

WORK TABLE: Species of Common Conservation Concern

Co-Chairs: Dr. Gabriela Chavarria, Forensic Science Branch Chief, U.S. Fish and Wildlife Service, U.S.; Omar Eduardo Rocha Gutiérrez Subdirector de Manejo y Desarrollo de Poblaciones DGVS-SEMARNAT, MX; Dr. Charles Francis, Bird Population Monitoring Manager. Canadian Wildlife Service, Environment Canada, CA.

This year's agenda was developed based on the following criteria identified in the 2013-2014 Action Items Report.

Executive Table Priorities 2014-2017

- Climate Change with a Focus on Adaptation
- Landscape and Seascape Conservation Connectivity and Area Based Conservation Partnerships
- Wildlife Trafficking
- Monarch Butterfly Conservation (New)

Working Table Priorities for 2015-2016

- Landscape and Seascape Conservation Connectivity and Area Based Conservation Partnerships

Monday, April 13, 2015

Room: Cortez1A

(9 am – 10 am: Species Working Table Convenes)

(9:00 am)

AGENDA ITEM 1: Welcome – Adoption of the Agenda and Logistics (10 min)

AGENDA ITEM PRESENTORS: Dr. Gabriela Chavarria and Omar Eduardo Rocha Gutiérrez.

(9:10 am)

AGENDA ITEM 2: Update - Implementation of the North American Rabies Management Plan (25 min)

COLLABORATORS & CONTACTS: North American Rabies Management Team: Association of Fish and Wildlife Agencies; Western Association of Fish and Wildlife Agencies; Canadian Rabies Committee; Canadian Food Inspection Service; Environment Canada; Cornell; 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 (CENA VECE); Ministère des Ressources naturelles et de la Faune du Québec; Ministry of Environment and Natural Resources of Mexico (SEMARNAT); Navajo Nation; 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; Ross University School of Veterinary Medicine; Puerto Rico Department of Health; US Forest Service; PAHO; and Wistar Institute.

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

BACKGROUND: The North American Rabies Management Plan is designed to provide direction and serve as a catalyst for cooperative rabies management actions at the continental level. Key components of this Plan include routine communications on policies and rabies status, exchange of scientific and technical information, and collaboration on surveillance and control projects along the immediate borders of the four nations. The North American Rabies Management Plan, therefore, is designed to foster international cooperation involving governments at all levels, indigenous groups, nongovernmental organizations, corporations, universities, and private citizens. Success of the Plan depends on effective partnerships among all segments of society that have a role in rabies management. This Plan can be easily modified to adapt to change as a function of planning processes among bordering states and provinces and at the federal level. The ultimate function of the plan is to provide a framework and forum for constructive interaction among the states and provinces and federal levels of Canada, Mexico, and the U.S. to address challenges jointly and, thus, better ensure that long-term rabies management goals are met within each country and in North America.

REQUESTED SPECIFIC OUTCOMES:

- Continued support of the North American Rabies Management Plan
- Increased border surveillance between Mexico and the US.
- Participation by 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 exchange across borders

- Continued support to evaluate rabies vaccines in wildlife species

AGENDA ITEM PRESENTOR: David L. Bergman, USDA APHIS Wildlife Services, Phoenix, Arizona

SUBMITTED BY: David L. Bergman, USDA APHIS Wildlife Services, Phoenix, Arizona

(9:35 am)

AGENDA ITEM 3: Update - Black-footed ferret recovery at widely separated sites in continuous black-tailed prairie dog habitat across the United States, Mexico, and Canada *(25 min)*

COLLABORATORS & CONTACTS:

United States: U.S. Fish and Wildlife Service-chartered Black-footed Ferret Recovery Implementation Team comprised of multiple State, Tribal, and Non-Governmental Organizations (Pete Gober, Black-footed Ferret Recovery Coordinator, U.S. Fish and Wildlife Service; pete_gober@fws.gov and John Hughes, Wildlife Biologist, U.S. Fish and Wildlife Service; john_hughes@fws.gov)

Mexico: Eduardo Ponce Guevara, Ecología y Conservación de Fauna Silvestre Instituto de Ecología, UNAM; eponce@ecologia.unam.mx

Canada: Carolyn Gaudet, Grasslands National Park; carolyn.gaudet@pc.gc.ca

DESCRIPTION: Continuing captive breeding, reintroduction, and monitoring of black-footed ferrets in the United States, Mexico, and Canada; additional supplemental disease management for ferrets and their obligate prairie dog prey, including insecticide application and development of an oral bait-delivered sylvatic plague vaccine; re-establishment of prairie dog prey in some locations.

BACKGROUND: Black-footed ferrets, one of the world's most endangered mammals, have recovered from just a few animals in 1987 to several hundred in captivity and in the wild at present. Recovery partners in the United States, Mexico, and Canada have contributed to reintroduction efforts at 24 sites.

REQUESTED SPECIFIC OUTCOMES:

United States:

1. Establish at least 4 additional reintroduction sites in conjunction with the Black-footed Ferret Programmatic Safe Harbor Agreement and other regulatory approaches.
2. Support sylvatic plague vaccine development for the conservation of prairie dogs via ongoing field experiments.
3. Support ongoing efforts by partner agencies to compensate landowners for prairie dog conservation; expand efforts from Colorado to at least two additional states.
4. Support ongoing efforts by partner agencies to perform strategic prairie dog control and disease management in areas associated with active black-footed ferret reintroduction

sites.

AGENDA ITEM PRESENTOR:

By telephone, if available: Eduardo Ponce Guevara, Ecología y Conservación de Fauna Silvestre Instituto de Ecología, UNAM, Carolyn Gaudet, Parks Canada.

In person: John Hughes, U.S. Fish and Wildlife Service, Bill Van Pelt, Grasslands Coordinator for the Western Association of Fish and Wildlife Agencies, and Dave Bergman, State Director for Arizona APHIS Wildlife Services.

SUBMITTED BY: John Hughes, U.S. Fish and Wildlife Service

10 – 10:15 am BREAK

(10:15 – 1:00 pm Table Reconvenes)

(10:15 am)

AGENDA ITEM 4: Update on Black-tailed prairie dog conservation: Grassland restoration, health and demographic assessment. (45 min)

COLLABORATORS & CONTACTS: Arizona Game and Fish Department, Sonora Commission of Ecology and Sustainable Development (CEDES), National University Autonomous of Mexico (UNAM), Janos Biosphere Reserve (CONANP), Endangered Species Office-CONANP, Dirección General de Vida Silvestre-SEMARNAT, Bureau of Land Management, USFWS, Arizona State Land Department, and the Western Association of Fish and Wildlife Agencies.

DESCRIPTION: In 2014, the Arizona Game and Fish Department (AGFD) continued with the re-establishment of black-tailed prairie dogs (BTPD) to the southeastern portion of Arizona. There were two trapping events, one in March and another in October to assess the health and determine the population of the three existing colonies of BTPD. There were a total of 92 individuals trapped in March and 140 trapped in October. The October event resulted in the highest population of BTPD since re-establishment began. Arizona also had the highest reproductive success with 192 pups emerging from their burrows. Colonies are continually monitored throughout the year by the AGFD and the University of Arizona. Grassland restoration has been on-going in grasslands surrounding the existing colonies. Grassland restoration includes removing invasive mesquite trees, rehabilitating grasses, and prescribed fires. To date, over 300 acres of grasslands have been restored and BTPD have quickly started to expand into these cleared areas. AGFD and the Bureau of Land Management will complete 700 acres by June 2016 with funding from the National Fish and Wildlife

Foundation.

AGFD traveled to Janos Biosphere Reserve in Chihuahua, Mexico in March and August 2014. The purpose of the trips was to collect blood samples from BTPD for genetic research and to meet with local BTPD researchers from UNAM to discuss the potential for BTPD translocations. AGFD is funding the University of Arizona to conduct genetic research on the similarity of BTPD in the southwest and across its range. One of the biggest challenges to BTPD re-establishment in AZ is source populations. AGFD has been trying to stay as genetically similar as possible to BTPD that were in AZ historically but the most recent genetic work across its range was completed in the early 1980's. Updated research may allow AGFD to expand its range for source populations. Genetic research should be completed in 2016.

AGFD is preparing a fourth site outside of Las Cienegas at Sands Ranch. This site is owned by Pima County and is an active cattle ranch. In 2015, AGFD will have public meetings to discuss the BTPD release with the local land owners, complete the necessary environmental clearances, and if possible will translocate animals from colonies in Janos, Chihuahua.

AGFD did not conduct any work in Sonora in 2014. CEDES indicated that our services were not necessary at this time.

AGFD participated in a workshop hosted by National Autonomous University of Mexico (UNAM). The goal of the workshop was to begin the process of standardizing methodologies for monitoring and managing BTPD in the southwest. Presentations were given by various groups on research, management techniques, and permitting. These presentations will be summarized and published.

