in this direction. The goal is to have assessed all bat species in North America (close to 200) for the 2022 Trilateral. 5) Identification, designation, implementation of KBAs. This is another new initiative. The Key Bat Conservation Areas. Mexico has a lead in this with 30 AICOMS already recognized by the Latin American Bat Conservation Alliance but Canada and the US are in the process. Nobody in the Trilateral has heard about his push yet and feedback and endorsement will be essential. The goal is to optimize representativity of conservation-relevant bat species in a network of priority areas.

PRESENTATION DESCRIPTION:
1) White Nose Syndrome/ fungus surveillance. We will report on the progress made by the three teams: Mexico has more than tripled its knowledge on hibernacula. We will also report on the new models created to understand how far south the fungus is likely to reach and management within and across the countries, the degree of concern we should have, as well as media communication and how to match the overlapping programs the countries have. 2) Wind energy mortality mitigation across North America. We will report on the innovative technologies becoming available and how the three countries can join forces to secure a safe and rapid transit to bat-safe wind energy. 3) NaBat and SIMMA expansion and application. We will present the new technologies that make these protocols inexpensive and easy to use. We will also talk about what the agencies stand to gain from them. 4) Expert conservation assessment of all bat species in North America. North America is rapidly becoming one of the first regions of the world

to assess all its bat species. We will present the significant advances reach until today and why this is important.. 5) Identification, designation, implementation of KBAs. We will present information on how this item, never before presented in trilaterals, has unfolded. Goals and how to work together across countries, and synergy with the agencies.

AGENDA ITEM PRESENTER(S): Rodrigo A. Medellin, Mexico, UNAM, CONABIO. Jeremy Coleman, U.S. Fish and Wildlife Service, and Charles Francis, Canadian Wildlife Service
SUBMITTED BY: Rodrigo A. Medellin, UNAM/CONABIO
PREVIOUSLY PRESENTED TO SPECIES TABLE?: (yes/no) Yes and other new ones
BINATIONAL/TRINATIONAL: (specify one) Trinational

COLLABORATORS & CONTACTS:
Jeremy Coleman USFWS **jeremy_coleman@fws.gov**
Charles Francis CWS **charles.francis@canada.ca**
Julian Equihua CONABIO **jequihua@conabio.gob.mx**

2:35 – 2:55pm: Aoudad (Barbary sheep) control in a transboundary area between Mexico and the USA

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Underline the importance of developing a shared conservation effort, through the control of the Barbary sheep (Ammotragus lervia), as a basis for the success in the recovery of the populations of bighorn sheep (Ovis canadensis) in the transboundary region between the Big Bend and the biological corridor between Maderas del Carmen and Ocampo in the state of Coahuila.

Present the efforts already implemented in the search for new financing opportunities.

PRESENTATION DESCRIPTION:
Invasive species are one of the main causes of biodiversity loss in the world. In the Chihuahuan desert ecoregion a variety of topics are shared between Mexico and the United States. Speaking about bilateral efforts the biodiversity conservation complex composed by the Big Bend National Park, Big Bend Ranch State Park, Adams Ranch, and Black Gap Wildlife Management Area in Texas, and Mexico's Protected Areas of Cañón de Santa Elena in Chihuahua, and Maderas del Carmen and Ocampo, as well as El Carmen Natural Reserve in Coahuila, are one of the biggest transboundary and conservation areas in north America. During at least the last two decades, the Aoudad (*Ammotragus lervia*) populations have increased to the extent that such growth has impacted the populations of native ungulates such as mule deer and white-tailed deer, but even more against the recovery possibilities of bighorn sheep, which was extirpated from the region, and current efforts seems to be not enough as long as the Aoudad persists. There have been many actions implemented on both sides of the border. These include activities such as the reintroduction of bighorn sheep individuals to its original habitat, educational and informative campaigns about invasive species, and different methods of lethal control of Aoudad. Nevertheless, these efforts must be integrated to get better outcomes. It is a reality that Aoudad eradication is a huge challenge, however, establishing a control rate across the region would be key to the successful recovery of the native wildlife.

AGENDA ITEM PRESENTER(S):
Javier Ochoa Espinoza/ Julio Carrera Treviño
Área de Protección de Flora y Fauna Maderas del Carmen-Área de Protección de Flora y Fauna Ocampo, CONANP

SUBMITTED BY:
Javier Ochoa Espinoza, Subdirector de ANP, APFF Maderas del Carmen

COLLABORATORS & CONTACTS:
Julio Alberto Carrera Treviño, director de APFF Maderas del Carmen
Alejandro Espinosa Treviño, gerente de conservación Reserva Natural El Carmen
Herbert Young Jr. jefe del departamento de ciencia y manejo de los recursos del Parque Nacional del Big Bend
Thomas Athens, biologo de vida silvestre, Parque Nacional del Big Bend
Miguel Ramón Mendoza Pérez, encargado de la dirección del APFF Cañón de Santa Elena
Mark Garrett, manager Black Gap Wildlife Management Area, Texas Parks and Wildlife Dpt.

