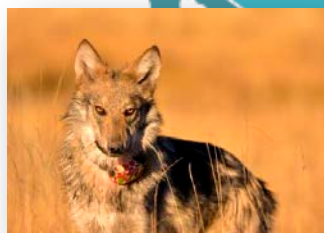
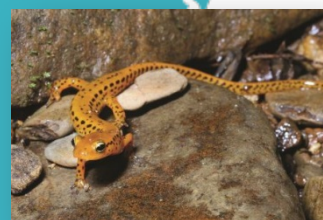
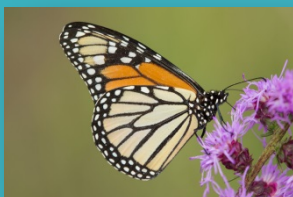


# **Association of Fish & Wildlife Agencies and State Fish and Wildlife Agencies International Collaborations 2017-2018**



**XXIII Meeting of the Canada/Mexico/U.S. Trilateral Committee for  
Wildlife and Ecosystem Conservation and Management**

**April 9-12, 2018, Shepherdstown, West Virginia United States**

**Association of Fish and Wildlife Agencies and State Agencies Report to the Executive Table**

## Table of Contents

Global Forums .....	3
Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).....	3
The Ramsar Convention on Wetlands .....	3
International Union for Conservation of Nature (IUCN).....	4
The Convention on Biological Diversity (CBD) .....	4
The Convention on the Conservation of Migratory Species Wild Animals (CMS) .....	4
Western Hemisphere.....	4
WESTERN HEMISPHERE SHOREBIRD RESERVE NETWORK.....	4
Neotropical Migratory Bird Conservation Act (NMBCA).....	5
Southern Wings.....	5
Conservation Business Plans for Birds .....	7
Atlantic Flyway Shorebird Business Strategy .....	7
Pacific Flyway Shorebird Conservation Strategy.....	7
North America .....	8
Trilateral Committee for Wildlife and Ecosystem Conservation and Management.....	8
Monarch Butterfly Conservation .....	8
North American Waterfowl Management Plan (NAWMP) and North American Wetlands Conservation Act (NAWCA).....	9
Flyway Councils.....	10
Amphibian and Reptile Conservation .....	11
Landscape Conservation Cooperatives (LCC).....	12
Binational: Mexico-U.S. ....	12
Mexican Wolf Recovery .....	12
Joint Ventures .....	13
Border Governors Wildlife Table .....	14
U.S.-Mexico Border State Wildlife Agencies .....	14
Binational: Canada-U.S. ....	22
Trapping work with Canada .....	22
Canadian Wildlife Directors Committee .....	22



State Fish and Wildlife Agencies work throughout the world on conservation issues both as individual states and as members of the Association of Fish and Wildlife Agencies (AFWA). They understand that achieving conservation goals requires a global scale approach especially for migratory species. This is not comprehensive report but rather a summary of major ongoing international projects and action taken by AFWA and state fish and wildlife agencies.

## **-Global Forums-**

### **Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)**

International treaties, agreements and initiatives offer opportunities and challenges to state fish and wildlife agency management. Understanding and engaging in international forums is important. Especially for CITES, the state agencies working relationship with the U.S. Fish and Wildlife Service (USFWS) is critical for both partners. The fish and wildlife agencies in the 50 states of the United States and their supporting regional and national organizations (Association of Fish and Wildlife Agencies and the Associations of Midwest, Northeast, Southeastern, and Western Fish and Wildlife Agencies) have participated in CITES since its inception. The CITES Technical Work Group, comprised of one representative from each of the four Regional Associations, has worked in partnership with the USFWS to engage on CITES issues since 1992 and has proven to be both effective and efficient. The Work Group functions under the leadership of the AFWA International Relations Committee and works closely with the AFWA International Director. They collaborate with USFWS to provide input on species status, management, and international trade to help ensure that actions taken through CITES support the conservation of wildlife in the U.S.

The CITES Technical Work Group has representatives from each Regional Association that include SEAFWA – Buddy Baker (LA); NEAFWA – Rick Jacobson (CT); MAFWA – Carolyn Caldwell (OH); WAFWA – Jim deVos (AZ). They represented the state fish and wildlife agencies and when applicable Provincial and Territorial interests at the Animals, Plants, and Standing Committees, CITES work group, and interagency meetings in 2017.

### **The Ramsar Convention on Wetlands**

The Convention on Wetlands of International Importance, called the Ramsar Convention, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. AFWA represents the State Fish and Wildlife Agencies on the U.S. National Ramsar Committee. The Committee has helped designate 38 Ramsar wetlands in the U.S., supports sites needs for outreach and communication, and helps where possible on addressing threats to Ramsar sites. (<http://www.ramsarcommittee.us>). AFWA's International Relations Director participated in the most recent U.S. National Ramsar Committee meeting in February 2017. The focus of the meeting was on how to support the current sites, how to strategically grow the number of sites, and what the priorities of the Committee should be.

## **International Union for Conservation of Nature (IUCN)**

The Association is a member of IUCN on behalf of the state fish and wildlife agencies. Founded in 1948, IUCN's mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. Today it has more than 1,300. The last IUCN World Conservation Congress was October 2016. AFWA teamed up with other like-minded organizations to influence decisions and discussions on topics such as waterfowl conservation, trophy hunting, climate change, livelihoods, and the use of lead ammunition. The Association also is an active member of the Sustainable Use and Livelihoods Specialists Group.

## **The Convention on Biological Diversity (CBD)**

The Convention on Biological Diversity (CBD) a legally binding instrument that aims to promote "the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilization of genetic resources." It entered into force in 1993. Sustainable use of biological diversity is one of the three objectives set out in the Convention. Various measures are to be undertaken by signatories to promote sustainable use of biological diversity. The U.S. is not a Party to the CBD; therefore, the state fish and wildlife agencies are not directly impacted by decisions made by the CBD. However, the strong stance on sustainable use of biodiversity makes this convention extremely useful to the state fish and wildlife agencies as they promote and advocate for sustainable use of wildlife at home and abroad. Last year the Association participated as a member of the US Delegation to the Standing Committee.

## **The Convention on the Conservation of Migratory Species Wild Animals (CMS)**

As a result of international concern over the threats faced by migratory species, CMS, also known as the Bonn Convention, aims to conserve terrestrial, marine and avian migratory species throughout their ranges. The U.S. is not a party to CMS. However, the Association participated in the Conference of the Parties in 2017 and has engaged on discussions surrounding lead ammunition and migratory bird conservation via this forum.

## **-Western Hemisphere-**

### **Western Hemisphere Shorebird Reserve Network**

AFWA sits on the Western Hemisphere Shorebird Reserve Network (WHSRN) Hemispheric Council to help conserve shorebirds with partners throughout the Western Hemisphere. The Hemispheric Council last met in April 2017. The Western Hemisphere Shorebird Reserve Network is a conservation strategy launched in 1986 with the designation of the first site, Delaware Bay in the United States. The Network aligns with the simple strategy that we must protect key habitats throughout the Americas in order to sustain healthy populations of shorebirds. In 2017, WHSRN designated its 100<sup>th</sup> site. This brings the network to 100 sites in 15 countries, covering a total of 36.8 million acres, or nearly 15 million hectares.