The most important area for BTPD in Mexico is located in Janos, Chihuahua, and this is a key area for populations of several endangered species like, pronghorn, golden eagle and others. In recent years was observed a significant decrease of the populations of BTPD in the area, for this reason CONANP and UNAM joined efforts since 2013, to determine the causes of the reduction of the colonies, implementing actions to prevent potential risk to the populations.

BACKGROUND: In the US, AGFD began re-establishing BTPD in 2000. After extensive research was completed on the feasibility of re-establishment, the first BTPD were released in 2008 at the Las Cienegas National Conservation Area. Source populations have been from Ladder Ranch and McDonald Ranch in New Mexico and La Mesa colony in Sonora, MX. These colonies have been the source for the three existing colonies. A fourth colony was also started but failed due to a insufficient number of individuals to maintain it.

In México, at the 1980's decade, Janos held one of the largest black-tailed prairie dog colony complexes in North America, covering more than 55,000 hectares (135,907 acres). In 2005, they occupied 12,000 hectares (29,652 acres), and then in 2013, they occupy only 2,277 hectares (5,626 acres), less than 5 % of the area they occupied three decades prior. The complex has

become increasingly fragmented, and the population densities of prairie dogs have dramatically declined as a result of chronic overgrazing and repeated droughts that have occurred, especially over the last decade. In 2009, Sylvatic Plague was reported in a kit fox (*Vulpes macrotis*) carcass, and it was observed in counties near the Mexican border, that is why important monitoring the presence of plague in the region.

US, conservation efforts to control plague outbreaks include the “dusting method” to reduce the number of fleas (principal vector of the disease), and the application of an experimental oral vaccine. Both methods have shown positive results by reducing the incidence of plague on prairie dog colonies. For this reason the working group of BTPD in Mexico had a specific meeting with US participation in order to determine potential collaboration projects and establish binational coordination to early detect, management and prevention of these diseases in the area of Janos.

REQUESTED SPECIFIC OUTCOMES: In 2015, AGFD hopes to prepare the first colony outside of Las Cienegas and use colonies from Chihuahua as a source. AGFD will continue to work with Sonora and Mexico to establish standardized protocols for monitoring and managing BTPD in the southwest. AGFD will continue to work with Sonora and Chihuahua to monitor colonies as needed. AGFD will continue grassland restoration and aid UA in collection of genetic material for research.

México will provide information to the Trilateral Committee about the situation of the BTPD colonies in Janos Biosphere Reserve, and efforts generated by the working group. Mexican team will look forward to identify other potential alliances in the region, and get the support and collaboration of the Trilateral Committee to implement actions for management and threats reduction in the colonies in Janos.

AGENDA ITEM PRESENTORS:

Bill Van Pelt, WAFWA Grassland Coordinator, Arizona Game and Fish Department.
Eduardo Ponce. Instituto de Biología, UNAM. Lizardo Cruz, CONANP

SUBMITTED BY:

Bill Van Pelt, WAFWA Grassland Coordinator, Arizona Game and Fish Department
Oscar Ramírez & Lizardo Cruz (CONANP); Gerardo Ceballos & Eduardo Ponce, IE-UNAM.

(11:00 am)

AGENDA ITEM 5: Update - Sonoran Pronghorn Recovery in US and Mexico (30 min)

COLLABORATORS & CONTACTS: Sonoran Pronghorn Recovery Team, Arizona Game and Fish Department, USFWS – Arizona Ecological Services, Cabeza Prieta National Wildlife Refuge (CPNWR), Kofa National Wildlife Refuge (KNWR), Organ Pipe Cactus National Monument, Arizona Antelope Foundation, 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-SEMARNAT, Pinacate Biosphere Reserve-CONANP, and Endangered Species Office-CONANP.

DESCRIPTION: To work toward recovery of the Sonoran pronghorn range wide, the collaborators propose to continue binational monitoring (including telemetry) efforts, continuing a captive breeding program within the CPNWR and KNWR and subsequent releases in the wild, conducting training efforts in survey methodology and other important wildlife management practices for collaborators in Mexico. In addition, collaborators will work on updating the Sonoran pronghorn Population Viability Analysis, Population and Habitat Viability Assessment and Recovery Plan. All products will address the Sonoran pronghorn rangewide, including in Arizona and Sonora. Partners will explore the possibility of sending some pronghorns from the captive breeding pens in Arizona to Sonora. A coordination meeting between US and Mexico partners is scheduled in March 2015 to discuss future binational collaborations. This agenda item is an update on progress made on binational conservation activities.

BACKGROUND: Sonoran pronghorn are endangered in both the U. S. and Mexico. As part of a binational effort in recovery, partners have implemented several successful binational efforts aimed at recovery of the subspecies in both countries. These activities include: conducting range-wide surveys in both countries on a two-year interval, equipping Sonoran pronghorn with GPS-based and VHF telemetry collars in Mexico and the U.S., implementing a captive breeding program in Arizona to provide offspring to augment wild populations in Arizona and Sonora, implementing forage enhancement and water projects, conducting genetic and diseases studies, and providing training efforts in survey methodology and other important wildlife management practices for collaborators in Mexico. These initiatives have been supported by the Trilateral Committee for Wildlife and Ecosystem Conservation and Management for more than a decade.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to continue working on binational Sonoran pronghorn recovery.

AGENDA ITEM PRESENTOR: Jim deVos and Francisco Abarca, Arizona Game and Fish Department

SUBMITTED BY: Jim deVos, Mike Rabe, John Hervert, Jill Bright, and Francisco Abarca, Arizona Game and Fish Department; USFWS - Jim Atkinson, Cabeza Prieta National Wildlife Refuge and Erin Fernandez, Arizona Ecological Services Office; Rogelio Molina, Cristina Melendez, Eberardo Sánchez, CEDES; Oscar Ramírez, Lizardo Cruz, Federico Rodríguez, CONANP, Organ Pipe Cactus National Monument.

(11:30 am)

AGENDA ITEM 6: Continental Scale Bison Conservation (45 min)

COLLABORATORS & CONTACTS:

Glenn Plumb, Chief Wildlife Biologist, National Park Service (United States)

Steve Torbit, Assistant Regional Director, Mountain-Prairie Region, US Fish and Wildlife Service (United States)

Keith Aune, Chair, IUCN North American Bison Species Specialist Group (United States)

Oscar M. Ramírez Flores, Priority Species Director, National Commission of Natural Protected

Areas (CONANP) (Mexico)

Lizardo Cruz Romo, Priority Species Deputy-Director, CONANP (Mexico)

Martín Sánchez Vilchis, Priority Species Chief of Department, CONANP (Mexico)

Jesus Antonio Esquer (BSc), Responsible of the Ecological Reserve “Rancho El Uno”, TNC, The Nature Conservancy.

Additional Proposed Collaborators:

Justina Ray, Co-Chair, COSEWIC Terrestrial Mammal Committee (Canada)

Thomas Jung, Senior Wildlife Biologist, Yukon Department of Environment (Canada)

Gerardo Ceballos Gonzalez, Instituto de Ecología (Mexico)

Rurik List, Autonomous Metropolitan University -Lerma (Mexico)

DESCRIPTION: The SCCC Working Table is the appropriate forum to examine recent advances in bison conservation across historic range in Canada, Mexico and United States. Each nation has achieved notable advances within the past five years, yet there is need for enhanced international cooperation and collaboration for conservation of wild and ranging bison at the continental scale.

BACKGROUND: Recent advances in science and stewardship have identified opportunities and challenges for conservation of wild and ranging bison on large landscapes across North American historic range. These include a comprehensive Status Review and Conservation Guidelines published by the IUCN NA Bison Species Specialist Group (2010) and ongoing IUCN Red List assessment (2014-15); the US Department of Interior Bison Report (2014); the Yellowstone bison brucellosis quarantine feasibility study and Environmental, Assessment (2010-2015); the NPS Call-to-Action for wild bison restoration (2011-2016); collaboration among NPS, TNC and Mexican partners for restoration of bison genetically pure herd at the Janos Biosphere Reserve (ongoing). Action Program for Conservation of Bison in Mexico (PACE: Bisonte) throw herd management on the historical rage, among local landowners, NGOs, universities and Mexican Government; PACE: Bisontete is supported by the Species at Risk Conservation Program (PROCER). The American Bison Society meeting on shared stewardship (2013); the new Northern Tribes Buffalo Treaty (2014); pending ESA petitions to list the Yellowstone bison in the U.S.; and pending COSEWIC review and listing decisions for plains and down-listing for wood bison; and US Fish and Wildlife Service and the Bureau of Land Management in Alaska collaboration with the Alaska Department of Fish and Game and other stakeholders to develop a plan for reintroducing an experimental non-essential population of wood bison into western Alaska.

REQUESTED SPECIFIC OUTCOMES: Identify opportunities for Canada, Mexico and United States to develop formal and informal cooperation for conservation activities and outcomes towards comprehensive conservation of the North American bison genome at multiple spatial scales and jurisdictions.