2:55 – 3:15pm: Transboundary translocations: Reintroduction of the Peninsular Pronghorn in its historic range in the Baja California peninsula and Southern California.

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- The central objective of the PPRP is to re-establish the wild population in their historical habitats in the peninsula of Baja California and southern California.
- To secure exportation permits from México, by including this subspecies of binational interest to the corresponding work table.
- The USA-based zoo consortium will expand to accommodate three times the number of individuals that they currently do.
- To re-establishing extirpated populations in their historical home range in the Baja California Peninsula, México and Southern California, USA.
- Develop an environmental education program to engage nearby local people will help to address the threats.

PRESENTATION DESCRIPTION:
The peninsular pronghorn subspecies, *A. a. peninsularis*, is found in a subset of its historical range in Baja California, Mexico at present, but until a century ago ranged up into Southern California both in coastal and desert habitats.

In Mexico, the peninsular pronghorn is a protected species. In the United States, the peninsular pronghorn is listed as an Endangered Species, and thus protected by the U.S. Fish and Wildlife Service using the prohibitions and processes of the Endangered Species Act of 1973 (ESA), as amended. However, the pronghorn as a species is listed as Least Concern due to the over 750,000 individuals of the nominate race found throughout the U.S. and Canada.

Threats to the taxon have included over-hunting, habitat destruction and degradation, competition with cattle over resources, feral dog and coyote predation of fawns, car collisions, and drought.

The Peninsular Pronghorn Recovery Program (PPRP), is a successful rearing and monitoring program, over 700 peninsular pronghorns currently exist and more than 70 000 ha of his habitat is now exclusively protected for the pronghorn. An additional 46 individuals have been reared under human care in the USA at a consortium of zoos in the Southwestern USA.

The PPRP program in Mexico has been successful in dramatically increasing the population size, but the zoo consortium-based population will soon experience inbreeding depression. Importing animals from

Mexico to bolster the genetic diversity of the US population will be essential to deliver a genetic rescue to inbreeding. Increasing the numbers of animals in the USA is essential before reintroduction efforts for this species can commence.

AGENDA ITEM PRESENTER(S):
Victor Gelasio Sánchez Sotomayor/ Comisión Nacional de Áreas Naturales Protegidas (CONANP)
SUBMITTED BY:
Victor Gelasio Sánchez Sotomayor/ Comisión Nacional de Áreas Naturales Protegidas (CONANP)
COLLABORATORS & CONTACTS:
This group comprises the Peninsular Pronghorn Working Group (PPWG).
U.S. Fish and Wildlife Service:
Kerry L. Holcomb kerry_holcomb@fws.gov
San Diego Natural History Museum:
Kevin Clark kclark@sdnhm.org
Los Angeles Zoo:
Beth Schaefer beth.schaefer@lacity.org
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3:30 – 3:50pm: Transboundary translocations: Mexican Wolf Recovery in the United States and México

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
We request direction on how to fund the binational recovery efforts for the Mexican wolf. In particular, we are seeking funding for release and management of Mexican wolves in México and for depredation compensation and payments for presence in both countries.

We request endorsement to continue collaborating on implementing the Mexican Wolf Recovery Plan, First Revision.

We request endorsement to continue México/U.S. collaboration to manage the binational Mexican wolf Species Survival Plan (SSP) captive breeding program to provide Mexican wolves for release in both countries.

We request endorsement to continuing to strength the current wild population in Chihuahua with multiple reintroductions and recapturing wolves for putting and replacing radio-collars.
We request endorsement to implement capacity building for Mexican technicians in the U.S. and identify ways in which visas for those participating could be expedited.

PRESENTATION 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, First Revision.

Specifically, we propose to:

1) Continue working among USFWS, SEMARNAT, CONANP, Arizona Game and Fish Department, and New Mexico Department of Game and Fish for binational collaboration in the implementation of Mexican wolf recovery actions as outlined in the Mexican Wolf Recovery Plan, First Revision.
2) Continue discussions on additional funding to implement recovery actions, in particular for release and management of Mexican wolves in México and for depredation compensation and payments for presence in both countries.
3) Continue México/U.S. collaboration to manage the binational Mexican wolf Species Survival Plan (SSP) Captive Breeding Program to provide Mexican wolves for release in both countries.
4) Continue collaboration among USFWS; SEMARNAT; CONANP; AGFD, and NMDGF on the release of wolves in the U.S. and México.
5) Coordinate among USFWS, CONANP, state wildlife agencies in Arizona and New Mexico, and USDA–APHIS Wildlife Services should wolves in México disperse into the U.S.