WHSRN sites support the conservation of species such as Red Knot (*Calidris canutus*), American Oystercatcher (*Haematopus palliatus*), Black-bellied Plover (*Pluvialis squatarola*), and Western Snowy Plovers (*Charadrius alexandrinus nivosus*). AFWA is a member of the WHSRN Hemispheric Council on behalf of the state fish and wildlife agencies. (<http://www.whsrn.org>)

## Neotropical Migratory Bird Conservation Act (NMBCA)

In 2011, there were 47 million birdwatchers – about 20 percent of the population. Expenditures associated with birding generated nearly \$107 billion in total industry output, 666,000 jobs, and \$13 billion in local, state, and federal tax revenue. Through the NMBCA, partnerships have received more than \$58 million for 510 projects in 36 countries and at least 28 U.S. states, but threats such as habitat loss are increasing, and demand continues to exceed available funding.

Numerous state agencies through Southern Wings or through their own projects are involved in conservation projects in the U.S. and Mexico, Central and South America and the Caribbean through the NMBCA. In addition, Arizona Game and Fish Department staff participates in the proposal review process.

The NMBCA IMPACT Program targets 13 highly threatened Neotropical migratory bird species, with the goal of achieving a **measurable biological improvement** in these species over the next 5-10 years. All of the 13 species identified are priorities to state fish and wildlife agencies such as Cerulean Warbler, Wood Thrush and Buff-breasted Sandpiper. They are all considered Species of Greatest Conservation Need in at least 15 and upwards of 32 SWAPs.

Since 2002, NMBCA has provided more than \$58.5 million in grants to support 510 projects in 36 countries. These projects have positively affected more than 4.2 million acres of bird habitat and spurred partnerships on multiple levels contributing an additional \$221.9 million. In 2017, over \$3.8 million in federal funds was matched by more than \$14 million in partner contributions going to 31 collaborative conservation projects in 19 countries across the Americas.

## Southern Wings

2018 marked the hundred year anniversary of the Migratory Bird Treaty Act. It recognized that conserving migratory birds — which cross international boundaries as part of their annual life cycle — calls for international collaborations. The Act and the associated Treaty set the cornerstone for innovative solutions and tools that have enabled waterfowl populations to grow and thrive. Just as successful waterfowl conservation required new strategies and approaches, we now need new and innovative solutions and tools to reverse the declines of hundreds of migratory birds throughout the Western Hemisphere as we embark on another 100 years of conservation.

Southern Wings is one of these tools. It facilitates state fish and wildlife agency participation in conservation of migratory birds on their breeding, migration, and nonbreeding sites. Southern Wings and its partners help to focus vital conservation funds on nonbreeding and migration sites for more than one-half of North America's breeding birds; such sites include forests, wetlands, and grasslands that face continually mounting pressures.

*Southern Wings:*

- offers an easy, transparent, and flexible process for states to effectively conserve their migratory bird species of greatest conservation need when they are not in the U.S.;
- is a critical complement to in-state investment on migratory bird stop over and breeding habitats;
- leverages limited state funds;
- can provide non-federal match for State Wildlife Grants and Pittman-Robertson funds;
- identifies strategic, biologically relevant projects with high quality partners that provide the most bang for your conservation buck;
- helps keep species off the Endangered Species Act (ESA) by addressing annual life cycle conservation needs; and
- provides an effective and efficient way to engage in successful conservation partnerships and the Neotropical Migratory Bird Conservation Act (NMBCA), the North American Wetlands Conservation Act (NAWCA) and other funding sources.

*Southern Wings projects:*

- implement objectives that are biologically relevant to the states;
- aim to take action on high priority objectives in critical habitats for state priority migratory bird species;
- protect your in-state investments through full-life cycle conservation; and
- work with partners that have an established and proven track record.

Thirty-one states participate in the Program (Arizona, Arkansas, Colorado, Indiana, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Carolina, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, Wisconsin, and NEAFWA [Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and DC]). **Since its inception, state agencies and their in-state partners have contributed over \$2,700,000 in funding.** All state contributions are matched at a minimum of 100% by non-state funds before directly supporting on-the-ground projects.

Southern Wings has demonstrated clear successes in protecting and managing crucial wintering habitat for priority species including Cerulean, Golden-winged and Prothonotary Warbler, Bicknell's and Wood Thrush, as well as a suite of grassland birds including Long-Billed Curlew and Mountain Plover. Arizona supported conservation of the thick-billed parrot in Chihuahua and yellow-billed cuckoo in Sonora. Oklahoma, Nebraska, South Dakota, and Iowa focused on grassland conservation and restoration in Northern Mexico. Over 100,000 acres of grasslands have been secured for conservation. Laguna Madre located on the Gulf Coast just south of the U.S. border is an important stop over and wintering habitat for Migratory shorebirds and hundreds of thousands of Red heads. Texas Parks and Wildlife along with other partners restored acres of mangroves. The Caribbean coast of Guatemala is an important area that supports at least 153 species of neotropical migrants during the nonbreeding season. Missouri, Arkansas, Tennessee and Texas have helped conservation almost 9,000 acres that are now being managed for shared species. The National Audubon Society, The Bahamas National Trust, the North Carolina Wildlife Resources Commission, and the Virginia Department of Game and Inland Fisheries are some of the partners involved in Piping Plover conservation in the Bahamas. Here we have the opportunity to protect and manage habitat used by 20% of the wintering piping plover population.

The Southern Wings Program works with National Audubon Society, Bird Conservancy of the Rockies, Birdlife International, Cornell Lab of Ornithology, Iowa Audubon Society National Audubon Society, Iowa Ornithologists' Union, Vermont Center for EcoStudies, American Bird Conservancy, Point Blue, and the Neotropical Migratory Bird Conservation Act in the US. Our in-country partners include FUNDAECO, Reserva El Jaguar, Bahamas National Trust, Fundación Lomo Quite Espuela (FLQE), Jocotoco Foundation, Fundación Proaves, Pronatura Noreste, Pronatura Noroeste, Amigos de Sian Ka'an, Sociedad Ornitológica Hispaniola, Osa Conservation, and Asociación Armonía.

## **Conservation Business Plans for Birds**

The bird conservation community has embraced annual life-cycle conservation of birds and is advancing the development of conservation business plans or investment strategies to guide bird conservation funding and action in particular habitats. Business strategies differ from standard conservation plans by focusing on a set of well-developed actions that link funding to specific, measurable conservation outcomes, rather than producing long lists of possible actions, some of which may not be clearly defined. The plans are a way to create a unified vision for full life cycle needs and how to address them with innovative approaches through the business plan approach. The results are intended to guide future conservation activities by conservation practitioners, educators, state and federal agencies, philanthropic organizations and researchers. Numerous plans are now being developed.

A more detailed discussion about the Atlantic Flyway Shorebird Business Plan can be found below. The Pacific shorebird business strategy is completed. Funding is being provided by the Packard Foundation, National Audubon, and the U.S. Fish and Wildlife Service. The Rio Grande JV is spearheading the finalization of the Chihuahua Grasslands Conservation Business Plan after the 2017 workshop.