AGENDA ITEM PRESENTOR:

Glenn Plumb, National Park Service; Steve Torbit, US Fish and Wildlife Service; Lizardo Cruz Romo, CONANP; Antonio Esquer, TNC

SUBMITTED BY:

Glenn Plumb, PhD, National Park Service, glenn_plumb@nps.gov, 970-267-7203
 Steve Torbit, PhD, U.S. Fish and Wildlife Service, stephen_torbit@fws.gov, 303-236-4602
 Lizardo Cruz Romo, M Sc, National Commission of Natural Protected Areas,
jcruz@conanp.gob.mx, +52 55 54437071

(12:15 pm)

AGENDA ITEM 7: Update on Ocelot Recovery Actions (30 min)

COLLABORATORS & CONTACTS: Dirección General de Vida Silvestre, Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Comisión Nacional de Áreas Naturales Protegidas, Procuraduría Federal de Protección al Ambiente, U.S. Fish and Wildlife Service, U.S. Geological Survey, State of Tamaulipas, Texas Parks and Wildlife Department, Arizona Game and Fish Department, The Nature Conservancy, Conservación y Desarrollo de Espacios Naturales, Universidad Nacional Autónoma de México, Universidad Autónoma de Queretaro, Instituto Tecnológico de Ciudad Victoria, Texas A&M University-Kingsville, Northern Arizona University, University of Arizona, Pittsburgh Zoo & PPG Aquarium, Gladys Porter Zoo, Tamatan Zoo.

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 and Mexico.

BACKGROUND: The ocelot is endangered in the U.S. and Mexico. There are now three known breeding subpopulations remaining in Texas, and these subpopulations are vulnerable to disease and in-breeding. Several ocelots have been documented in Arizona. Populations in some parts of Mexico appear stable. Translocation of ocelots from Mexico to Texas is identified in the draft Ocelot Recovery Plan as a necessity to lower the risk of extinction of the Texas populations.

Partners have identified populations of ocelots in northern Mexico that are able to serve as a potential source of ocelots for at-risk populations while other partners are providing updated population status to meet recovery goals and objectives including translocation between populations. Partners are also focused on reducing road mortality, increasing available habitat, increasing connectivity and supporting partnerships.

REQUESTED SPECIFIC OUTCOMES: 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.

AGENDA ITEM PRESENTOR: Mitch Sternberg

SUBMITTED BY: Mitch Sternberg, Hilary Swarts, Erin Fernandez, (USFWS); Maria Araujo (TPWD); Mike Rabe, Tim Snow (AZGFD); Carlos Lopez-Gonzalez (UAQ)

(12:45 pm)

AGENDA ITEM 8: Update on Ocelot Recovery in Tamaulipas, MX (15 min)

1 – 2:15 pm LUNCH

(2:15 – 3:45 pm Table Reconvenes)

(2:15 pm)

AGENDA ITEM 9: Update Northwestern Jaguar Recovery (30 min)

COLLABORATORS & CONTACTS: USFWS (Arizona and New Mexico Ecological Services Office) and USFWS-led Binational (Mexico – U.S.) Jaguar Recovery Team (including CONANP [Priority Species and ANPs], Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora, SAGARHPA, Universidad de Querétaro, Naturalia, Arizona Game and Fish and Department, New Mexico Department of Game and Fish, Panthera, Northern Arizona University, Arizona State University, U.S. Forest Service, Bureau of Land Management, USDA/APHIS-Wildlife Services, Customs and Border Protection, the Tohono O’odham Nation, and others)

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. to conserve and recover jaguars.

Specifically, this year we propose to:

- 1) Complete a draft recovery plan for the jaguar, with emphasis on jaguars in western and northwestern México and southwestern U.S.; and
- 2) Continue implementing recovery actions for the jaguar, including completing the following contracted projects: 1) jaguar survey and monitoring in Arizona and New Mexico; 2) jaguar survey and monitoring on the Tohono O’odham Nation; 3) jaguar survey protocol development; 4) survey of citizens’ attitudes toward jaguars in Arizona and New Mexico; 5) jaguar habitat mapping and on-line jaguar detection database development; 6) jaguar population viability analysis; 7) jaguar road crossing design recommendations; 8) rancher/landowner outreach; 9) citizen science/education and outreach program; and 10) jaguar genetic analysis.

BACKGROUND: In January 2010, the USFWS made the decision to develop a formal recovery plan for the jaguar and we are currently in the process of carrying out this effort. In 2010, we convened a binational recovery team for jaguars with participants from México and the U.S. Since 2011, we have held a number of meetings with the Jaguar Recovery Team during which a habitat model was developed and a Population Viability Analysis (PVA) and Population and Habitat Viability Assessment (PHVA) were conducted. Using information from the meetings and the habitat model, PVA, and PHVA, the Jaguar Recovery Team and the USFWS developed a recovery outline for the jaguar in 2012. The Team continues to develop the draft recovery plan, which will be completed in 2015, as well as provide guidance on implementation

of recovery projects.

Additionally, the USFWS has been working with Customs and Border Protection to implement projects to help offset the effects of border infrastructure projects on listed species, including the jaguar. Multiple projects are being implemented (see list above), including jaguar survey and monitoring along the Arizona and New Mexico border with México. These projects will be completed in 2015. Final reports from these projects will be posted on <http://www.fws.gov/southwest/es/arizona/Jaguar.htm>.

REQUESTED SPECIFIC OUTCOMES: 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 jaguars, including developing a recovery plan and implementing recovery actions for jaguars with emphasis in western and northwestern México and southwestern U.S.

AGENDA ITEM PRESENTOR: Arizona Ecological Services Office - Tucson

SUBMITTED BY: Marit Alanen, Arizona Ecological Services Office, USFWS; and the Jaguar Recovery Team

(2:45 pm)

AGENDA ITEM 10: USFWS Arizona Field Office Activities Update - Conservation and capacity building for the conservation of amphibians in Sonora, Sinaloa, and Chihuahua. *(12 min)*

COLLABORATORS & CONTACTS: USFWS, Naturalia, SEMARNAT, CONANP (including Priority Species and Áreas Naturales Protegidas of Northwestern México), INE, CONABIO, Comisión de Ecología y Desarrollo Sustentable del Estado de Sonora (CEDES), Universidad Nacional Autónoma de México, Universidad Autónoma de Querétaro, The Phoenix Zoo, Arizona-Sonora Desert Museum, Africam Safari Zoo, The Nature Conservancy, and Biodiversidad y Desarrollo Armónico.

DESCRIPTION: We propose to continue our efforts to build capacity for amphibian conservation in northwestern México; however, this will depend on current travel and budget restrictions improving. Specifically, we plan to continue to teach our workshop titled “Inventory, Monitoring, and Conservation of Amphibians of Northwestern México, with Emphasis in Sonora,” at Naturalia’s Rancho Los Fresnos in northeastern Sonora, México. The workshop is designed for biologists and managers from Areas Naturales Protegidas in Sonora, Sinaloa, and Chihuahua, CEDES, and Mexican NGOs, as well as Mexican university biology students. It includes theoretical and practical sessions on the following topics: Diversity, Distribution, and Habitats of Northwestern México Amphibians; Identification of Northwestern México Amphibians; Threats to Northwestern México Amphibians; Survey Methodologies; Field Protocols for Preventing Spread of Disease and Invasive Plants and Animals; Long-term Amphibian Monitoring Strategies for Reserves and other managed areas; Conservation Tools and Methods; and Captive management, including husbandry, headstarting, and propagation. We will also continue our field-oriented Amphibian Survey and Monitoring Techniques Workshop at Naturalia’s Northern Jaguar Reserve or other sites, such as state reserves or other

important protected areas, in Sonora as determined in cooperation with project partners. This workshop instructs Mexican biologists in techniques for detecting, identifying, and monitoring amphibians. As follow-up to the workshops, we will continue to support implementation of amphibian monitoring in protected areas in Mexico by conducting site visits to assist reserve biologists develop monitoring programs and by providing some of the necessary basic monitoring equipment to reserve staff.

We also plan to continue to conduct amphibian inventories at various ranches and reserves in Sonora and Chihuahua to provide data to land managers to inform management and conservation decisions. During these inventories, we propose to document non-native predators (bullfrogs, fish, and crayfish) and to use non-invasive

sampling techniques (by swabbing skin with cotton swab) to collect disease and skin microbe samples. We propose to assess the status of the Chiricahua leopard frog (*Lithobates chiricahuensis*) and its primary threats in Sonora and Chihuahua to provide a baseline for conservation planning and actions, as well as conduct outreach and environmental education for local communities and ranchers about the imperiled status of the frog and the need to conserve the species and its habitat. Additionally, we plan to coordinate with Mexico on conserving the distinct population segment (DPS) of the Arizona treefrog, including during the Endangered Species Act listing process to determine the status of and the threats to the DPS in Mexico.

