Nongame Subprogram Briefing
- December 1, 2009 – March 31, 2010 -

Common acronyms used in this report:

AF=Alpha female
AM=Alpha male
ASNF=Apache-Sitgreaves National Forest
ASDM=Arizona Sonoran Desert Museum
ASU=Arizona State University
BLM=Bureau of Land Management
BRWRA=Blue Range Wolf Recovery Area
BTPD=Black-tailed Prairie Dog
CNF=Coconino National Forest
CEDES=Comision de Ecologica y Desarrollo del Estado de Sonora
CONANP=Comision Nacional de Areas Naturals Protegidas
DPS=Distinct Population Segment
EA=Environmental Assessment
ESA=Endangered Species Act
FAIR=Fort Apache Indian Reservation
GIS=Geographic Information System
GNF=Gila National Forest
IFT=Interagency Field Team
LCR=Little Colorado River
MA=Management Area
NAU=Northern Arizona University
NEPA=National Environmental Policy Act
NF= National Forest
NMDGF=New Mexico Department of Game and Fish
NPS=National Park Service
NRCS=Natural Resource Conservation Service
RU=Recovery Unit
SHA=Safe Harbor Agreement
TNC=Nature Conservancy
TPZ=The Phoenix Zoo
UA=University of Arizona
USFS=U.S. Forest Service
USFWS=U.S. Fish and Wildlife Service
USGS=U.S. Geological Survey
YOY=Young-of-Year

Providing an accurate count of listed and candidate species for a state is complicated by several parameters, such as whether a person counts species with historical range in the state but now absent from the state (e.g. grizzly bear), only counts species presently in the state, and/or whether experimental status populations are counted (e.g. Colorado pikeminnow). This is further complicated by the fact that some species occurring in the state have listed or candidate populations only outside of the state (e.g. Gunnison's prairie dog).

When looking at all listed and candidate species that may currently occur in the state (regardless of their status), there are 26 species that are Endangered, 13 that are Threatened, and 16 that are Candidates. However, two species should be added to the Endangered list for management purposes (Northern Aplomado falcon and thick-billed parrot). The Northern Aplomado falcon has been released into New Mexico as a 10(j) Nonessential Experimental population. Arizona is included in the 10(j) area for the New Mexico release. The Department works with thick-billed parrots in Mexico and continues to evaluate the potential to reintroduce them back into the state. Therefore, the working number for Endangered species for the Department is more accurately considered to be 28. In contrast, the Department has no plans for reintroduction of grizzly bear, so it is not counted in our total even though Arizona is within its historical range (see the table below).

In comparison to the last report to the Commission, the number of Endangered species has increased by one. This increase is a result of the addition of the California least tern, the thick-billed parrot and the Rio Sonoyta pupfish and the removal of the Eskimo curlew and Sinoloan jaguarundi. Neither of the removed species has been delisted; however the Department contends that Arizona is not in their historic range. A similar situation occurs for the Greater sage grouse, which is not tallied as an Arizona species by the Department, but now appears on the ecos.fws.gov website. At this time, the list of Threatened species still includes the Sonoran Bald Eagle Desert DPS pending a court response to a federal motion of dissolution with the Federal Court that enjoined them from delisting the bald eagle in the Sonoran Desert area. The list of Candidate species now includes the Wet Canyon and San Xavier talussnails. See Appendix A.

The Department continues to work with USFWS staff to clarify the listing status of several species and to rectify apparent errors on their website. The USFWS website still lists some species as having historic range in the state which the Department believes to be inaccurate (Eskimo curlew, Sinaloan jaguarundi, and the Greater sage-grouse); it does not include a presently listed DPS that only exists in Arizona (Sonoran Desert bald eagle); it inaccurately excludes the Colorado pikeminnow from the Arizona list due to it only currently occurring in 10(j) Experimental populations within the state (however it is also a historic range species and should be counted); it does not accurately reflect recent changes in species status (Rio Sonoyta pupfish, Wet Canyon and San Xavier talussnails); and inaccurately includes the Gunnison's prairie dog as a Candidate in Arizona due to a DPS designation for populations elsewhere in the country.