## **Atlantic Flyway Shorebird Business Strategy**

All the states within the flyway that deal with shorebird conservation were involved in the development of the Atlantic Flyway Shorebird Business Strategy Phase I. The Plan was finalized in 2015 and can be found [here](#). The goal of this conservation strategy is to create a long-term platform for stability and recovery of fifteen focal species identified. The cumulative impact of the projects developed herein, will increase current shorebird population levels by 10%, by 2025, at a cost of approximately \$90 million. NFWF has developed an [initiative](#) to help implement the Plan. Other partners and states are also actively involved.

## **Pacific Flyway Shorebird Conservation Strategy**

The Strategy focuses primarily on the Pacific coasts of North, Central and South America and spans 120 degrees of latitude from northeastern Russia and northwestern United States of America to southern Chile. The project area is subdivided into four focal geographic regions (e.g., Arctic/subarctic, North-temperate, Neotropical and South-temperate) that share broad habitat characteristics and similar conservation challenges and opportunities. Together, these regions encompass the suite of habitats used by 21 target shorebird species during their annual cycles along the Pacific coast of the Western

Hemisphere. They were chosen as conservation targets because they are representative of specific habitats in the Flyway, populations of conservation concern or endemic to the Flyway. State agencies in California, Arizona, Nevada, Idaho, Utah and Washington were involved in its development. The Strategy can be found [here](#).

## **-North America-**

### **Trilateral Committee for Wildlife and Ecosystem Conservation and Management**

AFWA and individual State Wildlife Agency representatives actively participated in the Tables of the 2017 Trilateral Committee for Wildlife and Ecosystem Conservation and Management that took place in Mexico. In addition, state agencies also participate at the Executive Table. Understanding the national policy directions in bilateral efforts enables the state wildlife agencies along the U.S.-Mexico border to support and strengthen the bilateral priorities presented at the Trilateral.

### **Monarch Butterfly Conservation**

The Midwest Association of Fish and Wildlife Agencies (MAFWA) continues its leadership in convening U. S. states on monarch butterfly conservation. MAFWA hired former Minnesota fish and wildlife director Ed Boggess as its Monarch Conservation Liaison and Claire Beck as its Monarch Technical Coordinator to coordinate a team effort of all of the Midwest range states in developing a comprehensive conservation strategy for Midwest populations of the monarch butterfly. The plan is currently being drafted and will include technical information about the biology of the monarch butterfly, an analysis of threats to the species, an evaluation of various conservation approaches, and commitments from the individual state agencies and partners to specific goals for the conservation of the species.

Texas:

- Is not part of the Midwest Association of Fish and Wildlife Agencies, but was invited to participate in the Mid-America Monarch Conservation Strategy and serves on the executive board of the governance and development team, as the state lead for Texas, and on the Southern Core Habitat Technical Working Group.
- Helped to organize the South-Central Monarch Symposium that Texan by Nature hosted in Austin, Texas.
- Held a Texas Monarch Summit to develop a comprehensive, voluntary, consensus-based, quantitative monarch conservation strategy, and a Texas Monarch Consortium evolved from the Summit. Most partners are already involved in significant Monarch habitat conservation.
- Serves on the Texas Comptroller of Public Accounts Monarch Science Advisory Panel. The Texas Comptroller funds research for some species of concern.
- Attended the annual Monarch Joint Venture (MJV) conference and represents SEAFWA on the MJV board.
- Served on the High Level Work Group to develop the national Monarch conservation strategy.



Texas restoration efforts to improve habitat for monarchs and other pollinators on 5 wildlife management areas and nearly 15,000 acres of private lands, funded by a FY15 grant from the National Fish and Wildlife Foundation (NFWF) is nearly complete and a final report from Texas Parks and Wildlife Foundation will be submitted to NFWF in early 2019. In FY2017, NFWF awarded 6 grants to TPWD partners, totaling over \$1 million slated for monarch conservation (\$3 million including match).

State fish and wildlife agency staff are also collaborating with federal and academic scientists to address outstanding scientific and research questions for the monarch butterfly, through an informal research consortium known as the Monarch Conservation Science Partnership. The Partnership has developed a set of innovative scientific tools for modeling the effects of various conservation measures on the migratory population of monarch butterflies in the central North American flyway. These modeling tools are being used by the individual states as they develop more detailed conservation strategies to restore habitat for the species.

## **North American Waterfowl Management Plan (NAWMP) and North American Wetlands Conservation Act (NAWCA)**

State Wildlife Agencies recognize the importance of taking a continental approach to conservation for migratory birds and have been addressing waterfowl conservation at the flyway level for decades. In recognition of the importance of breeding habitat in both the United States and Canada, the state wildlife agencies have been contributing funds through conservation organizations, like Ducks Unlimited, who match the money and put it to work on wetland and waterfowl projects. NAWCA requires non-federal funds as match, and this incentive helps partners to more than quadruple funding important breeding habitat projects.

Since 1986, State wildlife agencies have contributed over \$80 million of non-federal match to the AFWA initiative for Canadian NAWMP/NAWCA projects. In 2016-2017, 40 states contributed a total of \$3,800,308. Ducks Unlimited or Manitoba Habitat Heritage Corporation match each dollar from the State agencies, which in turn are matched with NAWCA funds. Canadian partners provide additional match to multiply the impact of each state's contribution on the breeding grounds at least four to five-fold.

During its FY 2017, Texas contributed a total of \$725,000 and was the leading state in contributing to projects in Canada. Contributions continue to grow in 2018-2019 with 41 states contributing to projects on the waterfowl breeding grounds in Canada and several states increasing or planning to increase their funding from the previous year, including Alabama, Colorado, Nebraska, Virginia, and Wyoming.

In addition, Texas also contributed \$50,000 to fund projects in Mexico, marking the second straight year to contribute to waterfowl conservation projects in Mexico.

Since the NAWMP called for the establishment of the Migratory Bird Joint Ventures in 1986, the Joint Ventures have grown to cover nearly all of the U.S. and Canada and a good portion of Mexico. Established in 1999, the Sonoran Joint Venture (SJV) was the first binational Joint Venture with Mexico, and the first Joint Venture formed to address the needs of all birds—not just waterfowl.

The NAWMP has undergone an update roughly every five years in accordance with the North American Wetlands Conservation Act. The 2012 Revision changed the goals of the Plan for the first time, adding an explicit “people” goal. The new goals underscored the importance of understanding human needs and desires, social capacity for supporting ongoing conservation of waterfowl and wetlands, and the role of ecosystem services provided by waterfowl and wetlands. One element of implementing the 2012 Revision has been the ground-breaking research involving U.S. and Canadian surveys of hunters, birders, and the general public. This is a strong first step in learning how to better engage people in waterfowl and wetland conservation.

It is anticipated that the next NAWMP Update will be available in the fall of 2018. To learn more about the 2012 Revision, the human dimensions surveys and the 2018 Update, visit <https://nawmp.org/>.