BACKGROUND: Fourteen of the 37 amphibian species that have been documented in Sonora are on México's list of species-at-risk; the Chiricahua leopard frog is on the U.S. endangered species list as well. A number of these species are thought to be declining; however, relatively little is known of their status in Sonora. To better understand their status, as well as to build capacity for amphibian conservation in Northwestern México, we have been conducting amphibian inventories for a number of years in Sonora to provide information to land managers, and for the last three years, we have taught an amphibian monitoring and conservation workshops. As described above, this year we will continue our amphibian survey and conservation capacity building efforts in Sonora, Sinaloa, and Chihuahua.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to continue our efforts to monitor and conserve amphibians as well as build capacity for their conservation in Sonora, Sinaloa, Chihuahua.

AGENDA ITEM PRESENTOR: Cat Crawford, Arizona Ecological Services Office

SUBMITTED BY: Arizona Ecological Services Office, USFWS; Gerardo Carreón, Naturalia; Cristina Melendez, CEDES; Stewart Wells, The Phoenix Zoo; Jim Rorabaugh, Tucson Herpetological Society; Erin Muths and Blake Hossack, U.S. Geological Survey

(2:55 pm)

AGENDA ITEM 11: USFWS Arizona Field Office Activities Update - Conservation and capacity building for the conservation of bats in northwestern Mexico. (12 min)

COLLABORATORS & CONTACTS: USFWS (Arizona Ecological Services Office and Kofa National Wildlife Refuge), Naturalia, Arizona Game and Fish Department, Comisión de Ecología

y Desarrollo Sustentable del Estado de Sonora (CEDES), Universidad Nacional Autónoma de México (UNAM), Universidad Autónoma de Querétaro, University of Arizona, The Phoenix Zoo, CONANP (including Priority Species and Áreas Naturales Protegidas of Northwestern México), DGVS, INE, CONABIO.

DESCRIPTION: We propose to continue our efforts to build capacity for bat conservation in northwestern Mexico; however, this will depend on current travel and budget restrictions improving. Specifically, we will continue to teach bat a monitoring and conservation workshop and conduct bat inventories at Naturalia's Los Fresnos Reserve. Additionally, we will continue to conduct site visits to Federal Reserves in northwestern Mexico to assist reserve staff establish bat monitoring protocols. The week-long workshop at Los Fresnos, designed for biologists and managers from Áreas Naturales Protegidas in northwestern Mexico, CEDES, Mexican NGOs, as well as biology students from the Universidad de Sonora and Centro de Estudios Superiores Del Estado de Sonora, includes both theoretical and practical sessions on a variety of topics, including natural history, distribution and identification of appropriate bat species, threats (including the emerging threat of white-nose syndrome and the need for monitoring and precautions), survey and monitoring techniques, and specific management tools and practices. In addition to building capacity for bat conservation in northwestern México, the workshop will also provide networking opportunities to Sonoran, Sinaloan, and Chihuahuan organizations to increase collaborations and viability of monitoring and other projects. As follow-up to the workshop, we will continue to support implementation of bat monitoring in protected areas in Mexico by conducting site visits to assist reserve biologists develop monitoring programs and by providing some of the necessary basic monitoring equipment to reserve staff.

We also plan to continue our bat conservation work in Ajos Bavispe and Alamos, Sonora with CONANP and PRONATURA.

BACKGROUND: Bats, many species of which are considered to be at-risk, are an integral part of ecosystems throughout the world and provide significant ecological services, such as pollination and seed dispersion. Maintaining their presence is critical to the health and function of these systems; however, information on the distribution and status of many bats in northwestern México remains scarce with some exceptions. For example, the lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*), listed as threatened by Mexico and endangered by the U.S., has been the subject of long-term monitoring and conservation in Sonora. To add to this and other bat survey and conservation efforts in northwestern Mexico, for the last five years, we have provided training to Mexican Reserve managers and biologists as well as University students in bat monitoring and conservation techniques and have conducted bat inventories at protected areas in Sonora to facilitate the conservation of bats in the region. As described above, this year we plan to continue our bat conservation capacity building efforts in northwestern Mexico, including conducting workshops and site visits to protected areas.

Our work in Alamos has included inventory and monitoring projects (Alamos area), protection of a *Leptonycteris curasoae yerbabuenae* maternity colony (La Aduana), training of local biologists and reserve managers (CONANP and RRONATURA), and the presentation of educational talks and demonstrations to educators and schools (Alamos and surrounding area). We have provided educators with education and natural history material and biologists the equipment necessary for the fieldwork. We have discussed vampire bat issues and the current eradication programs with the local Cattle Rancher's Association.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to continue and expand our efforts to monitor and conserve bats as well as to build capacity for their conservation in northwestern Mexico.

AGENDA ITEM PRESENTOR: Scott Richardson, Arizona Ecological Services Office – Tucson

SUBMITTED BY: Arizona Ecological Services Office, USFWS; Christa Weise, Kofa National Wildlife Refuge, USFWS

(3:05 pm)

AGENDA ITEM 12: USFWS Arizona Field Office Activities Update - Binational partnerships to recover and conserve listed and sensitive species of mutual concern in Sonora, Sinaloa, Chihuahua, and Arizona. (12 min)

COLLABORATORS & CONTACTS: USFWS (including Arizona Ecological Services Office, Sonoran Joint Venture, Arizona Fisheries Resources Office, Imperial National Wildlife Refuge, Cabeza Prieta NWR, Kofa NWR, Buenos Aires NWR, and San Bernardino NWR), SEMARNAT, DGVS, CONANP (including Priority Species, Reserva de la Biosfera del Pinacate y Gran Desierto de Altar, Reserva de la Biosfera del Alto Golfo de California y Delta del Río Colorado [RBAG], and El Bosque Nacional y Refugio de Vida Silvestre Los Ajos-Bavispe, Área de Protección de Flora y Fauna Sierra de Álamos-Río Cuchujaqui), INE, CONABIO, National Park Service-Organ Pipe Cactus National Monument, U.S. Geological Survey, Arizona Game and Fish Department, Comisión de Ecología y Desarrollo Sustentable del Estado de **Sonora**, University of Arizona, Universidad Nacional Autónoma de México, Tecnológico de Monterrey, Universidad de Sonora, Naturalia, Africam Safari Zoo, The Phoenix Zoo, Arizona-Sonora Desert Museum, Sky Island Alliance, Pronatura, Biodiversidad y Desarrollo Armónico, Bat Conservation International, Sonoran Institute, La Ruta de Sonora Ecotourism Association, International Sonoran Desert Alliance, and the Center for the Study of Deserts and Oceans.

DESCRIPTION: We propose to continue working with our governmental and non-governmental partners at local, state, and Federal levels in México and the U.S. to conserve and recover listed and sensitive species of mutual concern and migratory birds throughout their ranges in Arizona, Sinaloa, Sonora, and Chihuahua.

Under this agenda item we propose to continue the following actions:

- 1) Support the conservation efforts of land owners and managers in México by assisting with biological surveys on their ranches and reserves, as well as providing technical assistance on species conservation and recovery efforts, such as the reestablishment of species within their historical range;
- 2) Build capacity for conservation of the flat-tailed horned lizard through education, outreach, and collaborative development and implementation of a management plan in México for the species, in conjunction with a variety of State and Federal agencies in Arizona and California, Pronatura, and the RBAG;
- 3) Assist AGFD and other U.S. and Mexican partners in developing a plan to augment captive breeding and wild populations of pygmy-owls in the U.S. with owls from

Mexico;

- 4) Support our partners in conducting Sonoran pronghorn monitoring and conservation in Sonora and Arizona, including completing the revised Sonoran Pronghorn Recovery Plan which will address the Sonoran pronghorn rangewide, including in Arizona and Sonora;
- 5) Work with Mexican partners and AGFD to assist seeking funding opportunities for thick-billed parrot recovery work in Mexico;
- 6) Assist our Mexican partners (Africam Safari) in managing the captive breeding of masked bobwhite quail in Mexico;
- 7) Work with Mexican partners to assess the status of yellow-billed cuckoos in Mexico; and
- 8) Coordinate with Mexico on monitoring and conserving rare plants of mutual concern, including *Lilaeopsis schaffneriana* ssp. *recurva*, *Coryphantha robbinsorum*, *Coryphantha scheeri* var. *robustispina*, *Echinomastus erectocentrus* var. *acunenensis*, *Graptopetalum bartramii*, *Pectis imberbis*, and *Amourexia gonzalezii*.

In addition to the aforementioned activities and those described in our other agenda items, we plan to work with our partners on lesser long-nosed bat, black-tailed prairie dog, and Acuña cactus conservation efforts.