Status	Historic Range Only, No Active Management Program	Historic Range, Not Known to be Present but Active or Potential Management Programs	Maybe or Likely Present	Total
Endangered	1 (grizzly bear)	2 (Aplomado falcon and TBP)	26	29
Threatened			13	13
Candidate			16	16
Contention	3 [Eskimo curlew (E), Sinaloan Jaguarundi (E), Greater sage-grouse (C)]			3

Species	Current Status (see Appendix A)	Ongoing Action	Recent History and Date of Next Anticipated Action	Potential Impacts to AGFD Activities/Authorities	Origin of Action
475 Species Petition	No ESA Status	12-month status review	Negative 90-day finding for 270 (+5) of the 475 on 01/06/09. Second partial finding published in Federal Register 12/16/09 was positive for 67 species, including 11 species of Arizona mollusk and 1 Arizona lizard.	May increase the number of mollusk species and one lizard species to be surveyed and managed, without having adequate staff to accomplish increased workload.	Forest Guardians (now WildEarth Guardians)
Black-tailed Prairie Dog	No ESA Status	12-month status determination made	Positive 90-day on 12/02/08. 12-month status review resulted in determination that listing is not warranted as published in Federal Register on 12/3/09.	Department can continue as currently planned with on-going reintroduction project. We continue to work with FWS to pursue a CCAA.	Listing petitioned by Forest Guardians (now WildEarth Guardians), Center for Biological Diversity, Biodiversity Conservation Alliance, Rocky Mountain Animal Defense
Cactus Ferruginous Pygmy-Owl	No ESA, but Positive 90-day Finding	12-month status review	American Ornithologists' Union did not split eastern and western populations into different species. USFWS issued positive 90-day finding published 6/2/08. 12-month finding on hold. CBD filed compliant to FWS on 2/18/10 to force determination on 12-month finding.	If re-listed, captive-breeding activities and/or other management activities may need to be modified.	Defenders of Wildlife & Center for Biological Diversity
Chiricahua Leopard Frog	Threatened	USFWS settled lawsuit and will evaluate designating critical habitat	Proposed rule for critical habitat is due by 12/08/10 and a final rule is due by 12/2011. Ramsey Canyon leopard frog subsumed within Chiricahua leopard frog and those populations are now covered by ESA.	If designated, Critical Habitat could further impact the Department's Sportfish stocking programs.	Wild Earth Guardians
Flat-tailed Horned Lizard	No ESA Status	Petition to list	May 2009, Ninth Circuit Court of Appeals upheld an appeal by petitioners contesting 2006 USFWS decision to withdraw its proposed listing. The Court ordered USFWS to reevaluate the status. November 2009 U.S. District Court in Arizona ordered USFWS to reinstate 1993 proposal to list; decision expected November 2010. AGFD preparing comments for FWS.	Listing will require additional resources to be allocated to recovery.	Tucson Herpetological Society, Defenders of Wildlife, Center for Biological Diversity, Horned Lizard Conservation Society, Sierra Club, Wendy Hodges; Francis Allan Muth

Gila Chub	Endangered with Critical Habitat	Formation of Recovery Team	Invitations to Team out in April-May. Draft plan by late 2010.	Department resources further committed to planning and implementation.	2005 Listing
Gila Topminnow	Endangered w/o Critical Habitat	Rewrite of Recovery Plan	Draft plan with AGFD-Nongame. AGFD hopes to complete next year. Draft for public review in FY11.	Department resources further committed to planning and implementation.	1967 Listing
Gunnison's Prairie Dog	No ESA Status	12-month status determination made	12-month finding published 2/12/2008 in Federal Register found populations in portions of CO & NM are warranted but precluded for listing under ESA as Threatened; populations in AZ found not warranted for listing.	Required monitoring, recovery plan drafting, and potential critical habitat designation are not needed at this time. Monitoring may still be advisable.	WildEarth Guardians + others
Hualapai Mexican Vole	Endangered	12-month finding to delist	Positive 90-day finding to delist published 5/15/08. 12-month finding in prep.	Little current work with this species in anticipation of de-listing, which would increase management options.	AGFD
Jaguar	Endangered	Determination that CH is prudent published in FR 1/13/10.	Proposed Critical Habitat (CH) designation scheduled to publish January 2011.	Depends on extent of CH if designated.	Center for Biological Diversity
Mexican Spotted Owl	Threatened with Critical Habitat	Recovery Plan Revision	Recovery Plan Revision currently being initiated by FWS.	No impact to the Department, unclear what new direction will be included in new Recovery Plan.	Dr. Robin Silver, 1993