### Hunter/Birdwatcher/Public Survey: Wetland/Waterfowl Attitudes

The NAWMP, in partnership with the North American Bird Conservation Initiative, the Flyways, the US Geological Survey, and other partners, conducted a national survey of hunters, viewers (birdwatchers), and the public, both to evaluate the awareness and perceptions of waterfowl and wetlands and to measure participation in recreational activities and conservation behaviors focused on wetlands and wetland-associated birds.

Most respondents knew of wetlands in their local area or community and more than half had visited wetlands within the last 12 months. Of those who had visited wetlands, the most common reasons were for walking/hiking/biking and enjoying nature/picnicking. In addition, this sample was very concerned about the reduction or loss of ecosystem services due to wetlands degradation or loss. A majority of respondents were somewhat or very concerned about 9 out of 10 wetlands benefits, with hunting opportunities being the only benefit the majority of people were not concerned about. People were the most concerned about clean water, clean air, and providing a home for wildlife. In contrast, people were least concerned about hunting opportunities and wetlands providing scenic places for inspiration or spiritual renewal.

Many people reported having participated in conservation behaviors within the last year. The most popular activity was making the yard more desirable to wildlife, with more than three-quarters of respondents participating, followed by donating money to support wildlife/habitat conservation and talking to others in their community about conservation issues. There was lower participation in conservation behavior specifically related to wetlands and waterfowl, with two-fifths of respondents voting for candidates or ballot issues to support wetlands/waterfowl conservation and one-third advocating for political action to conserve wetlands/waterfowl.

### **Flyway Councils**

The Pacific, Mississippi, Central and Atlantic Flyway Councils are international bodies that include members from both the U.S. state agencies and the Canadian provinces. Each flyway is involved in international projects for waterfowl and other migratory bird conservation.

For example, biologists from state, federal, and provincial agencies conduct surveys each year to determine the status of waterfowl populations, evaluate habitat conditions, and to estimate waterfowl harvest. Banding programs are used to estimate survival and migration patterns. Data are used

cooperatively to manage migratory game birds and play a paramount role in the annual establishment of hunting regulations. Primary continental waterfowl habitats are monitored during the Waterfowl Breeding Population and Habitat Survey in May. Biologists from federal, provincial, and state agencies survey areas via fixed-wing aircraft to evaluate the conditions of habitats in the north-central United States and southern Canada.

## **Amphibian and Reptile Conservation**

Through AFWA, and Partners in Amphibian and Reptile Conservation (PARC), the states participate with partners in Mexico and Canada on amphibian and reptile conservation. The AFWA Amphibian & Reptile Conservation Committee continues to closely track the salamander fungal pathogen, *Batrachochytrium salamandrivorans* (Bsal), which has decimated fire salamander populations in The Netherlands and Belgium. It has also been detected in Germany and France, and now in at least three species in the wild in Europe. It is apparently endemic in some Asian newt species, which serve as reservoirs, and could be moved via the pet trade. Several captive species in trade have been tested and there is a low prevalence; this pathway is high risk for moving the pathogen into North America. The January 2016 interim final rule issued by USFWS remains in effect, prohibiting importation into the US of the 201 “injurious”-listed salamander species.

Surveillance for Bsal occurred in the US throughout 2017, led by the US Geological Survey. So far, it remains undetected in North America; these surveillance efforts will aid in early detection and rapid response. Susceptibility testing has been ongoing, with many high-priority species being evaluated through a grant that AFWA secured via a private funder. Mitigation options, such as probiotic treatments, are also being explored via this funding.

The Southwest regional working group of PARC will hold the 2018 meeting September 6-9 in Oklahoma City, OK. In 2016, the Southwest Habitat Management Guidelines technical publication was completed, including guidance relevant to habitats in northern Mexico, and is still available for purchase via Amazon. The group continues to work on outreach to Mexico and will offer stipends again to Mexican participants. The SWPARC regional species prioritization effort has been completed; information is available at <http://www.swparc.org/products/>. PARC’s Northwest regional working group includes partners from British Columbia, Alberta, and Yukon. They held a symposium on top reptile conservation challenges on February 15, 2018 in Portland, OR, as part of the Society for Northwest Vertebrate Biology, with participation from Canadian colleagues.

The PARC technical publication, *Inventory and Monitoring: Recommended Techniques for Reptiles and Amphibians*, applicable to Canada and northern Mexico, was reprinted in Fall 2016, but is now sold out. If any partners are interested in this publication, please let us know. The 2017 PARC annual report is available online. PARC has completed a Strategic Plan which will be posted on the PARC website soon; we will focus on opportunities to strategically grow our partnership, and to engage in species and habitat conservation, including expanding efforts to identify Priority Amphibian and Reptile Conservation Areas (PARCAs).

Please contact Priya Nanjappa ([pnanjappa@fishwildlife.org](mailto:pnanjappa@fishwildlife.org)) for further information regarding AFWA Amphibian & Reptile conservation efforts, or PARC activities.

## **Landscape Conservation Cooperatives (LCC)**

The LCCs, which extend beyond the U.S. border into Canada and Mexico, have basically been disbanded by the FWS. Current projects are working toward completion. The Desert LCC:

- Organized the 2017 Rio Grande / Rio Bravo Binational Forum to bring together water users such as farmers, ranchers, city officials, tribal members, policymakers, business leaders, conservationists, and scientists from Mexico and the United States to share creative and innovative approaches to meet river management and water challenges in the basin, build relationships for networking and create a common vision of where to go after the Forum and guide future Forums.
- Selected the Rio Grande-Rio Conchos Landscape Conservation Design Pilot Area as one of three pilot areas and awarded funds to Sul Ross University for coordination of this collaborative to develop conservation goals and measurable objectives for focal resources; produce spatial data and cultural and economic information; visualize potential effects of climate change; and develop implementable adaptation responses to help achieve common goals.

## **-Binational: Mexico-U.S.-**

### **Mexican Wolf Recovery**

From December 2015 to February 2017, state wildlife agencies from Arizona, New Mexico, Utah, and Colorado participated in recovery planning workshops for the Mexican wolf, sponsored and lead by the FWS. The purpose of these workshops was to provide, analyze, and review the most up-to-date scientific information available on habitat suitability, population demographics, and prey availability for the recovery of the Mexican wolf (*Canis lupus baileyi*). Representatives from Mexico's Wildlife Office (Dirección General de Vida Silvestre-SEMARNAT) and the Priority Species Office of CONANP, as well as independent scientists from the US and Mexico, also participated in these workshops. Information gathered during these workshops was used to produce three important documents in November of 2017: 1) the Mexican Wolf Recovery Plan, First Revision; 2) the Mexican Wolf Recovery Implementation Strategy; and 3) the Mexican Wolf Biological Report: Version 2, that included a) Population Viability Analysis for the Mexican Wolf Integrating Wild and Captive Populations in a Metapopulation Risk Assessment Model for Recovery Planning, and b) Mexican Wolf Habitat Suitability Analysis in Historical Range in the Southwestern U.S. and Mexico.