BACKGROUND: It is critical to work cooperatively with our Mexican and U.S. partners to conserve and recover the many listed and sensitive species that occur on both sides of the international border. These species include the Sonoran pronghorn, jaguar, ocelot, lesser-long nosed bat, black-tailed prairie dog, cactus ferruginous pygmy-owl, masked bobwhite, Mexican spotted owl, southwestern willow flycatcher, Yuma clapper rail, thick-billed parrot, yellow-billed cuckoo, Aplomado falcon, bald eagle, Arizona tree frog, Sonoran tiger salamander, Chiricahua leopard frog, Tarahumara frog, lowland leopard frog, Sonoyta mud turtle, New Mexico ridge-nosed rattlesnake, Mexican gartersnake, flat-tailed horned lizard, desert tortoise, Quitobaquito pupfish, Río Yaqui fishes, Sonora chub, Gila chub, Gila topminnow, Acuña cactus, Canelo Hills Ladies' Tresses, Tumamoc globeberry, Gentry indigo bush, Pima pineapple cactus, Cochise pincushion cactus, Nichol Turk's Head, Bartrom stonecrop, beardless chinchweed, Huachuca water umbel, Santa Rita yellowshow, and Coleman's coralroot. We have successfully been, and propose to continue, working with our Mexican and U.S. partners to monitor and conserve many of these species.

REQUESTED SPECIFIC OUTCOMES: The Arizona Ecological Services Office, USFWS, seeks the endorsement of the Trilateral Committee to continue working with our governmental and non-governmental partners at local, state, and Federal levels in México and the U.S. to conserve and recover listed and sensitive species of mutual concern and migratory birds throughout their ranges in Arizona, Sonora, Sinaloa, and Chihuahua.

AGENDA ITEM PRESENTOR: Arizona Ecological Services Office – Tucson

SUBMITTED BY: Erin Fernandez, Cat Crawford, Doug Duncan, Julie Crawford, Susan Sferra, and Scott Richardson, Arizona Ecological Services Office; James Atkinson, CPNWR; Christa Weise, Kofa NWR, USFWS

(3:15 pm)

AGENDA ITEM 13: USFWS Arizona Field Office Activities Update - Conservation of the

imperiled species of the Río Sonoyta watershed, Sonora/Arizona. (12 min)

COLLABORATORS & CONTACTS: USFWS, SEMARNAT, CONANP-Reserva de la Biosfera del Pinacate y Gran Desierto de Altar (RBPGBDA) 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, The Phoenix Zoo, Arizona-Sonora Desert Museum, Monte Sonorense, La Ruta de Sonora Ecotourism Association, International Sonoran Desert Alliance, the Center for the Study of Deserts and Oceans, and National Park Service-Organ Pipe Cactus National Monument (OPCNM), Dr. Chuck Minckley, CETMAR Puerto Peñasco.

DESCRIPTION: We propose to continue our efforts to conserve the imperiled species of Río Sonoyta watershed, including the Sonoyta mud turtle (*Kinosternon sonoriense longifemorale*), longfin dace (*Agosia chrysogaster*), and Sonoyta [Quitobaquito] pupfish (*Cyprinodon eremus*). These efforts include monitoring populations of these species in Sonora and Arizona; monitoring and managing the three refuge populations of pupfish and dace in Sonora and two permanent and three temporary pupfish refuges in Arizona; working with the municipal government of Sonoyta, Sonora and others to incorporate and implement conservation measures for these species into the design of a proposed wastewater treatment facility in Sonoyta; managing and maintaining Quitobaquito Springs and Pond in Arizona; finalizing and implementing the Quitobaquito-Río Sonoyta Conservation Assessment and Strategy; and working toward the development and implementation of a community-based restoration and conservation plan for the Río Sonoyta for the benefit of native species and the local community. New plans for 2014 include creating a refuge and breeding population for longfin dace at CETMAR Puerto Peñasco.

BACKGROUND: The Río Sonoyta watershed and Quitovac, an extremely rare and threatened lowland desert stream and spring system in northwestern Sonora and southwestern Arizona, support the only wild populations of Sonoyta mud turtle and Sonoyta pupfish. In recognition of its importance, it is a designated Ramsar wetland of international significance. To address the many threats the Río and its species face, as described above, we have been and plan to continue developing and implementing a variety of conservation programs and projects.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to continue and expand our efforts to conserve the imperiled species of Río Sonoyta.

AGENDA ITEM PRESENTOR: Doug Duncan and Cat Crawford, Arizona Ecological Services Office - Tucson

SUBMITTED BY: Arizona Ecological Services Office, USFWS; Federico Godinez and Izar Aguirre, RBPGBDA; Cristina Jones and Ross Timmons, AGFD; Cristina Melendez, CEDES; Phil Rosen, University of Arizona; Tim Tibbitts, OPCNM; Paloma Valdivia Jimenez, CEDO.

(3:25 pm)

AGENDA ITEM 14: USFWS Arizona Field Office Activities Update - Native aquatic vertebrate conservation in the Río Yaqui basin, Sonora, Chihuahua, and Arizona. (12 min)

COLLABORATORS & CONTACTS: Universidad de Sonora (UNISON), University of

Arizona, Arizona Game and Fish Department (AGFD), Comisión de Ecología y Desarrollo Sustentable del Estado de **Sonora** (CEDES), USFWS (Arizona Ecological Services Office [AESO], New Mexico and Arizona Fish and Wildlife Conservation Offices [NMFWCO and AZFWCO], San Bernardino National Wildlife Refuge), Texas Natural Science Center-University of Texas at Austin, Chuck Minckley with Cuenca Los Ojos, Desert Fishes Council, Marsh & Associates, LLC., SEMARNAT, DGVS, CONANP, Institute of Aquaculture of Sonora

DESCRIPTION: We propose to re-survey sites in the Río Yaqui basin that were initially surveyed by Hendrickson et al. 1980 for Fishes of the Río Yaqui basin, Mexico and United States [Ariz.-Nev. Acad. Sci. 15(3):1-106]. They surveyed 90 sites in México, and compiled information for about 70 other sites from museums and the literature. Since their surveys in 1978, fish surveys in the basin have been limited to surveys for Mexican trouts by Truchas Mexicanas (Hendrickson et al. 2006), work on Yaqui catfish genetics (Varela Romero), the Río Tutuaca (Brooks and Varela Romero), and private lands conservation efforts on Cajon Bonito and Rancho San Bernardino (Minckley). Wallace et al. and USFWS personnel have done amphibian and chytrid fungus surveys on the Río Aros and other tributaries to the Río Yaqui, including drainages on the Northern Jaguar Reserve, and Rorabaugh (AESO) has compiled all herpetological records from 26 museums for the Río Yaqui basin in Sonora. In 2007, Rorabaugh and others surveyed for gartersnakes at 12 sites in western Chihuahua, including several of Hendrickson's sites, and made notes on fishes and non-native species. Information would also be gathered on other native aquatic species of concern such as leopard frogs, Tarahumara frogs, salamanders, turtles, and gartersnakes. Limited work has been done on the non-fish native aquatic species.

Many changes have occurred in the Río Yaqui basin since the 1978 surveys. Human activities and their impacts to aquatic ecosystems and their native species have increased in the basin since 1978. Of special concern is the increase in non-native fish, since they almost always pose threats to native fish and other native aquatic species. The distributions of the non-native American bullfrog and crayfish are also of conservation interest. Updated information on the distribution and relative abundance of both native and non-native species will greatly assist with conservation efforts for native Río Yaqui species by understanding threats and mitigating them with local stakeholders.

BACKGROUND: Though a small percent of the Río Yaqui basin lies within the United States, the 6 to 8 fish species that occurred there contributed a substantial portion of the basin's fish fauna; five of those occurred nowhere else in the U.S. Currently, five of these occur in U.S., four of which are listed under the U.S. Endangered Species Act. The Río Yaqui basin has the largest drainage area in the state of Sonora. Thus, the species there contribute greatly to the aquatic diversity of the state.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to continue and expand our efforts to survey and conserve the imperiled native aquatic vertebrates of the Río Yaqui basin.

AGENDA ITEM PRESENTOR: Doug Duncan, Arizona Ecological Services Office - Tucson

SUBMITTED BY: Arizona Ecological Services Office, USFWS; Jim Brooks, NMFWCO USFWS; Alejandro Varela, UNISON; Jeff Sorensen, Native Fish Program Manager and

Francisco Abarca, AGFD

3:45 – 4 pm Break

(4 – 5 pm Table Reconvenes)

(4 pm)

AGENDA ITEM 15: Update on Mexican Wolf Recovery in the US and México. (40 min)

COLLABORATORS & CONTACTS: USFWS Mexican Wolf Recovery Program, Dirección General de Vida Silvestre (Semarnat), Dirección de Especies Prioritarias para la Conservación-CONANP, Arizona Game and Fish and Department, U.S. Forest Service, White Mountain Apache Tribe, USDA-APHIS Wildlife Services, San Carlos Apache Tribe, and others.

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. to recover Mexican wolves in the U.S. and México.