AGENDA ITEM PRESENTER(S): Brady McGee (USFWS), Eduardo Ponce (CONANP), Jim deVos (AGFD), Stewart Liley (NMDGF)

SUBMITTED BY: Brady McGee (USFWS), Eduardo Ponce (CONANP), Jim deVos (AGFD), Stewart Liley (NMDGF)

COLLABORATORS & CONTACTS: USFWS Mexican Wolf Recovery Program; Dirección General de Vida Silvestre (SEMARNAT); Dirección de Especies Prioritarias para la Conservación (CONANP);

Universidad Autonoma de Queretaro; Arizona Game and Fish Department; New Mexico Department of Game and Fish; and USDA Wildlife Services

3:50 – 4:10pm: Transboundary translocations: Ocelot Recovery Actions

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
We request an endorsement from the Trilateral Committee to support the recovery actions of the Ocelot Recovery Team within the framework of the strategic plans of the Trilateral Committee as well as within the framework of all legal requirements and procedures in each country. In particular, we request support to translocate ocelots from Mexico to the United States in the near future to assist in the long-term survival of the populations close to the border, if deemed safe and appropriate by both countries. We also request support to continue to develop a revision of the 2013 Sister Protected Areas agreement between USFWS and CONANP, which will also facilitate the recovery of ocelots.

PRESENTATION DESCRIPTION:
This project supports the Species of Common Concern Work Table's goal of management and conservation of small and isolated populations at-risk. The endangered ocelot (*Leopardus pardalis*) is in need of binational conservation efforts to ensure its continued existence in the U.S. and Mexico. Project collaborators will be instrumental in the recovery of the ocelot in Texas, Arizona, and Mexico.

Similar to conservation actions implemented for other transboundary species like Mexican wolf, Sonoran and American pronghorn, black-tailed prairie dog, and black-footed ferret, we propose that binational partners assist in the translocation of ocelots between Mexico and the United States soon to help ensure the long-term survival of the ocelot populations close to the border.

Our presentation will describe recent ocelot recovery actions and a history of actions taken towards Ocelot Translocation, a tentative plan for actions in support of ocelot translocation, as well as a description of the status and use of the Sister Protected Areas agreement between USFWS and CONANP.

AGENDA ITEM PRESENTER(S): Mitch Sternberg (USFWS), Martha López-Hernández (CONANP)

SUBMITTED BY: Mitch Sternberg (USFWS); Martha López-Hernández (CONANP).

COLLABORATORS & CONTACTS: Mitch Sternberg, Hilary Swarts, Erin Fernandez (U.S. Fish and Wildlife Service); Maria Araujo (Texas Parks and Wildlife Department); Francisco Abarca (Arizona Game and Fish Department); Martha López-Hernández (Comisión Nacional de Áreas Naturales Protegidas); Arnulfo Moreno-Valdez (Comisión de Parques y Biodiversidad de Tamaulipas); Rogelio Carrera-Treviño (Universidad Autónoma de Nuevo León); Carlos Lopez-Gonzalez (Universidad Autónoma de Querétaro).

4:10 – 4:30pm: Transboundary translocations: Sonoran pronghorn recovery

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

1. Continue working on binational Sonoran pronghorn recovery.
2. Conduct population surveys in Arizona and Sonora.
3. Implement a translocation for 6 Sonoran pronghorn from Arizona to the PBR.
4. Continue releasing Sonoran pronghorn into selected areas in the U.S.
5. Maintain water and forage enhancement projects, provide supplemental forage when necessary.
6. Continue discussions on restoring linkages between the populations in Mexico and between the populations in the U.S. and Mexico to benefit the pronghorn that are currently largely isolated.
7. Assess the genetic structure of the existing populations to determine the extent of genetic isolation.
8. Continue discussions on establishing a third population in Sonora.

PRESENTATION DESCRIPTION:

To work toward recovery of the Sonoran pronghorn range wide, the collaborators propose to continue binational monitoring (including aerial surveys and telemetry) efforts, 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. In 2016, the USFWS finalized and approved the Sonoran Pronghorn Recovery Plan. The revised recovery plan lays out a strategy that includes protecting habitat; increasing and/or maintaining existing populations in the U.S. and Mexico and possibly establishing additional populations, 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.

In Arizona, the CPNWR and KNWR breeding programs continue to do well. Temporary holding pens, including a new release site in Sonora, Mexico, were constructed in 2019. The holding pen at El Pinacate Biosphere Reserve was installed in October of 2019; however, it was not utilized because translocation efforts were postponed due to poor habitat conditions. A new translocation effort will be attempted in late 2021. On December 4-5, 2019, eighty-three (83) Sonoran pronghorn (SOPH) were captured and processed at the CPNWR pen, of which thirty-one (31) SOPH were transferred to holding pens for subsequent release after two weeks. The release sites were located at ORPI (10 SOPH), Barry M. Goldwater Range (16 SOPH), and CPNWR (5 SOPH). The remaining processed animals were returned to the Cabeza Prieta captive breeding pen because they were breeding females and males or young of the year. The 2020 capture and release operation at KNWR took place on January 14; nine (9) SOPH were transferred to a holding pen at DOD's Yuma Proving Ground. Additionally, the Sonora range-wide SOPH survey was originally scheduled for mid-November of 2019 but had to be postponed due to inclement weather. The range-wide survey in Sonora, Mexico took place February 18 – 22, 2020. In the Quitovac subunit, 393 pronghorn were observed in 121 groups on transects. The annual capture/release at the CPNWR pen took place December 9–10, 2020. More than 70 animals were processed. We also conducted the annual Kofa capture/release on December 18, 2020. Thirty-three pronghorn were caught in the bomas and processed on the 18th. All captured pronghorn were vaccinated, had blood drawn for disease and genetic testing and were marked. All pronghorn being released were fitted with either GPS or VHF collars. Telemetry flights were conducted in both herds late 2020. This agenda item is an update on progress made on binational conservation activities.