Northern Leopard Frog	No ESA , but Positive 90-day Finding	12-month status review	90-day finding published in FR 7/1/09. Comments for 12 mo status review submitted to FWS.	Listing will require additional resources to be allocated to recovery.	Center for Native Ecosystems, Biodiversity Conservation Alliance, Defenders of Black Hills, Forest Guardians, Center for Biological Diversity, The Ark Initiative, Native Ecosystems Council, Rocky Mountain Clean Air Action, Jeremy Nichols
Ocelot	Endangered	Petition for designation of Critical Habitat	CH petition is dated Jan 21, 2010 and per the ESA the FWS should respond within 90 days.	Petition primarily addresses Texas; so CH designation in AZ seems unlikely at this time.	Wildearth Guardians, Santa Fe
Page Springsnail CCAA	Candidate	Finalized 10/7/09	Director signed on March 26, FWS signed on October 7; publication in FR thereafter.	Page Springs & Bubbling Ponds hatchery operations are now better protected if the species gets listed.	AGFD
Roundtail Chub	Warranted but precluded	12-month status review	Positive 12-month finding published in FR 7/07/09. Now a Candidate Species.	Could have significant impacts to Sportfish program. Planning meeting on 7/21/09.	Center for Biological Diversity
San Bernardino Springsnail	No ESA Status	Revised proposed rule submitted 12/08/08	Expected FR publication date in FY11.	Additional Department resources for Recovery planning and implementation, possible 12-step process.	FWS
Sonoran Desert Bald Eagle DPS	Threatened	12-month status review completed 2/25/2010	*12-month finding published 2/25/2010 found bald eagles in Arizona are not a DPS and therefore not a listable entity; however, until Court injunction is dissolved, the Sonoran Desert population remains listed.	Bald eagle conservation activities will continue as in recent years. Eagle still protected under Bald & Golden Eagle Protection Act.	Center for Biological Diversity
Sonoran Population of the Desert Tortoise	No ESA Status	12-month status review	90-day finding published in FR on 8/28/09. Comments on 12 mo status review being submitted to FWS.	Require resources for development & Implementation of Recovery Plan, strengthen mitigation guidance to developers, alter adoption program requirements.	WildEarth Guardians & Western Watersheds Project

Spikedace/Loach Minnow	Threatened with Critical Habitat & Proposed Critical Habitat respectively	Revision to Chapter 1 of plan proposed for 2009	Proposed Critical Habitat due to Federal Register 10/15/10, final due 10/14/11.	If designated CH, could further impact Department's Sportfish program.	1986 Listings
Southwestern Willow Flycatcher	Endangered with Critical Habitat	Lawsuit against APHIS for tamarisk beetle introduction; 5 year status review; Lawsuit against USFWS for additional critical habitat designation	Asian and Middle-Eastern beetle was approved for introduction by APHIS to control tamarisk; however, beetles have also been released in unauthorized areas and are spreading faster than anticipated. Five year Status Review on-going. Critical habitat was first designated in 1997, but was challenged and redesignated at a reduced acreage in 2005. On January 14, 2010, the USFWS agreed to reconsider designation of critical habitat following lawsuit. Revised proposed critical habitat rule expected to publish in FR 7/31/11.	More extensive and/or quicker spread of beetles than anticipated could substantially impact tamarisk and thus potentially flycatchers. No significant impact to the Department unless a significant amount of critical habitat acreage is added.	The Center for Biological Diversity and Maricopa Audubon Society
Three Forks Springsnail	Candidate	Revised proposed rule submitted 12/08/08	Expected FR publication date in FY11.	Additional Department resources allocated to recovery planning and implementation.	FWS
Thick-billed Parrot	Endangered	Lawsuit (2/5/10) against USFWS for development of Recovery Plan; following USFWS clarification on listing status	FWS published in FR 7/14/09 a clarification on the listing status of the thick-billed parrot; finding declared the parrot as being endangered throughout its range and not just outside the United States.	Complicates future releases (requires full protection, 10j., 10(a)(1)(A), etc. No immediate implications to Department, as parrot does not occur in AZ	WildEarth Guardians
Tucson Shovel-nosed Snake	Candidate	12-month status review published 3/31/10	AGFD provided comments; Publication of 12-month finding on hold pending FWS internal revision. CBD filed complaint to FWS on 2/18/10 to force determination on 12-month finding. Warranted but Precluded determination on 03/31/10.	Increased resources for development and implementation of Recovery Plan.	Center for Biological Diversity