Specifically, this year we propose to:

- 1) Work with Scientists in the U.S. and México to continue assessment of the suitability of habitat and ungulate populations in areas of México for Mexican wolf recovery.
- 2) Implement recovery actions for the Mexican wolf in the U.S. and México.
- 3) Continue México/U.S. collaboration to manage the captive breeding population of Mexican wolves in both countries in accordance with the Mexican Wolf Species Survival Plan
- 4) Continue collaboration among USFWS, CONANP, and AGFD on the release of wolves in México and enable coordination among USFWS, CONANP, State wildlife agencies in Arizona and New Mexico, and USDA –APHIS Wildlife Services should those wolves disperse into the U.S.
- 5) The USFWS listed the Mexican wolf as an endangered subspecies under the Endangered Species Act in January 2015. The USFWS also revised the Mexican Wolf Experimental Population rule in January 2015. Revisions include expanding the southern boundary of the Mexican Wolf Experimental Population Area from Interstate Highway 10 to the U.S./México border. These revisions enable the management of Mexican wolves that may disperse from México into the United States for recovery of the Mexican wolf.

BACKGROUND: Scientists from both countries have been collaborating on the analysis of habitat and ungulate populations to determine areas suitable for wolf recovery in México. The U.S. collaborates with México to manage the approximately 55 captive breeding facilities in the United States and México, which house 250- 300 wolves for eventual release into the wild. All of these wolves are managed in accordance with the Mexican Wolf Species Survival Plan. The U.S. collaborates with México on the implementation of recovery actions for the Mexican wolf in the United States and México. In 1998, the U.S. completed the first release of Mexican wolves into the Mexican Wolf Experimental Population Area, and in October 2011, CONANP

completed the first release of wolves in México, achieving the first litter in the wild during the 2014, since their extirpation. The SSP breeding facilities have continued to provide Mexican wolves to CONANP and to the USFWS for release into the wild.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to work with non-governmental and governmental partners at local, state, and Federal levels in México and the U.S. to conserve and recover Mexican wolves.

Specifically, we request endorsement of our proposal to work with Scientists in both countries to assess areas that have suitable habitat and ungulate populations for recovery of Mexican wolves; implement recovery actions, including releases, for Mexican wolves in the U.S. and México; continue collaboration on management of the captive Mexican wolf population for releases of Mexican wolves in the U.S. and México; and coordinate on the release of Mexican wolves in México and their management in the U.S., should those wolves disperse north into the U.S.

AGENDA ITEM PRESENTOR: Sherry Barrett and Jesus Lizardo Cruz Romo

SUBMITTED BY: Sherry Barrett, Oscar Ramirez, Lizardo Cruz, Jim deVos

(4:30 pm)

AGENDA ITEM 16: Update - Work Session of Border Governors Wildlife Table (20 min)

COLLABORATORS & CONTACTS: Arizona Game and Fish Department, California Department of Fish and Game, New Mexico Department of Game and Fish, Texas Parks and Wildlife Department, Baja California Secretariat of Environmental Protection, Chihuahua Secretariat of Urban Development and Ecology, Coahuila Secretariat of Urban Development and Ecology, Parks and Wildlife of Nuevo León, Sonora Secretariat of Agriculture, Tamaulipas Wildlife Commission, Dirección General de Vida Silvestre-SEMARNAT and U.S. Fish and Wildlife Service.

DESCRIPTION: At the work session of the Border Governors Wildlife Table held in February 2015 during the Safari Club International (SCI) convention, the SCI-International Affairs and Development Committee asked the Texas Parks and Wildlife Department (TPWD) to continue coordinating this annual meeting and invited all Mexican states as well as Mexico's federal wildlife agencies to the 2016 convention to discuss wildlife research proposals with the SCI Foundation to explore opportunities for collaboration. Currently, Latin America is a priority region for SCI/SCIF. The Trilateral meeting is an outstanding vehicle to officially extend this invitation to Mexico.

BACKGROUND: The U.S.-Mexico Border Governors Conference is comprised of the governors in the 10 border states and the Wildlife Table, established in 2004, is comprised of the wildlife directors those border states. In 2007, SCI invited the Wildlife Table to have a seminar at the SCI convention to promote the hunting opportunities in the Mexican border states. The following year, the annual donation of booth space for the Mexican states commenced. Over the years, the wildlife conservation issues discussed have broadened beyond game species and the Mexican states received SCI funds to train two cadets in the Texas Game Warden Academy. The Mexican states are currently looking for funding for a number of wildlife research projects and

the SCIF is a potential funding partner.

REQUESTED SPECIFIC OUTCOMES: The BGC Wildlife Table requests continuing support by the Trilateral Committee to use this forum for information exchange and intergovernmental coordination.

AGENDA ITEM PRESENTOR: María Araujo, Texas Parks and Wildlife Department

SUBMITTED BY: María Araujo, Texas Parks and Wildlife Department

Co-chair wrap-up

Tuesday, April 14, 2015

Room: Cortez 1A

(10:45 – 1:00 pm Table Convenes)

(10:45 am)

AGENDA ITEM 17: Update on the Migratory Dragonfly Partnership monitoring and outreach projects in Canada, the US, and Mexico (30 min)

COLLABORATORS & CONTACTS: Scott Black, sblack@xerces.org; Greg Butcher, gbutcher@fs.fed.us; Elisa Peresbarbosa eperesbarbosa@pronaturaveracruz.org, Celeste Mazzacano, celeste@xerces.org;

DESCRIPTION: We will report on the results of the first three years of the Migratory Dragonfly Partnership monitoring and outreach projects in Canada, the US, and Mexico, lessons learned, and our plans to expand and extend the program.

BACKGROUND: Dragonfly migration in North America is an understudied phenomenon. Little is known about all aspects of this process, including key overwintering locations, the southern extent of migration, triggers and pathways for migration, and the degree and causes of differences in the intensity and timing of migration but the Migratory Dragonfly Partnership (MDP) is changing this. Since 2011, MDP has combined research, citizen science, education, and outreach to better understand North America's migrating dragonflies, and to promote conservation of the wetland habitats on which they rely. Our work is revealing more details of this amazing process, and raising awareness of freshwater habitats and their importance to humans and wildlife. The main migratory species in North America are wetland-dependent, and although these dragonflies are currently widespread and abundant, their habitats are among the most threatened on the continent. Ongoing surveys by citizen scientists across North America coordinated by MDP will also enable us to detect the first changes in range or status that may occur due to impacts from climate change and habitat loss, which will better enable us to work toward the conservation of these animals and their habitats.

REQUESTED SPECIFIC OUTCOMES: Dissemination of information and invitations to participate in upcoming MDP workshops in Mexico in the summer of 2015; additional public

and private conservation entities becoming better informed about dragonfly migration and MDP initiatives to study this phenomenon; exploration of partnerships to further the study of dragonflies and their migration and conservation; distribution of information and protocols for the MDP projects Migration Monitoring, Pond Watch, and Stable Isotope Analysis; participation in MDP projects by public and private conservation entities interested in the study, monitoring, and protection of different dragonfly species and the wetland habitats on which they rely.

AGENDA ITEM PRESENTOR: Scott Hoffman Black (Xerces Society for Invertebrate Conservation), Greg Butcher (U.S. Forest Service International Programs), Elisa Peresbarbosa-Rojas (Pronatura Veracruz),

SUBMITTED BY: Greg Butcher, U.S. Forest Service International Programs; Celeste Mazzacano and Scott Hoffman Black, The Xerces Society for Invertebrate Conservation; Elisa Peresbarbosa, Pronatura Veracruz; Colin Jones, Ontario Natural Heritage Information Centre

(11:15 am)

AGENDA ITEM 18: Update on Conservation and Restoration of the Islands of Canada, the United States, and Mexico (30 min)

COLLABORATORS & CONTACTS: Annie Little (USFWS), Patrick Nantel (Parks Canada), Alfonso Aguirre (Conservación de Islas), Gregg Howald (Island Conservation), Humberto Berlanga (CONABIO), Eduardo E. Inigo-Elias (Cornell)

DESCRIPTION: This agenda item focuses on a collaborative trilateral effort to conserve and restore island ecosystems. Following the signing of the Letter of Intent (LOI) at the 2014 Trilateral Committee meeting, the three countries have been jointly developing a Plan of Action for the trilateral island initiative. We will present the progress to date on the Plan of Action including goals, objectives, priorities, and strategies. In addition, we will update the SCCCW on: 1) the status of current collaborative island restoration projects, and 2) our efforts to promote the LOI and seek funding for future projects.

BACKGROUND: In the last five years, several bilateral and trilateral island restoration projects were initiated. In order to further encourage coordination and collaboration on island projects, a Trilateral Island Working Group was created in 2012. This group developed the LOI that was signed by the three countries at the 2014 Trilateral Meeting in Querétaro, Mexico. The LOI documents that the three countries intend to engage in cooperative bilateral and trilateral activities to promote sustainable environmental policies and practices in support of island conservation. The LOI identifies the development of a Plan of Action aimed at strengthening cross coordination, setting priorities, and identifying collaborative projects. The Working Group is currently focused on developing the Plan of Action.