Arizona is contributing close to \$75,000 annually to support Mexican wolf conservation actions in Mexico that include 1) monitoring the extant Mexican wolf packs (including terrestrial, satellite, and camera trap monitoring of individuals living in the wild which includes home range analysis, habitat use, births, and mortalities); 2) management actions undertaken in the project (including new releases, supplemental feeding, and coexisting techniques); and 3) outreaching to local ranchers and communities to build positive relationships for the acceptance of the reintroduction program. This effort is closely coordinated with the Mexican Government thru the Priority Species for Conservation Office within CONANP. Arizona's contribution has been critical to maintaining essential conservation actions in Mexico.

Arizona Participated at the Mexican Wolf Species Survival Program master planning meeting held on July 13-14, 2017 in Cananea, Sonora, Mexico hosted by the UMA Buenavista del Cobre and Grupo Mexico.

Comprehensive genetic and demographic analyses of the captive Mexican Wolf SSP population was performed during this meeting. New Breeding and Transfer Plans for this species were completed in July of 2017. The current number of Mexican wolves in captivity is 281 (TAG recommended size = 300) distributed among 55 institutions. Excluding thirty-six (36) animals that are reproductively compromised (e.g., cryptorchidism, castration, neutering, aged, etc.), there are 245 animals in the managed population.

In addition, the Mexican wolf Interagency Field Team (IFT) completed the annual year-end population survey, documenting a minimum of 114 Mexican wolves in the wild in Arizona and New Mexico at the end of 2017, which is a slight increase from 113 the previous year. This number includes 26 pups that survived to the end of 2017 (slightly below the 5-year average of 31), and 88 adults, which is an all-time high for the population (above the 5-year average of 73). More breeding pairs (21) were detected at the end of 2017 than any previous year in this recovery effort.

## **Joint Ventures**

State wildlife agencies have an active role in supporting international partnerships in many of the Bird Habitat Joint Ventures, by sitting on management boards, providing technical expertise, or, in some cases, collaborating in specific projects.

The Sonoran and Rio Grande Joint Venture are bi-national Joint Ventures that continue to work collaboratively across the U.S./Mexico border. Other Joint Ventures like the Appalachian Mountains Joint Venture (AMJV) and the Pacific Coast Joint Venture (PCJV) have formal international collaborations with partners in Mexico. State wildlife agencies sit on the boards of and participate actively in all of these Joint Ventures.

**The Rio Grande Joint Venture (RGJV)** is developing a cross border Strategic Plan to guide conservation planning, design, implementation, monitoring, and communications.

Texas chairs the RGJV board and Mexico's board members include CONABIO, CONANP, DUMAC, Pronatura Noreste, The Nature Conservancy-Mexico, and Alejandro Carrillo, president of Fundación Pasticultores del Desierto. State wildlife agencies participate in the technical committees and are welcome to join the board.

RGJV is leading efforts to develop a Conservation Investment Strategy for the Chihuahuan Desert Grassland Priority Conservation Areas in Mexico, Texas, and New Mexico. This will facilitate collaborative, adaptive management of critical wintering habitat for grassland birds, including establishing goals and tracking progress toward grassland bird and habitat objectives. Active collaboration continues with Mexican and international partners to develop conservation plans for the Reddish Egret and the Red-crowned Parrot in México and the U.S. Conservation planning for priority birds and Monarch butterfly in northern Mexico is coordinated with Pronatura Noreste, CONANP, and key regional stakeholders. The RGJV continues to support NAWCA and NMBCA management and conservation projects proposed and implemented by partners in Mexico.

*South Texas Grassland Restoration Incentive Program (GRIP)*, funded by the National Fish and Wildlife Foundation (NFWF) and the San Antonio Quail Coalition Chapter, conducts grassland restoration on

private lands in South Texas with an emphasis on restoring and improving early successional grassland habitats for monarchs, other pollinators, quail, and other grassland birds. A group of TPWD, NRCS and other partners have worked with RGJV staff to develop a South Texas GRIP program modeled on the OPJV GRIP program.

*Chihuahuan Desert Grassland and Riparian Habitat Conservation* integrates the RGJV riparian restoration efforts funded through the Landowner Incentive Program in the Big Bend region, the Landscape Conservation Design project that the Desert LCC is funding through Sul Ross University and the recently announced NFWF Pecos Watershed Conservation Initiative.

## **Border Governors Wildlife Table**

The Border Governors Wildlife Table was established in 2004 as Mexico began to decentralize wildlife functions to the Border states. In the last few years, the governors have not held cross border meetings, but the Safari Club International (SCI) convention continues to invite the ten border state wildlife agencies as the Border Governors Wildlife Table, and the Mexican states support continuing this relationship as the Border Governors Wildlife Table. The first meeting at the SCI convention was held in 2007, where Federación Mexicana de Caza (FEMECA) inquired about the International Hunter Education Association and the BG Wildlife Table assisted FEMECA in the creation of the IHEA-Mexico chapter. The SCI convention is considered the best venue to promote sustainable use, is accessible to Mexico, and offers the opportunity to promote other regions in Mexico. Dirección General de Vida Silvestre has attended in previous years. Texas coordinates this partnership with SCI. At the 2018 SCI convention in Las Vegas:

- The Mexican states presented a Hunt Mexico seminar.
- Tamaulipas had a 10-booth exhibit area and the governor attended the convention.
- Baja California had an exhibit and the governor attended the convention.
- Sonora has had an exhibit area since 2012.
- Chihuahua and Nuevo Leon attended and are considering applying for a “Hunt Mexico” exhibit area where several Mexican states can participate. (SCI has a waiting list of applicants for booths and seminar slots.)

## **U.S.-Mexico Border State Wildlife Agencies**

### **Arizona Game and Fish Department (AGFD):**

- *Wetlands Training Program* - Since 1996, the Arizona Game and Fish Department has been implementing wetlands conservation workshops in Mexico. Through the years, the Department has partnered with multiple agencies and groups from Canada, Mexico, and the United States, such as the Canadian Wildlife Service, the U.S. Wildlife Service, Mexico’s Commission of Natural Protected Areas (CONANP), Ducks Unlimited de Mexico A.C. (DUMAC), Sonoran Joint Venture (SJV), the Ramsar Convention, the Society of Wetlands Scientists, several of the Pronatura organizations, and others. On February 5-16, 2018, AGFD implemented a wetland training workshop in Puerto Vallarta, Jalisco, in collaboration with CONANP, DUMAC, Estero El Salado, University of Guadalajara, Instituto de Biología-UNAM, Instituto de Ecología A.C. and Bristol Community College.