AGENDA ITEM PRESENTER(S):

John Hervert, Francisco Abarca, and Cynthia Soria, Arizona Game and Fish Department

SUBMITTED BY: Clay Crowder, John Hervert, Jill Bright, Cynthia Soria, and Francisco Abarca, AGFD; Stephanie Doerries, Cabeza Prieta National Wildlife Refuge; Erin Fernandez, Arizona Ecological Services Office, USFWS; Christa Weise, Kofa National Wildlife Refuge; Leonardo Corrales, Raul Molina, CEDES; and Eduardo Ponce, Angelica Narvaez, Ana Luisa Figueroa, Martin Sau, CONANP.

COLLABORATORS & CONTACTS:
Sonoran Pronghorn Recovery Team, Arizona Game and Fish Department (AGFD), U.S, Fish and Wildlife Service (USFWS) – Arizona Ecological Services, Cabeza Prieta National Wildlife Refuge (CPNWR), Kofa National Wildlife Refuge (KNWR), Organ Pipe Cactus National Monument (ORPI), Arizona Antelope Foundation, University of Arizona, Arizona State University, US Border Patrol, Barry M. Goldwater Range, Yuma Proving Ground, The Phoenix Zoo, Los Angeles Zoo, Sonora Commission of Ecology and Sustainable Development (CEDES), Dirección General de Vida Silvestre (DGVS)-SEMARNAT, Pinacate Biosphere Reserve (PBR)-CONANP, Northwest Regional Office-CONANP, and Endangered Species Office-CONANP.

4:45 – 5:05pm: Transboundary translocations: U.S.-Mexico California Condor Recovery Program and Captive Reproduction Development

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Once numbering in thousands, California condors *(Gymnogyps californianus)* were found from British Columbia, Canada to Baja California, Mexico, but declined dramatically as European pioneers settled within its range until the species was near extinction by the mid-1980s. The 1996 California Condor Recovery Plan, developed by the U.S. Fish and Wildlife Service's California Condor Recovery Team recommended Northern Baja California as a potential release site. Following many years of discussion, the governments of Mexico and the U.S. entered into a Memorandum of Understanding in 2014 providing for cooperative actions furthering the recovery of California condor, including sharing of information, strategies, expertise, public information, educational material and training between and among the recovery programs for this species. This agenda item provides an update concerning both, the current species status in the U.S. and Mexico and the implementation of the MOU, as well as the Transition Plan presented to CONANP by San Diego Zoo and the USFWS in 2016.

During 2019 all the parties involved in the recovery program, both in Mexico and the US, agreed to sign a Work Plan linked to the current MOU that includes the main activities to be implemented by the agencies and the cooperative work among them. The purpose of the Work Plan is to ensure the continuation of the partners' collaborative research efforts so sound management recommendations can be made. This includes the use of telemetry and camera traps to advance the Program's knowledge about threat identification and mitigation, lead poisoning, diet, and range expansion of the Baja population.

As of December 2020, there is an estimated wild population of approximately 300 condors in the wild, 40 of which are in the wild in Baja California, Mexico including nine chicks hatched at the Chapultepec Zoo since 2016.

BACKGROUND: The goal of this on-going binational collaborative effort is to establish a self-sustaining population of California condors within their historic range of distribution in Baja California, Mexico in an effort to recover the species. The overall condor population in Mexico grew steadily until 2014 from a combination of new releases from captive brd birds and natural productivity. However, cross border

regulations resulting from concerns related to the highly pathogenic avian influenza (HPAI) occurring in the United States have prevented exporting birds to Baja California from captive breeding sites in the United States since 2015. Both parties have been trying to identify new mechanisms to overcome these challenges since the Baja California flock will not grow without new releases from captive bred birds.

Alternative efforts to supplement the wild population include the establishment by CONANP of the first California condor captive breeding program centered at the Chapultepec Zoo in 2015. A total of nine chicks have been successfully hatched as a result of this effort. Three chicks hatched in 2016 in Chapultepec Zoo were transferred to Sierra de San Pedro Martir National Park (SSPM) that same year and released in to the wild later in October 2017. However, due to problems adapting to wildlife the three released chicks had to be taken back to the aviary at SSPM and discussions are being undertaken for these birds to become part of Chapultepec Zoo permanent California condor exhibit. In 2017 and 2018, two more chicks were hatched in the Chapultepec Zoo and successfully released into the wild in 2018. There are currently four birds in Chapultepec, hatched in 2019 and 2021, waiting to be released in SSOM in the upcoming months. Plans for such translocation will be made as soon as budgets for both, SSPM and Chapultepec, are confirmed.