REQUESTED SPECIFIC OUTCOMES: We seek support of the Plan of Action and continued endorsement by the Trilateral Committee of collaborative conservation efforts on islands in Canada, the United States, and Mexico.

SUBMITTED BY: Annie Little, USFWS

(11:45 am)

AGENDA ITEM 19: Southern Wings Program Update (30 min)

This item is an ongoing project that has previously been presented to the SCCCW. The program is trinational in nature although most partnerships are bi-national between the US and Mexico.

COLLABORATORS & CONTACTS: Deborah Hahn

DESCRIPTION: Southern Wings Program – The mission of the Program is to provide a mechanism to support and facilitate State Fish and Wildlife Agency participation in conservation projects that support the conservation of shared migratory bird species in Mexico, Central and South America and the Caribbean.

BACKGROUND: This is an ongoing program for the State agencies with partnerships with Mexican partners. We have presented on this program at previous meetings. The Program started in 2009. Since 2009 the state fish and wildlife agencies have contributed to projects in the Colorado River Delta, Saltillo grasslands, Valle Centrales grasslands and Yucatan Peninsula in Mexico, Costa Rica, Nicaragua, Dominican Republic, Guatemala, Bolivia, and Colombia. Twenty-eight states have participated.

REQUESTED SPECIFIC OUTCOMES: Inform the Committee about the projects occurring in Mexico and consider how to increase participation by Mexican and Canadian partners for the conservation of shared migratory bird species.

AGENDA ITEM PRESENTOR: Deborah Hahn

SUBMITTED BY: Deborah Hahn

(12:15 pm)

AGENDA ITEM 20: Condor Update (30 min)

COLLABORATORS & CONTACTS: John McCamman, Condor Coordinator, Jesus Lizardo Cruz, CONANP, Mike Wallace, San Diego Zoo Global, Juan Arturo Rivera, Chapultepec Zoo

DESCRIPTION: Status Report on the California Condor Recovery bi-national program and report on efforts over the past year following execution of an MOU between U.S. and Mexico supporting condor recovery.

BACKGROUND: This is an on-going bi-national project to reintroduce California condors (*Gymnogyps californianus*) in their historic range in support of the recovery of the species. Currently, over 230 condors are in the wild, with 29 at the Sierra de San Pedro Martir National Park in Baja California. The San Diego Zoo Global's Institute for Conservation Research works directly with the program in Baja supporting the National Commission of Natural Protected Areas (CONANP) in their efforts to manage the free-ranging population of condors. In addition, a captive breeding program has been developed at the Chapultepec Zoo. An MOU has been

developed between the governments of the United States and the Mexican National Government promoting cooperation in the recovery efforts of the two nations. This is a joint presentation on the status of implementation of the MOU and the progress of the program.

REQUESTED SPECIFIC OUTCOMES: Update and status report only.

AGENDA ITEM PRESENTOR: John McCamman, Condor Coordinator, Jesus Lizardo Cruz, CONANP, Mike Wallace, San Diego Zoo Global, Juan Arturo Rivera, Chapultepec Zoo

SUBMITTED BY: John McCamman, CA Condor Coordinator, John_mccamman@fws.gov

(12:45 pm)

AGENDA ITEM 21: Bi-National - Masked Bobwhite Recovery Project Update (15 min)

COLLABORATORS: Buenos Aires National Wildlife Refuge (BANWR), Sonoran Joint Venture, Ecological Services, USFWS; Africam Safari; Comisión Nacional de Areas Naturales Protegidas (CONANP); Intituto Nacional de Ecología y Cambio Climatico; Comision de Ecología y Desarrollo Sustentable del Estado de Sonora; Dirección General de Vida Silvestre; and Zoological Society of San Diego.

DESCRIPTION: Project Objectives –

1. Transfer MBQ from BANWR, Arizona U.S. to Africam Safari, Puebla, Mexico.
2. Establish a captive MBQ breeding facility at Africam Safari.
3. Release offspring hatched and reared at Africam Safari in historical MBQ range in Sonora, Mexico.
4. Work with landowners to protect and enhance MBQ habitat for future releases in Mexico.

BACKGROUND: A combination of overgrazing, buffelgrass invasion, and continuing drought conditions have had a devastating impact on the savanna grassland habitat upon which this endangered quail depends and has triggered a precipitous decline in the MBQ population numbers over the past decade. Comprehensive surveys conducted in 2009 and 2010 throughout its range in Mexico (Sonora) resulted in no detections. At this point the MBQ for all practical purposes is extinct in the wild.

Key to the recovery of the MBQ is the establishment of a captive breeding program in Mexico, On January 29, 2015, seventy MBQ were delivered to Africam Safari. Chicks hatched and reared at Africam Safari will be released into their historical grasslands in Sonora in an effort to recover the MBQ.

REQUESTED SPECIFIC OUTCOMES: Request Trilateral Committee endorsement to continue the coordination and implementation of this bi-national project.

SUBMITTED and Presented by: Robert Mesta, Coordinator, Sonoran Joint Venture, Division of Migratory Birds. Ph.520-882-0047

1 – 2:15 pm LUNCH

(2:15 – 3:45 pm Table Reconvenes)

(2:15 pm)

AGENDA ITEM 22: An Update on Using Surrogate and Priority Species in Landscape Conservation Design (30 min)

This is a follow-up to an ongoing U.S. – Mexico effort to share lessons learned on efforts to use conservation targets to prioritize conservation efforts at landscape or ecoregion scales.

COLLABORATORS & CONTACTS: Melanie Steinkamp, USFWS, melanie_steinkamp@fws.gov, Patricia Kolef, CONABIO, pkoleff@conabio.gob.mx

DESCRIPTION: An update on the progress made to implement an agency wide effort to select surrogate species as part of a Strategic Habitat Conservation framework and how species are being used in landscape conservation design efforts.

BACKGROUND:

REQUESTED SPECIFIC OUTCOMES: Participants are aware of the progress made by FWS using conservation targets for biological planning and conservation design and have the opportunity to ask questions.

AGENDA ITEM PRESENTOR: Melanie Steinkamp

SUBMITTED BY: Melanie Steinkamp and Seth Mott

(2:45 pm)

AGENDA ITEM 23: Update on Development of Species Conservation Action Plan (PACE) for the Great White Shark (*Carcharodon carcharias*) in Mexico (30 min)

COLLABORATORS & CONTACTS: Oscar Ramírez, Ana R. Barragán (DEPC-CONANP), Oscar Sosa Nishizaki (CICESE), Heidi Dewar (SWFSC – NOAA)

DESCRIPTION: Presentation of the Species Conservation Action Plan (PACE) for the Great White Shark (*Carcharodon carcharias*) in Mexico, along with relevant actions to be executed in 2014.

BACKGROUND: Since 2007, the PROCER (Conservation Program for Species at Risk) has been working like the main strategy of the Mexican Federal Government, coordinated by CONANP to conserve species at risk in collaboration with other stakeholders. The PROCER works through the PACE, the Action Plans for recovery species at risk. During 2013 CONANP structured a Working Group to put together a strategy for the conservation and research of the great white shark and finished the PACE for the species, which delineates the action items to reduce the threats along its distribution range.

REQUESTED SPECIFIC OUTCOMES: To inform about the PACE and to establish specific cooperation actions within the Action Plan of the species.

SUBMITTED BY: Oscar Ramírez (CONANP)

(3:15 pm)

AGENDA ITEM 24: Conservation of Imperiled Fish Species through the Creation of a “Refuge Area” at the Arroyo Cajón Bonito, Rio Yaqui Watershed, in the US – México Border. (30 min)

COLLABORATORS & CONTACTS: SEMARNAT – Dirección General de Vida Silvestre, CONANP - Reserva de la Biosfera Janos and Priority Species Unit, Cuenca Los Ojos, The Nature Conservancy.

DESCRIPTION: We propose to continue our efforts to establish a proof of concept project for freshwater species conservation through the establishment of a “refuge area” (area de refugio) as a tool to conserve imperiled endemic fish species in the Arroyo Cajón Bonito including: Agosiachrys ogaster - Longfin dace, Poeciliopsis occidentalissonoriensis - Yaqui topminnow, Cyprinella formosamearnsi - Beautiful shiner, Cyprinella ornate, Ictalurus pricei - Yaqui Catfish, Gila robustaminaca -Roundtail chub, Carpiodescarpio - River carp and also Campostoma ornatum - Mexican Stoneroller. Lessons learned through the use of this wildlife management tool for freshwater species, will be useful to protect other sites within the Río Yaqui Watershed, the Conchos River Watershed (Conchos trout or Aparique (Oncorynchus sp.), and in general other threatened fish species with a limited range of distribution in México.