- *Sonoran pronghorn conservation* – 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. In Arizona, the Cabeza Prieta and Kofa National Wildlife refuges breeding programs continue to do well. Temporary holding pens at three release sites were constructed during November 2017. These pens are located on the Barry M. Goldwater Range east of Highway 85, in the Mohawk Valley, and in the Valley of the Ajo. In early December, several animals were captured at the breeding pens in Cabeza Prieta, processed, and moved into holding pens for their subsequent release after three weeks of acclimation. In Sonora, collaborators conducted aerial surveys at the Pinacate and Quitovac populations and continued implementing conservation actions for the species.
- *Lesser long-nosed bat* - This species has been the subject of long-term monitoring and conservation by collaborators in Arizona and Sonora and beyond for over 20 years. During that time, collaborators have conducted annual simultaneous bat emergence counts at the largest maternity and late summer roosts in northwestern Mexico and Arizona. In 2013 in a joint statement, the National University Autonomous of Mexico (UNAM) and SEMARNAT announced the recovery and delisting of the lesser long-nosed bat in Mexico. Through binational partnerships, researchers have achieved significant breakthroughs thanks to the use of leading-edge telemetry technology not used previously in any other bat species. With miniaturized GPS tracking units, UNAM researchers have been able to follow movements of individual bats and demonstrate nightly cross-border movements into Arizona. Over the last three years, AGFD provided financial assistance to conduct a research study about foraging routes and distances traveled utilizing GPS tracking units deployed by UNAM.
- *Black-tailed prairie dog in northern Mexico* - Arizona continued collaborating with the UNAM the Janos Biosphere Reserve in northern Chihuahua, Mexico to implement conservation actions for the black-tailed prairie dog and black-footed ferret. The Janos Biosphere Reserve is a unique grassland ecosystem containing the largest prairie dog complex in North America. No spotlighting surveys for ferrets were conducted in 2017. Despite severe losses over the last few years, the prairie dog colonies seem to be rebounding, a trend that was confirmed during 2016-2017 population evaluations. In addition, Arizona continued working with Sonora's Commission on Environment and Sustainable Development (CEDES) to monitor the status of the black-tailed prairie dog Las Palmitas colony in northern Sonora.
- *Black-tailed prairie dog in Arizona* - There were two trapping events, one in March and another in September to assess the health and determine the population of the three colonies of BTPD at Las Cienegas National Conservation Area (LCNCA) in southern AZ. These monitoring efforts have indicated a steadily growing population with estimates of over 350 prairie dogs and 21.2 occupied acres. Colonies are continually monitored throughout the year by the AGFD. To encourage the participation of volunteers and expand citizen science efforts, this year we developed a smart device application to collect information on prairie dog counts, weather conditions, and other species observations. In October 2017 AGFD translocated 94 BTPD from McGregor Range in New Mexico to

a fourth site outside of LCNCA at Sands Ranch. This site is owned by Pima County and is an active cattle ranch. The site was monitored daily after the release and has transitioned to monthly monitoring. Visual counts at this colony have been high, and new burrows are appearing regularly. 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 550 acres of grasslands have been restored, and BTPD have quickly started to expand into these cleared areas. AGFD and the Bureau of Land Management completed these restoration activities with funding from the National Fish and Wildlife Foundation.

- *Bird Conservation Projects* - Arizona is collaborating with several partners in Northwest Mexico to support projects that benefit both shared migratory and resident bird species of concern. Other projects have contributed to clarify or prevent the need of listing a bird species. Several of these projects are supported as part of Southern Wings- an AFWA initiative that facilitates partnerships between state fish and wildlife agencies and partners in Mexico, Central, South America and the Caribbean to conserve shared migratory bird species throughout their annual lifecycle. Current projects we are supporting include:
  1. Conserving neotropical migratory birds by implementing best management practices in old-growth forests of the Sierra Madre Occidental - For Neotropical migrants and Thick-billed Parrots (TBPA), OVIS and other partners are working to conserve habitat by incorporating habitat management practices that benefit migratory and resident birds in more than 30 ejidos in the Sierra Tarahumara (500,000 ha). The project will also implement conservation actions and monitoring of breeding populations of TBPAs in the protected areas of Tutuaca, Papigochi, Campo Verde, Mesa de Guacamayas and Madera. This project is one of Arizona's longest-running bird conservation collaborations in Mexico, having initiated the collaboration with Pronatura Noroeste and ITESM over 10 years ago. In addition, AGFD met with OVIS and San Diego Zoo Global in December 2017 to develop a short-term (2 year) strategic work plan, an exercise that can be used to seek additional funding.
  2. Status of Western Yellow-billed Cuckoos in Sonora - Universidad Estatal de Sonora is surveying known and suspected YBCU locations across the state to document species occurrence.
  3. Conserving and monitoring Golden Eagles within high priority regions of Mexico - Pronatura Noroeste and partners are training biologists to deploy satellite tracking technology, identify occupied territories and areas for conservation, determine causes of mortality, enhance habitat on private ranches, and conduct environmental education and capacity building.
  4. The Pacific Flyway Shorebird Survey: Identifying Threats and Conservation Hotspots in Northwest Mexico - Terra Peninsular and partners are conducting annual non-breeding bird surveys of 10 wetland sites across NW Mexico, and compiling these survey data into the Pacific Flyway Shorebird Survey.
  5. Bald Eagle population assessment in northern Sonora - CEDES will survey the confluence of the Bavispe and Yaqui rivers, as well as the Pinacate Biosphere Reserve. AGFD provided training to CEDES staff on Arizona's bald eagle productivity monitoring program on February 6-7, 2018. Training consisted of classroom presentations and Q&A discussions as well as field training in Arizona.

In the past, other projects included: 1) Establishment of Breeding Bird Survey routes in Sonora, 2) Masked Bobwhite monitoring and habitat assessment, 3) Cactus Ferruginous Pygmy-Owl population



estimates and genetic analysis, 4) Yuma Ridgway's Rail surveys in the Colorado River Delta, and 5) Gould's Turkey reintroductions.

### **Baja California**

- Presented at the Hunt Mexico seminar at the Safari Club International (SCI) convention in Las Vegas and had a booth to promote hunting and fishing. Governor Francisco Arturo Vega de Lamadrid attended.

### **Chihuahua**

- Helped to organize the "Wildlife Management in the Chihuahuan Desert" workshop held in the Alpine area and is inviting Texas to do a similar workshop in Chihuahua City.
- Attended a state wildlife agencies coordination meeting at Chaparral Wildlife Management Area in Texas in 2017.
- Presented at the Hunt Mexico seminar at the Safari Club International (SCI) convention in Las Vegas and initiated discussions with landowners to have a booth at the 2019 SCI convention.
- Participated in the Desert LCCs Rio Grande-Rio Bravo Binational Forum in El Paso.
- In January, participated in the Chihuahua-Texas Cross Border Roundtable meeting organized by the Texas Commission on Environmental Quality.

### **Coahuila**

- Participated in the Coahuila- Nuevo Leon-Texas Cross Border Roundtable meeting organized by the Texas Commission on Environmental Quality in February and said that wildlife priorities for Coahuila are the eradication of feral hog and Eurasian dove.

### **New Mexico Department of Game and Fish (NMDGF)**

- New Mexico has worked over the years with Mexico under an ongoing MOU to facilitate capture and exchange and technical guidance between Mexico and New Mexico. The Department has exchanged New Mexico pronghorn for Mexican bighorn sheep and biologists continue to communicate on the status of the animals exchanged. Over the past year the Department signed an agreement with country of Mexico to conduct a trade of pronghorn from New Mexico for Gould's turkeys in Mexico. Gould's turkeys are listed as New Mexico State threatened species and additional birds from Mexico could help assist in the eventual delisting of the bird. The Department plans to capture and translocate 100 pronghorn from New Mexico to Chihuahua in November of 2018.
- In October of 2017 a Department representative traveled to Chihuahua to asses suitable pronghorn release sites for animals destined for translocation in the state of Chihuahua in the later part of 2018.
- Over the last year NMDGF has been working in cooperation with the USFWS, AGFD, Colorado Parks and Wildlife, Utah Division of Wildlife, SEMARNAT, and other partners in Mexico to help revise the USFWS, Mexican Gray Wolf recovery plan. As part of this process representatives from NMDGF

traveled Mexico to gain a better understanding of Mexican wolf habitat suitability, and prey availability along the Sierra Madre Occidental.