In June 2019, Zacango Ecological Park, is part of the State of Mexico's Commission for Natural Parks and Wildlife (CEPANAF), became an official member of the California condor breeding program. Zacango Ecological Park is currently in the process of obtaining permits needed to ensure the transfer of a bird from the Santa Barbara Zoo that will launch its education and awareness program. A second bird from Chapultepec Zoo is expected to join the bird to complete the exhibit. Unfortunately, the COVID-19 pandemic prevented the transfer of birds from the U.S. into Mexico in 2020.

In March 2020 members of all the agencies involved in the bilateral Program held a working meeting in Mexico City were a tentative captive breeding plan for the continuity of the wild population of Condor in México was discussed and approved. The plan includes the supplementation of birds bred in the United States to ensure genetic diversity of this population. As part of the results of the 2020 meeting, partners finalized a donation agreement facilitating the transferring of ownership of ATV/UTV and telemetry equipment to CONANP and the signing of a work plan on joint research and information exchange. During the meeting CONANP also stated its desire to resume the annual transfer of juvenile birds from the U.S. to increase the wild population in Mexico.

Although not directly related to the southern population of California Condors, USFWS is currently reviewing a 10j rule that will help facilitate the creation of a new California condor release facility in Redwood National Park, which is in the northern portion of the species' historic range. The rule will designate the Redwood National Park condors as a nonessential experimental population under the Endangered Species Act, which will provide needed flexibility in managing the reintroduced population, reduce the regulatory impact of reintroducing a federally listed species and facilitate cooperative conservation. This rule, which will expand the efforts of the USFWS and partners to support a growing population, is possible because of the strength of partnerships ongoing.

- Update on the status of the nine chicks breed in captivity in Mexico since 2016.
- Update on species conservation research and non-lead hunting education programs in Baja California.

- Discuss options for improved and continuous implementation of the MOU throughout the continued collaboration between CONANP, USFWS and San Diego Zoo 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.

PRESENTATION DESCRIPTION:
To provide an update regarding the condor recovery program, particularly as to the implementation of the MOU.

AGENDA ITEM PRESENTER(S): Ignacio Vilchis and Catalina Porras

SUBMITTED BY: Kelley Myers, Steve Kirkland, and Amanda Gonzales (USFWS), Jose Eduardo Ponce and Angelica Narvaez (CONANP), and Ignacio Vilchis (San Diego Zoo Wildlife Alliance).

COLLABORATORS & CONTACTS: Jose Eduardo Ponce, Acting Director for Priority Species Conservation (j.ponce@conanp.gob.mx); Kelley Myers, Acting Chief, Migratory Birds and California Condor Coordinator (kelley_myers@fws.gov); Steve Kirkland, California Condor Field Coordinator (steve_kirkland@fws.gov); Amanda Gonzales, Program Officer for Mexico (amanda_gonzales@fws.gov); Fernando Gual, Director General for Mexico City Zoos and Wildlife (fernando.gual.sedema@gmail.com); Ignacio Vilchis, Associate Director of Recovery \ Ecology, San Diego Zoo Wildlife Alliance (ivilchis@sdzwa.org), and Napoleon Fillat, Director General, State Commission for Natural Parks and Wildlife (CEPANAF).

5:05 – 5:25pm: Transboundary translocations (discussion)

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Initiate a dialogue among participants and pertinent authorities to identify roadblocks that may cause a negative impact on the successful translocation of species at risk and identify strategies that could lead to more effective regulations that may facilitate the transboundary movements of the related species.

PRESENTATION DESCRIPTION: The wild-to-wild cross-border movement of species can often inhibit collaboration between border countries as these involve a great deal of restrictions and regulations that can be not only extremely bureaucratic and cumbersome, but frequently confusing and difficult to comply. Further, this uncertainty frequently impedes conservation actions that would enhance binational recovery of many species.

The number of federal and state agencies involved, sanitary requirements, time lines, last minute changes that can occur (i.e. sudden outbreaks,), and most importantly, lack of knowledge, result in failed cross-border movements of specimens that can, at a certain point, be detrimental to local populations of species and their recovery.

It is important that parties begin, under the framework of the Species Table, an official dialogue with pertinent authorities involved that may result in standardize regulations that, in compliance with national laws, can also facilitate the successful translocation of species at risk

BACKGROUND: In the recent years the cross-border collaboration for the recovery of shared species at risk has greatly increased and with this, the need for transboundary movements of wild individuals has become paramount to achieving effective species conservation.

However, conflicts with different issues such as permit guidelines for cross-border species collection and transportation, disease and restrictions on moving animals across the border, sudden outbreaks, physical barriers, lack of understanding, have resulted in failed efforts to strengthen a number of binational reintroduction programs (i.e. American Bison, California Condor, Mexican Wolf, Pronghorn, etc.)

Agenda Item Presenter: Species of Common Conservation Concern Working Table
Submitted by: Species of Common Conservation Concern Working Table

Thursday, May 20, 2021

1:00 – 1:40pm: IUCN Guidelines on Reintroductions and Other Conservation Translocations: an aligned framework for collaboration within and among countries?