BACKGROUND: The Cajón Bonito is considered to support the largest assemblage of native fishes in Northwest México and especially in Sonora, and hopefully it is still free of introduced exotic fish species (Hendrickson, et al., 1980; Hanson, 2005; Varela, et al., 2010). Aquatic species refuge areas (area de refugio para la protección de especies acuáticas) are policy tools included within Mexico’s General Wildlife Law that so far have only been applied in marine habitats (Vaquita, great whales). Experimenting with their application on freshwater habitats will provide examples of on the ground experiences for working toward the development and implementation of a community-based restoration and protection plans for the benefit of native species and local human communities.

REQUESTED SPECIFIC OUTCOMES: We seek the endorsement of the Trilateral Committee to continue and expand our efforts to conserve the imperiled species of the Cajón Bonito and welcome new partners to experiment and evaluate the use of this policy tool to protect freshwater biodiversity.

AGENDA ITEM PRESENTOR: The Nature Conservancy.

SUBMITTED BY:

3:45 – 4 pm BREAK

(4 – 5:30 pm Table Reconvenes)

(4 pm)

AGENDA ITEM 25: Genetic traceability of wild and captive-reared totoaba stocks (*Totoaba macdonaldi*): A tool for population recovery assessment and law enforcement of an endemic marine endangered species – a joint session with Law Enforcement Working Table (30 min)

COLLABORATORS & CONTACTS: Luis Enríquez Paredes. UABC Laboratorio de Ecología Molecular lmuriquez@uabc.edu.mx, Conal David True. Unidad de Biotecnología en Piscicultura ctrue@uabc.edu.mx, Mary Burnham Curtis. USFWS Forensics Laboratory, mary_curtis@fws.gov

DESCRIPTION: Totoaba is one of the largest members of the croaker family (Sciaenidae) endemic to the upper Sea of Cortez. It once was very abundant but its population was severely affected a combination of anthropogenic impacts. Out of which over fishing and changes to its natural habitat are the most important. The former due the high value of its swim bladder as an item sought out by Asiatic markets and the latter associated to the reduction of the Colorado river flow onwards to the delta which corresponds to both spawning and nursery habitat for this species. Currently this species is protected both by Mexican and international law (NOM-059 and CITES Appendix I), nevertheless due to its high value for Asian market illegal poaching has emerged and a black market has been established in the past 5 years fuelled both by the its high value and the precarious socioeconomic status of the upper Gulf human population. During the past 20 years the Autonomous University of Baja California has developed reproduction and captive husbandry procedures for this species with the aim of developing a sound culture biotechnology that could both supplement a stock-enhancement program and bring about commercial aquaculture of this species. Over the years we have established both wild and first generation breeding brood stock populations and developed larval rearing protocols along with hatchery installations that can provide an annual production of 50,000 offspring from selective breeding.

In an effort to evaluate the feasibility of reducing the risk status of the species, part of each year total production has been dedicated to experimental restocking over the years, while most of the production is transferred to marine sea farms for commercial aquaculture development.

Upon the increment of Totoaba poaching and the uncertainty of the actual natural population size captive breeding for enhancement purposes and further tracking through genetic markers is desirable.

BACKGROUND: Since 2008, UABC at its molecular ecology lab has been developing a series of genetic markers. Both micro satellite and mitochondrial DNA have been optimized under. This research has been done as part of an internal research project “Optimization and evaluation of molecular markers to ensure the traceability of both captive and wild stocks of totoaba (*Totoaba macdonaldi*)”.

Tototaba brood stock at UABC’s captive breeding program exhibited low relatedness and levels

of genetic diversity that resemble those reported for the wild population. Overall, initial genetic analyses suggest that the genetic health of the wild stock is not compromised and a steady demographic trend. However, facing current increase on illegal fishing this should be review in further detail. From collaborations with both Mexico's PROFEPA and USA's FWS (NMFS and NFWFL), we have been allowed to access and sample most of the seized swim bladders from several national and international smuggling cases.

Up to now, even though only 40% of the samples had been fully analyzed, both genetic and morphometric data support the idea for a population not drastically reduced in size. The genotype of a seized bladder, belonging to a 7 y.o. individual, was tracked-back to our experimental captive breeding program. This outstanding finding demonstrates that at least some of the experimental released individuals had reached the age of reproductively mature fish.

The proper establishment of a stock enhancement program, based on periodical releases of juveniles and a continuous genetic monitoring program of both captive and wild stocks would allow the evaluation of changes in effective population size and adapt management strategies to accomplish a sustainable fishery and aquaculture production of totoaba. Additionally, totoaba's genetic traceability will also provide a powerful tool to regulate and legally enforce its commercialization.

REQUESTED SPECIFIC OUTCOMES:

- Complete the standardization and optimization of a high resolution-low cost genetic markers set for the evaluation of totoaba and other sciaenid species genetic diversity.
- Validate the set of genetic markers and their associated lab protocols for genetic traceability of captive-reared totoaba oriented toward growth-out farms and experimental releases to the wild stock.
- Continue working on monitoring genetic diversity levels within the Environmental Management Units with a captive breeding program.
- Improve and scale-up, with support from the corresponding Governmental Agencies, current breeding and nursing capabilities at the UABC's Environmental Management Unit in order to properly start a repopulating or stock enhancement pilot program.
- Collaborate with SEMARNAT and INPESCA, the Mexican Federal Governmental Agencies responsible of regulate fisheries and natural resources, to promote the establishment of a continuous monitoring program of genetic diversity and effective population size in the wild stock through the analysis of totoaba fingerlings by-catch from shrimp fishery.
- Set and agreement with the Environment Protection Agencies to build a genetic traceability data base which must incorporate genotype data from all captive breeders at the Environmental Management Units, as well as from all seizures and catch permits (scientific and recreational if any).
- Establish a protocol to continuously evaluate commercial production through the genetic traceability set of markers.

AGENDA ITEM PRESENTOR:

SUBMITTED BY: Invited by the MX and US Co-chairs of the Species of Common Conservation Concern Working Table.

(4:25pm)

AGENDA ITEM 26: Reducing Risk of *Batrachochytrium salamandrivorans* (a Salamander Fungus) Introduction to North America – a joint session with Law Enforcement Working Table (25 min)

COLLABORATORS & CONTACTS: Charles M Francis (Canada), David Hoskins (USA), TBD (Mexico)

DESCRIPTION: Recent studies have shown that a salamander fungus, *Batrachochytrium salamandrivorans*, originating from Asia has established in Europe and is causing major population declines of many species of European salamanders. If this fungus gets introduced into North America, which has among the highest diversity of salamanders in the world, this could cause a conservation disaster. The purpose of the discussion will be to discuss options to reduce the risk that the fungus will establish in North America, including considering whether legislative controls to address salamander imports would be effective and, if so, whether they are needed in all 3 countries.

BACKGROUND: The Association of Fish and Wildlife Agencies (AFWA) wrote a letter to Dan Ashe in November 2014 asking the USFWS to take prompt action to address this risk. The USFWS and Canada are both exploring options, including possible use of the Lacey Act (USA) and the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (Canada) to restrict imports of salamanders, using clauses related to restricting import of organisms that may harm native species. This fungus is similar to *Batrachochytrium dendrobatidis* which has caused devastating impacts on frog species throughout the world, including extinction of several tropical frogs. However, the salamander fungus thrives in cooler climates, and hence is a major concern in North America.

REQUESTED SPECIFIC OUTCOMES: To determine whether a trilateral initiative is appropriate / necessary to limit imports of salamanders or other materials that may contain the salamander fungus into North America and, if so, to discuss possible legislative or other options.

AGENDA ITEM PRESENTOR: Charles M. Francis

SUBMITTED BY: Charles M. Francis

(5:05 pm)

AGENDA ITEM 27: Annual report of Program for Endangered Species Conservation (PROCER) (30 min)

COLLABORATORS & CONTACTS: Oscar Ramírez, Lizardo Cruz CONANP

DESCRIPTION: Update on PROCER and relevant actions executed during the year in the frame of the PACE's (Species Conservation Action Plans) of species at risk in North America

(Vaquita, Sea Turtles, Mexican Wolf, Jaguar, Pronghorn, Bison, etc), and perspectives of the PROCER for the further years.

BACKGROUND: Since 2007, the PROCER (Species at Risk Conservation Program) has been working like the main strategy of the Mexican Federal Government, coordinated by CONANP to conserve species at risk in coordination with other stakeholders. The PROCER works through the PACE, the Action Plans for recovery species at risk. During these years, CONANP had finished the elaboration of several PACE and implemented actions with species of regional interest. CONANP is also interested to show the evolution and perspectives of the PROCER for this administration.

REQUESTED SPECIFIC OUTCOMES: To inform about the PROCER, update about PACE implemented and to establish specific cooperation actions within the Action Plans of these species, as well as to work within federal and state agencies, when applicable.

AGENDA ITEM PRESENTOR: Lizardo Cruz (CONANP)

SUBMITTED BY: Oscar Ramírez & Lizardo Cruz (CONANP)

Co-chair final wrap-up