- In April of 2017 a Department representative participated and presented at a joint workshop concerning wildlife management in the Trans-Pecos region hosted by Texas Parks and Wildlife. The workshop was well attended by participants from states along the US-Mexico border.

### **Nuevo León**

- Participated in the “Wildlife Management in the Chihuahuan Desert” workshop held in Alpine.
- Attended the state wildlife agencies coordination meeting at Chaparral Wildlife Management Area and the Texas Monarch Summit in Austin, Texas.
- Presented at the Hunt Mexico seminar at the SCI convention in Las Vegas.
- Participated in the Coahuila- Nuevo Leon-Texas Cross Border Roundtable meeting organized by the Texas Commission on Environmental Quality in February

### **Sonora**

- Forestry and Game Dept. has had a booth at the SCI convention since 2012 and participated in this year’s Hunt Mexico seminar at the convention.
- CEDES signed a Letter of Intent (LOI) with the conservation group Panthera Mexico A.C. to collaborate in implementing research and conservation projects on wild cats within the State of Sonora. A coordination meeting among CEDES, Panthera, and AGFD will take place in April 2018 to discuss potential jaguar collaborations.
- CEDES and AGFD are collaborating in restoring mangrove ecosystem within the El Soldado Protected Area, near Guaymas, Sonora. This project will take several years for its completion. The first phase of the project was implemented in June 2017 when a mangrove restoration workshop took place to train 20 natural resources managers from Sonora.

### **Tamaulipas**

- Participated in the Tamaulipas-Texas Cross Border Roundtable meeting organized by the Texas Commission on Environmental Quality in November.
- Tamaulipas Hunting & Fishing Commission had one of the best exhibit areas (10 booths) at the SCI convention in Las Vegas and participated in the Hunt Mexico seminar. Governor Francisco Javier García Cabeza de Vaca attended.
- New staff is being trained as Hunter Education instructors to join IHEA-Mexico.
- The Parks and Biodiversity Commission attended the Texas Monarch Summit and continues to work on Monarch conservation projects.

### **Texas Parks and Wildlife Department (TPWD)**

- NAWCA - During its FY 2017, Texas contributed a total of \$725,000 and was the leading state in contributing to projects in Canada. For a second year, Texas is contributing \$50,000 annually to fund projects in Mexico in collaboration with DUMAC.

- *Collaborative Institutional Development* – Since Texas ecosystems extend into Mexico and four Mexican states are adjacent to Texas, the institutional development of the new sister wildlife agencies in those states is a priority for TPWD. Hence, TPWD will continue to invite its Mexican colleagues when it holds new training for its wildlife staff. TPWD will also continue to accommodate requests from Mexico for workshops on special topics. The Wildlife Management Areas (WMA) under TPWD administration have served well for these workshops so that field techniques and results can be demonstrated. Federal colleagues have also participated in some of these activities. Regularly scheduled WMA workshops are open to Mexican colleagues and landowners.
- *Feral Hog Control* - TPWD continues to work in several collaborative research projects with Australian partners, National Wildlife Research Center, and USDA Wildlife Services associated with the registration of a feral swine toxicant. Current work focuses on deployment and effectiveness of test products in pasture settings after the Environmental Protection Agency granted an experimental use permit in summer of 2017. In 2013, Consejo Estatal de Flora y Fauna de Nuevo Leon (CONEFF) conducted a feral hog control workshop and launched a website. In 2014, TPWD organized a binational feral hog control workshop in Laredo, Texas, and made available a DVD of all feral hog control technical publications in Spanish by Texas A&M AgriLife Extension, which continues to be available to anyone conducting these workshops. The binational workshop enabled Chihuahua to refine its control techniques in the Ojinaga area, and Coahuila conducted a workshop in 2015. CONEFF and the USDA-APHIS Mexico City office conduct these workshops throughout Mexico. Mexican colleagues recommended that TPWD organize another feral hog control workshop to review results and explore ways to increase these efforts.
- *Hunter Education* – Mexico Chapter of the International Hunter Education Association (IHEA-Mexico) celebrated its 10<sup>th</sup> anniversary in Morelia, Michoacan and continues to hold jointly with Texas advanced workshops for instructors. The next workshop will be on Waterfowl Conservation and will include topics on wounding loss as well as a one-day waterfowl hunt in South Texas. IHEA-Mexico resulted from a 2007 partnership between Federación Mexicana de Caza (FEMECA) and the Border Governors Wildlife Table.
- *Rio Grande Joint Venture* – TPWD helped to establish and chairs the Rio Grande Joint Venture (RGJV). Mexico's board members include CONABIO, CONANP, DUMAC, Pronatura Noreste, The Nature Conservancy-Mexico, and Alejandro Carrillo, president of Fundación Pasticultores del Desierto. State wildlife agencies participate in the technical committees and are welcome to join the board. TPWD staff contributes substantial technical support to RGJV activities. For current projects, please see page 14.
- *Cross Border Roundtable* – Texas Commission on Environmental Quality conducted three cross border meetings with counterparts in the four Mexican states to identify priorities and ways to collaborate to address the issues. In addition to the usual issues of water quantity and quality of the Rio Grande and air quality, the control of exotic species such as feral hog, Eurasian dove, salt cedar and arundo were identified as priorities. Another priority was presenting wildlife management workshops in Chihuahua and Monterrey.
- *Monarch Butterfly Conservation* – TPWD participated in a number of Monarch conservation activities listed on pages 7-8.

- *Red-crowned Parrot Conservation* - Starting in January 2016, TPWD initiated a Lower Rio Grande Valley-wide roost survey of Red-crowned Parrots (RCPA). Approximately 70 observers gather before dusk at the 4 known roosts to help estimate RCPAs. These surveys are now quarterly and estimates show seasonality changes among cities. Participants include a few biologists from Mexico but their efforts, thus far, have been on the U.S. side of the border.
  