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Introduce the IUCN Guidelines for Reintroductions and Other Conservation Translocations
- Introduce Conservation Translocation Activities in North America to recover species and/or restore ecosystem processes
- Introduce Policy Alignment to date of the IUCN Guidelines in an international context
- Suggest that the IUCN Guidelines might be a helpful tool to benefit national objectives, and to align recovery planning/actions for shared interests of the USA, Mexico, and Canada.

PRESENTATION DESCRIPTION:
Conservation translocations move species among wild populations or from human care into the wild for conservation purposes. Globally, such activities have increased 30-fold over the last 30 years, involving over 2000 species. One of the primary hotspots for such activities is North America, where efforts are frequent and increasing for plants and animals in terrestrial and marine systems. Responsible conservation translocations can have profound benefits for biodiversity and humanity. However, poorly planned or executed translocations could result in undesired consequences, high failure rates, and/or inefficient use of resources. A global standard of best practice is set through the IUCN Guidelines for Reintroductions and Other Conservation Translocations which are available in 9 languages. Governments can use these Guidelines as a basis for planning, regulatory mechanisms, policy, or action. Given the international basis and framework, adopting the Guidelines in a Trinational context could provide a platform for alignment among countries in the pursuit of common goals for species and ecosystems that pertain to conservation translocations.

AGENDA ITEM PRESENTER(S):
Axel Moehrenschlager

- Chair, IUCN Species Survival Commission Conservation Translocation Specialist Group
- Director, Conservation & Science, Calgary Zoological Society
- Adjunct Professor, University of Calgary
- Adjunct Associate Professor, Clemson University

SUBMITTED BY:
Axel Moehrenschlager

COLLABORATORS & CONTACTS:

- Representing global membership of IUCN Conservation Translocation Specialist Group (50+ countries)

1:40 – 2:00pm: Shared species conservation through nature tourism

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- To present a new shared species collaboration with a multi-species approach.
- To benefit from the Trilateral's synergy in information exchange and partnership building.
- To request SCCCWT and Trilateral Committee endorsement of this binational conservation collaboration.

PRESENTATION DESCRIPTION:
Mexico's Dirección General de Vida Silvestre (DGVS) and Texas Parks and Wildlife Department (TPWD) organized a Nature Tourism Workshop that integrated a suite of shared species and concomitant human dimensions in hunting, birdwatching and community participation in conservation. The overview of government and private sites showed how the same site can offer hunting and wildlife viewing opportunities. Bed and breakfast owners discussed how they studied their site's flora and fauna to carve a unique niche as a nature tourism destination. The special focus on a suite of Texas' migratory nongame birds of shared conservation concern was complemented as Pronatura Noreste and Pronatura Sur discussed the community involvement to monitor and protect these species in Mexico as well as the significant role that Southern Wings and (and collaborating partners such as American Bird Conservancy) play in some of these projects. Mexico's human dimension approach is similar to that of Las Palomas Wildlife Management Area which involve community programs throughout the region to invite the local population to participate in bird banding, habitat restoration and related conservation projects. Co-existing with urban wildlife was discussed to minimize human-wildlife conflicts. As an action item, Tamaulipas is coordinating with Texas the development of the Tamaulipas biodiversity plan.

AGENDA ITEM PRESENTER(S):
Biol. Jorge Alberto Duque, Conservation Director, SEMARNAT-Dirección General de Vida Silvestre

SUBMITTED BY:

- Biol. Jorge Alberto Duque, Conservation Director, SEMARNAT-Dirección General de Vida Silvestre
- María Araujo, International Affairs Director, Texas Parks and Wildlife Dept.

COLLABORATORS & CONTACTS:

- SEMARNAT-Dirección General de Vida Silvestre
  - Biol. Jorge Alberto Duque, Conservation Director
  - Ing. Florentino Chillopa
  - Biol. Cecilio Iván Rivas
- Texas Parks and Wildlife Dept.
  - Tony Henehan, Las Palomas WMA Wildlife Biologist/Lower Rio Grande Urban Biologist
  - Trey Barron, Wildlife Diversity Biologist for South Texas and Coastal Region
  - Jeff Raasch, Conservation Partnerships Program Leader
- Arizona Game & Fish Dept., Edwin Juarez, ABCI Coordinator & Southern Wings support
- Nuevo Leon Parks and Wildlife Dept., Alfonso Rodriguez
- Tamaulipas Tourism Dept. and Tamaulipas, James Wright
- Tamaulipas Hunting & Fishing Commission, Juan Enrique Espada
- Rio Grande Joint Venture/American Bird Conservancy, Jesús Franco, RGJV Assistant Coordinator
- DUMAC, Eduardo Carrera, National Executive Director & CEO
- Pronatura Noreste and Pronatura Sur

2:15 – 2:35pm: Bison as keystone species

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Discuss the relevance for the elaboration of a trilateral agreement for the ecological recovery of the bison as a keystone species of the grasslands and as a mitigation strategy for climate change, with the grassland being an ecosystem of common interest for the three countries and the bison.
- The goal is to restore the ecological role of bison throughout its original range, restoring cultural and biological interactions.
- The first outcome is to define if there is interest from the three countries to work together on the ecological recovery.
- If three countries can commit to collaborate on this initiative, the next outcome is to develop and agreement on how to proceed, including participants, activities, dates and people responsible to advance the different activities.