Yuma Clapper Rail	Endangered w/o Critical Habitat	Rewrite of Recovery Plan	Draft re-write of Recovery Plan made available for public comment per Federal Register on 2/10/10; comments due by 4/12/10.	Likely little to no impact to the Department.	1967 Listing

The Department works closely with the U.S. Fish and Wildlife Service and other partners to develop and implement species conservation documents such as Recovery Plans, Safe Harbor Agreements and Candidate Conservation Agreements (sometimes with Assurances). The existence of those documents frequently results in the implementation of management actions. Documents that are currently in development include:

- A Candidate Conservation Agreement for the Black-tailed Prairie Dog in Arizona. The Department is currently working with the USFWS to develop the agreement to implement conservation measures to manage Black-tailed prairie dog habitat and populations in a manner that will contribute to the multistate conservation effort and the long-term viability of the species while also maintaining management flexibility.
- A Candidate Conservation Agreement for the Burrowing Owl on the Ben Avery Shooting Facility. The Department is currently working with the USFWS to develop the agreement to allow for the translocation of Burrowing Owls to 10 areas throughout the Ben Avery Shooting Facility for translocation research.
- A Candidate Conservation Agreement and Strategy for the Sonoyta mud turtle, Sonoyta pupfish, Quitobaquito springsnail, and the longfin dace within Quitobaquito (Organ Pipe Cactus National Monument, Arizona) and the Rio Sonoyta (Sonora, Mexico). The Department is currently working with the USFWS, NPS, Comision de Ecologia y Desarrollo Sustentable del Estado do Sonora, and Comision Nacional de Areas Naturals Protegidas to develop the agreement to implement conservation measures to protect habitat that exists in the Rio Sonoyta watershed and its diverse floral and faunal assemblage. It further identifies a strategy with specific activities to conserve these species and the ecosystem.

Below is a summary of the more significant management activities taken during this reporting period.

MAMMALS

MEXICAN WOLF

Population Status

Month	Functional Radio Collars		Packs		Singles	
	AZ	NM	AZ	NM	AZ	NM
December 2009	13	15	4	5	1	1
January 2010	14	14	4	5	1	2
February 2010	14	14	4	5	1	2
March 2010	14	14	4	5	1	2

Mexican Wolf Management Activities November 12, 2009 – March 12, 2010

Measurement	Arizona	New Mexico	Total
New Wolves released	0	1	1
Wolves translocated	0	0	0
Wolf mortalities	1	0	1
Wolf captures to affix radio collars	1	1	2
Wolf that slipped its radio collar or collar stopped functioning	0	2	2
Wolves considered Fate Unknown[1]	0	0	0
Wolves removed – permanent	0	0	0
Wolves removed – non-permanent[2]	0	0	0
Reports of Wolf nuisance behavior	0	0	0
Confirmed or probable depredations[3]	1	2	3
Livestock depredation investigations that did not implicate wolves	2	1	3

[1]Fate Unknown are collared wolves unable to be located for a significant period of time
[2]Wolf that remains eligible for future translocations
[3]Total number of depredation occurrences

Initial Releases and Translocations

On January 10, the Interagency Field Team (IFT) released f1154 from captivity into New Mexico at the Gila Flat release site on the Gila National Forest. The IFT removed this wolf from the San Carlos Apache Reservation (SCAR) in June 2009 for being outside of the BRWRA boundary. This wolf was a 2008 wild-born offspring of the Bacho Pack from the Fort Apache Indian Reservation (FAIR).