- *Chihuahuan Desert Conservation Efforts*
  - TPWD is coordinating a response to the Chihuahuan Mud Turtle (*Kinosternon hirtipes murrayi*) disease. The species is found in southwest U.S. and has a “special protection” designation in Mexico. TPWD had been funding research in the Big Bend region to track individual turtle movements, home range size, seasonal activity and habitat use to help determine the threats facing this species.
  - In 2017, TPWD, Sul Ross University, and New Mexico Game and Fish Department presented a “Wildlife Management in the Chihuahuan Desert” workshop in Alpine, Texas, and Elephant Mountain Wildlife Management Area (WMA). Mexican colleagues and landowners attended the workshop, and Chihuahua’s Departamento de Ecología asked about the possibility of holding the same workshop in Chihuahua City. Coordination is underway to implement this request.
  - In December, 83 desert bighorn sheep were translocated from Elephant Mountain to Black Gap Wildlife Management Area, which is on the Rio Grande. The success of these restoration efforts requires the continued support of Mexican partners.
  - TPWD initiated the Transboundary Conservation Program along the Borderlands of Texas and Mexico by funding the Chihuahuan Desert Wintering Grasslands Bird research grant with the Borderlands Research Institute of Sul Ross University. The Principal Investigator was hired from Universidad Autonoma de Chihuahua and has commenced the research program.
  - Rio Grande – Rio Conchos Landscape Conservation Design Pilot Area is one of three pilot areas selected by the Desert LCC’s collaborative effort and includes protected areas in both the U.S. and Mexico and 29 Conservation Priority Areas (Commission for Environmental Cooperation, 2014). Major partners collaborating in this pilot area project include the National Park Service, Fish and Wildlife Service, Natural Resources Conservation Service, Texas Parks and Wildlife, World Wildlife Fund, and Comisión Nacional de Áreas Naturales Protegidas as well as numerous private landowners, non-governmental organizations, and research institutions. Ecological stressors that the plan will address include invasive species, soil erosion, resource extraction and use, all in the context of climate change, which are contributing to regional habitat loss, fragmentation, and degradation. Project objectives include: Identification of shared objectives and adaptation capacity through community outreach, engagement, and development, and testing and evaluation of adaptation strategies including: invasive species management, vegetation management, water management and erosion.
  
- *Native Fish Conservation Network (NFCN, <http://nativefishconservation.org/>)* is a partnership of conservation professionals from non-profits, universities, and state and federal agencies (including TPWD) who cooperate on landscape conservation assessments, watershed-based conservation planning, and delivery of strategic, science-based actions to protect and restore native fishes and their habitats. The NFCN would like to strengthen Mexico’s participation in conservation assessments, planning, and delivery within Native Fish Conservation Areas of the Chihuahuan Desert ecoregion (<http://nativefishconservation.org/plans/chihuahuan-desert-texas/>). Efforts center on delivery of a holistic, habitat-oriented approach to conservation of focal species, restoration and

protection of aquatic habitats, restoration of habitat connectivity, and management of non-native species. Cross border threats that require collaboration include habitat fragmentation, loss of natural flow regimes, reduced stream flow, channel narrowing and sedimentation, and groundwater pollution. A substantial source of funding recently became available for conservation delivery within Native Fish Conservation Areas of the Chihuahuan Desert ecoregion through the National Fish and Wildlife Foundation (<http://www.nfwf.org/swriters/Pages/home.aspx>).

- *Tamaulipas-TPWD Fisheries MOA* – The major implementation activities had to be postponed to this year due to Hurricane Harvey.
- *Sea Turtle Conservation Program*
  - During the 2017 Kemp’s Ridley nesting season, 24,586 nests were registered from Tamaulipas beaches with 73% documented from the Rancho Nuevo beach. This represents a 35.6% increase from 2016 nesting numbers.
  - 1,020,869 hatchlings were released into the Gulf of Mexico (61.7% from Rancho Nuevo), an 18.4% increase from 2016.
  - The first nest of the 2017 season was registered at the Playa Miramar Field Station on March 16. This is the second earliest Kemp’s ridley nesting recorded in the history of the Binational Kemp’s Ridley Project since it started in 1978. The earliest registered nesting was on March 15, 2016 at the Tepehuajes Field Station. The last nest of the 2017 season was also registered at the Playa Miramar Field Station on August 9.
  - The Gladys Porter Zoo has been awarded funding through the Deepwater Horizon Sea Turtle Restoration Program to assist in continuing the sea turtle conservation work in Tamaulipas. The target for funding of this effort is \$450,000 per year for up to 8 years.
  - The state of Tamaulipas conducts this work with government resources at two camps and reports the data to Gladys Porter Zoo, which is then included in the results that Gladys Porter Zoo reports. Since the Gladys Porter Zoo funds are spent strictly through non-governmental entities in Tamaulipas, the state of Tamaulipas has requested a budget from Gladys Porter Zoo on how the Zoo spends these funds in Tamaulipas.

Past projects include:

- In 1977, Mexico donated 6 desert bighorn sheep to Texas.
- In 1996, former Governor George W. Bush and SEMARNAP signed a cooperative agreement to facilitate wildlife exchanges. Since the 1970s, Texas had made multiple donations of white-tailed deer but it was cumbersome implementing them one by one. This same cooperative agreement facilitated the donation of mule deer to Mexico.
- In 1985, TPWD and the National Park Service launched the Border States Conference on Recreation, Protected Areas and Wildlife, which was held every couple of years with the venue alternating between the U.S. and Mexico. Capacity building workshops held in Mexico evolved from the networking at this conference. With the creation of the Border Governors Wildlife Table in 2004 and of the Rio Grande Joint Venture plus ongoing work by the Sonoran Joint Venture, the conference was considered duplicative and was discontinued.
- In support of Tamaulipas and Nuevo Leon fish hatchery programs, TPWD has donated brood fish, fingerlings and hatchery equipment.

## **-Binational: Canada-U.S.-**

### **Trapping work with Canada**

The United States and Canada continue to collaborate on the trap research efforts of their respective programs. For the US, Canada has provided invaluable data and research results, primarily on bodygrip traps, which have been used toward the development of Best Management Practices for Trapping in the US. The US has provided extensive data to Canada on restraining traps to allow certification of various foothold, foot encapsulating and cage traps through the Canadian program. Researchers collaborate annually on research agendas and field and lab results. Data sharing prevents the need for duplicating research efforts and provides for the efficiency of the respective programs. The two countries have plans to continue this important partnership as they work toward evaluating and developing capture devices that meet the Agreement on International Humane Trapping Standards (AIHTS). Since the start of the respective testing programs in 1997, over 450 types of commercially available traps have been evaluated for 22 furbearer species. In the U.S., some 1,200 trappers and wildlife technicians, as well as numerous state agency biologists have participated in the testing program in various ways. Field projects for the capture of furbearers and evaluation of traps have been conducted in 43 states. The U.S. program, coordinated through the AFWA, has included routine information exchange with other wildlife researchers worldwide. Reports and resource material are available at the AFWA website, [www.fishwildlife.org](http://www.fishwildlife.org)

### **Canadian Wildlife Directors Committee**

The Canadian Wildlife Directors Committee (CWDC) is composed of the wildlife directors and agency leads representing the jurisdictions/agencies (13 Provinces and Territories and Environment Canada, Parks Canada Agency, and Fisheries and Oceans Canada) with responsibility for wildlife conservation in Canada. The role of the CWDC is to provide leadership in the development and co-ordination of policies, strategies, programs and activities that address wildlife and habitat issues of national concern and contribute to the conservation of biodiversity. AFWA and state wildlife agency representatives attend this meeting each year. Last year the CWDC met in July 2017. AFWA's Executive Director, President, and Canadian Liaison attended the meetings.