PRESENTATION DESCRIPTION:
After their near extinction, bison numbers today are around half a million, from the ca. 30 million once existed. However, most are managed as livestock and do not fulfill the keystone ecological role they once did. Because of that, there are many ongoing efforts to recover the ecological role of bison across North America. These efforts range from regional, to national and continental, with the participation of a wide diversity of individuals, organizations and agencies, but despite being largely coordinated, for this ambitious effort to be successful, it needs the commitment of the three countries to work together to advance the ecological recovery of the bison.
Because the bison influences ecosystem dynamics, particularly in the grasslands, its recovery is associated to the restoration and maintenance of grasslands, carbon sequestration and the recovery of grassland species, many of which are at risk or declining.
Working as part of a trinational effort, the viability and speed of the recovery will be increased, however it is necessary to determine if the ecological recovery is of sufficient relevance for the three countries to grant a joint effort.
The proposal is to define an expert group to discuss the importance of this initiative and how this could proceed with the auspices of the three countries.

AGENDA ITEM PRESENTER(S):
Rurik List, Universidad Autónoma Metropolitana-Lerma

SUBMITTED BY:
Rurik List, Universidad Autónoma Metropolitana-Lerma

COLLABORATORS & CONTACTS:
Alejandro Espinoza, CEMEX; Antonio Esquer, Profauna; Laura Paulson, Wildlife Conservation Society; Eduardo Ponce, Conanp; Glenn Plumb, IUCN Bison Specialist Group.

2:35 – 2:55pm: Bison conservation activities in the Unites States Department of the Interior

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Our goals are:

- to capitalize on a few recent major accomplishments to highlight on-going work for national and international bison conservation through science, partnership, and ecocultural restoration.
- Engage the Work Table with opportunities to support complementary models and data inquiries across all three nations.
- 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.

PRESENTATION DESCRIPTION:
We wish to present an overview of 2 major accomplishments in 2020: announcement of the Dept. of Interior (DOI) Bison Conservation Initiative and publication of the bison population viability analysis. The Bison Conservation Initiative provides a framework for continuation of conservation genetics and expands integration of that work with ecocultural restoration of bison to landscapes and people. We will have also published, in early 2021 the DOI Bison Health Report. We will provide status updates of 2 new undertakings under the Bison Conservation Initiative: the development of a specific, detailed DOI Bison Metapopulation Strategy, and initiation of work toward a Shared Stewardship Plan for DOI collaboration with state, tribal, NGO, and private stakeholders.

We will discuss participation in a continental conservation strategy, across US, CA, and MX. Finally, following on discussions among Canada, Mexico, and United States representatives at the 2019 American Bison Society meeting, we wish further discussions for trinational professional collaboration, information sharing, and skill transfer among bison conservation professionals.

AGENDA ITEM PRESENTER(S):
Dr. Brendan Moynahan, National Park Service. Science Advisor; Chair, DOI Bison Working Group

SUBMITTED BY: Brendan Moynahan, National Park Service.

COLLABORATORS & CONTACTS: US Department of the Interior (DOI); DOI Bison Working Group; American Bison Society – Continental Bison Conservation Strategy; Wildlife Conservation Society; US National Park Service; US Fish and Wildlife Service; US Geological Survey; US Bureau of Land Management; US Bureau of Indian Affairs.

2:55 – 3:15pm: Parks Canada Supporting Indigenous-led Bison Recovery

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Raise awareness of Parks Canada efforts to support Indigenous communities in restoring bison to reserve lands in Canada and the US as a means to increase shared stewardship, and ecological and cultural restoration
- Examine the possibility of cross-border opportunities to reintroduce or augment Indigenous-managed bison herds for ecocultural purposes

PRESENTATION DESCRIPTION:
Parks Canada has long taken a lead role in bison conservation. While bison currently occur at 10 Parks Canada administered places, effective recovery of bison in North America requires shared stewardship at a landscape scale. Bison have played critical roles in the cultures and societies of Indigenous Peoples. Supporting Indigenous Peoples in returning bison to reserve lands is a key step toward sociocultural restoration for many communities. This can also act to increase the number of bison conservation herds and ecosystems that bison occur within, improving the overall health of both bison subspecies.

Since the last Trilateral, Parks Canada has transferred bison to several Indigenous communities. In 2019, Grasslands National Park transferred six plains bison to Wanuskewin Heritage Park. The first international transfer to an Indigenous community occurred in 2016, when 87 plains bison were moved from Elk Island National Park to the Blackfeet Nation, Montana. Between 2018 and 2021, Elk Island National Park transferred wood and plains bison to seven First Nations in Alberta and Saskatchewan.

Further to transferring disease-free, genetically pure wood and plains bison to Indigenous communities, Waterton Lakes National Park, which borders Kainai First Nation reserve land, has built upon an existing collaborative relationship to provide additional support to that nation in establishing a cultural plains bison herd in 2021. Financial, scientific, and logistic support have been contributed toward the Kainai Iinnii (bison in Blackfoot) Rematriation through the Government of Canada's Nature Legacy Program.