Movements, Dispersals and other Incidents

During the last four months, there have been several significant movements of individuals and packs within the Blue Range Wolf Recovery Area.

In Arizona:

The Hawks Nest, Rim, Bluestem and Paradise core pack members have remained within their traditional home ranges. Starting at the end of January, m1155, a juvenile wolf from the Hawks Nest Pack, began to travel by itself outside of the pack's traditional home range territory on the Apache Sitgreaves National Forest. This wolf eventually travelled to the Gila National Forest, east of Escudilla Mountain, and joined up with a single female wolf, F1106 that was translocated into New Mexico in December of 2008. These wolves have been utilizing the traditional Fox Mountain Pack territory on the Gila National Forest. The IFT will continue to monitor these wolves and determine if they form a new pairing.

AM990 began to travel widely outside of his normal territory on the FAIR in September of 2009. In November the IFT located this wolf dead on the San Carlos Indian Reservation in Arizona. An investigation into the incident is ongoing.

In New Mexico:
The Middle Fork, Luna, and Dark Canyon packs have remained within their traditional home ranges on the Gila National Forest. Two other wolf packs in New Mexico made significant movements outside of their traditional territories.

Starting in October 2009, the Fox Mountain Pack began to move out of their traditional territory north of Luna, New Mexico and range as far south as Eagle Peak, east of Reserve. Two members of this pack, AM1038 and m1161, have not been located during radio telemetry survey efforts since mid December. The IFT has documented the remaining members in this pack have begun to move back toward their traditional territory in the month of March.

Starting in late December 2009, the San Mateo Pack began to move widely outside of their normal territory in the Mangas Mountains on the Gila National Forest. This pack ranged primarily south of Highway 12 near the town of Aragon. In March this pack began to move north back into its normal territory.

A single wolf, F1106, was located with m1155 from the Hawks Nest Pack in the vicinity east of Escudilla Mountain in New Mexico. This location is within the traditional territory of the Fox Mountain Pack, and it will be interesting to see where these two wolves end up if the remaining Fox Mountain Pack members return to their territory. If this pairing continues the IFT will designate F1106 and m1155 as a new wolf pack this spring.

The IFT has not documented any new depredation incidents for the Middle Fork Pack in New Mexico during this reporting period. The Middle Fork Pack was assigned ten confirmed depredation incidents during the summer and fall of 2009. All of the livestock were yearling cattle. The IFT is working to develop both proactive and reactive management strategies in advance of the 2010 grazing season if this pack begins to depredate on domestic livestock again this grazing season.

Outreach

The IFT is currently working on the annual report for 2009. For the entire year, the IFT made 45 presentations and status reports to approximately 1289 people in federal and state agencies, conservation groups, rural communities, schools, wildlife workshops, and various other public and private institutions throughout Arizona, New Mexico and White Mountain Apache Tribal lands.

Other Issues

The IFT conducted the end of year population count in January 2010. Survey efforts were significantly hampered due to inclement weather and issues surrounding handling permits that ultimately resulted in Department personnel not participating in efforts to locate, count and or capture individual wolves for radio telemetry collaring purposes. The count was completed

utilizing personnel from the FWS and the New Mexico Department of Game and Fish. A minimum population count of 42 wolves was estimated, with 27 wolves estimated in Arizona and 15 wolves in New Mexico. Only two breeding pairs were documented in the project area. In 2008 the minimum population count was 52 wolves with two breeding pairs.

SONORAN PRONGHORN

The Department conducted boma captures and releases from the captive breeding pen December 2-4. This was our first attempt at this type of capture and release, modeled after methods used at the peninsular pronghorn captive pen in Baja. The bomas (a large corral-type trap the pronghorn voluntarily go into for food, and then doors are closed trapping them inside) worked as anticipated, and the removal of pronghorn from the bomas went smoothly (i.e. no injuries to the pronghorn). On the first day, 20 pronghorn were caught from the north half of the pen in the north boma. Eight males and two females were radio collared, ear tagged and released. These pronghorn received a combination of various drugs as recommended by the veterinarians on-site. Nine females were caught in the bomas, radio collared or ear tagged, and released back into the pen for breeding stock or because they were too young for release. The breeding buck was also caught and released back into the pen.