AGENDA ITEM PRESENTER(S):
Greg Wilson, Parks Canada Agency
Kim Pearson, Parks Canada Agency

SUBMITTED BY:
Greg Wilson, Parks Canada Agency

COLLABORATORS & CONTACTS:
Lindsay Rodger, John Mckenzie, Salman Rasheed, Rob Found, Stefano Liccioli, Jonathan Demoor

3:30 – 4:30pm: Executive table and co-chairs session

4:45 – 5:05pm: Conservation of rattlesnakes of U.S: and Mexico

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:

- Identify parties interested in the development of a binational agreement to protect specific rattlesnakes' populations and species in Mexico and United States.
- Identify priority populations, species and areas to conserve rattlesnakes in Mexico and United States.
- Develop a program to monitor the priority populations of rattlesnakes and their habitat and threats in Mexico and the United States
- Develop a program to communicate the importance of the conservation of rattlesnakes and their habitat in Mexico and the United States

PRESENTATION DESCRIPTION:

Rattlesnakes are highly threatened vipers; Mexico and the US together represent almost 90% of their habitat. There are many factors that have put these species at risk, the loss of their habitats, the overharvesting for pet´s market and for traditional use, such as medicine as well as many specimens that are killed for unjustified fear in both Mexico and the U.S.

The U.S. and Mexico share 15 species of rattlesnakes that represent 34% of rattlesnake's diversity in Mexico and 75% of rattlesnakes' species inhabiting in the US. Researchers from both countries have had a long tradition of cooperation, however, this relationship has been mostly in the academic area, leaving binational conservation efforts almost out of it. Through this collaboration we expect to identify ways for strengthening the joint work and the alliance formation between academic institutions, Non-Governmental Organizations and Government agencies from both countries for the protection of this group of species.

AGENDA ITEM PRESENTER(S):
C. Dr. Gustavo Jiménez Velázquez. Director General de Vida Silvestre Coatl A.C.

SUBMITTED BY:
Vida Silvestre Coatl A.C.

COLLABORATORS & CONTACTS:

- CONANP/PNUD: Biol. Aurora Romo Cervantes. aurora.romo@sinergiaplus.org; scorpion_arc@hotmail.com
- VIDA SILVESTRE COATL. A.C. C.Dr. Gustavo Jiménez Velázquez. vidasilvestrecoatl@gmail.com
- UNIVERSIDAD AUTÓNOMA DE AGUASCALIENTES/ IUCN SSC Viper Specialist Group. Dr. Jesús Sigala Rodríguez. jjsigala@gmail.com
- UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN. Dr. David Lazcano Villareal. imantodes52@hotmail.com

5:05 – 5:25pm Conservation actions for the Golden Eagle in the Baja California Peninsula

REQUESTED SPECIFIC OUTCOMES AND PROJECT GOALS:
Identify national and international stakeholders interested in collaborating with the Baja California golden eagle working group, as well as local, state and federal agencies of both USA and Mexico.
To establish a two-year golden eagle aerial survey program, considering additional areas of the Baja California peninsula and other states in Mexico.
To establish financial strategies that allow aerial and terrestrial survey program across Mexico.
To establish strategic collaborations with universities as well as long term research resources.

PRESENTATION DESCRIPTION:
Golden eagle (*Aquila chrysaetos*) is the most emblematic species of Mexico for being part of the national shield and one of the top predators in the arid and temperate zones ecosystems of the national territory. Historically, the Golden Eagle was distributed in large part of the Mexican territory from the Baja California Peninsula to Oaxaca. There are also records of over 280 sightings of the Golden Eagle in 17 states of the country, including several that were part of its historical range, and even others in which there had not been previous sightings registered, such as Veracruz, Morelos and Puebla. At the end of the last century its population in Mexico was considerably reduced due to various human activities making necessary to conduct a diagnosis of its distribution and abundance at the national level.
During annual surveys conducted along the western U.S. it was recorded an average of 1.2 eagles for every 100 km of transect length carried out. The population from the west of the Mississippi River has been quantified at 21,000 to 35,000 individuals. Based on such numbers, the U.S. extrapolated these figures, obtaining an average of 20,000 to 25,000 pairs in the western U.S., while the population from California and Wyoming has been estimated in approximately 500 and 4,200 pairs of golden eagles, using the same methodology.
Historically, the Baja California PACE (2015) referred to 10 reproductive pairs. However, preliminary results from the aerial surveys in 2021 identified 10 new nesting sites, placing Baja California as the third state with the highest record of golden eagle pairs, following Zacatecas and Chihuahua. The relevance through this technique would allow us to start joint work with the United States, specifically with the state of California that has conducted this monitoring for more than two decades. The continuity of these samplings is very important for the conservation of the population of golden Eagle in both countries.

AGENDA ITEM PRESENTER(S): Gonzalo de Leon

SUBMITTED BY:
Comisión Nacional de áreas naturales protegidas.
Sierra de San Pedro Mártir National Park
El Vizcaino Biosphere Reserve
Los Cirios Valley Flora and Fauna Protection Area

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