On the second day, 20 pronghorn from the south half in the south boma were caught. Ten males and two females were radio collared, ear tagged and released. We changed the sedative from Azaperone to Haloperidol due to the high level of stress exhibited among the pronghorn the first day. Personnel also radio collared or ear tagged six females that were released back into the pen. The breeding buck was also caught in the boma and released back into the pen. The two females were flown by helicopter under anesthesia and released from a release pen on Organ Pipe Cactus National Monument.

On the third day, one male from the north pen was darted and flown by helicopter under anesthesia to the release pen on Organ Pipe National Monument.

All the animals released back into the pen are alive and doing well. Unfortunately, the pronghorn released the first day from the north boma did not fare well. Three pronghorn died of capture myopathy between one and nine days after the capture. Four bucks and one doe were found dead from coyote predation near the pen. One doe was found dead 18 days after release. There was no predation; it may have been capture myopathy or possibly disease. Tissue samples were sent to a diagnostic lab for disease testing. Only one buck remains alive from the first day; he is with a group of eight bucks that were released on the second day.

Changing the sedative used from Azaperone to Haloperidol after the first day appears to have had a positive result. Of the 12 animals released the second day, 10 are still alive. One buck was killed by a coyote near the pen. Another buck moved from the pen to STAC and then to NTAC where he was found dead December 28. Cause of his death is unknown as he had likely been dead for a few days before being discovered. Eight of the bucks have joined up with one buck from the first day, and an adult buck that was released last year, and are moving around the pen

in a group of 10. The three pronghorn flown to Organ Pipe are all still alive and have joined groups of wild pronghorn.

The first two fawns this spring were born in the pen on February 13. So far, seven fawns have been seen. There are 19 females in the pen expected to produce twins this spring. There have been significant rains at the pen since the last report (~5.0 inches) and the pen is very green. The pronghorn are foraging more on natural forage and reducing their consumption of hay. The rains have also filled our pronghorn waters and greened up the range which should provide good forage for the wild herd and their new fawns this spring.

Range wide surveys were conducted in Mexico from December 7 – 11. A total of 311 pronghorn in 64 different groups were seen. The estimate for the total population is 483. In the Pinacate area, we saw quite a few more pronghorn than the last survey two-years ago (53 vs. 35) and the estimate is considerably higher (101 vs. 50). Most of the areas we flew were very dry, with only a few areas of green forage. A capture/collaring project was postponed due to the drought conditions we documented in Sonora at the time.

The draft Environmental Assessment for the proposed reestablishment of Sonoran pronghorn within suitable portions of its historic range in southwestern Arizona was released February 4, 2010. Included is a proposed rule designating the reestablished populations as "nonessential, experimental" to allow greater management flexibility under the Endangered Species Act. A public information session was held February 23, 2010, in Gila Bend but no one from the public attended. Public comments will be accepted until April 5, 2010.

A news report on the recent releases of pronghorn from the pen was front page news of the Arizona Republic on February 6. Stephanie Doerries, one of the pen technicians, was featured in photographs doing telemetry and monitoring pronghorn in the pen.

BLACK-FOOTED FERRET

On December 14 and 15, 2009, a two-day spotlighting event occurred on the Espee Ranch. This survey was designed to meet post release monitoring requirements following the release of 26 ferrets in October 2009. Four ferrets were observed, and one was captured. The captured ferret was a wild born female that was translocated to the Espee Ranch from the Aubrey Valley population in 2009.

In December 2009, a Canine Distemper Virus (CDV) outbreak was detected on the Espee Ranch through predator sampling conducted by the Animal and Plant Health Inspection Service (USDA). Opportunistic sampling of predators in the Aubrey Valley was conducted to determine how far the outbreak may have spread. Project personnel contacted hunters to obtain samples at a public coyote hunting event in early January. Only one coyote was collected within a five mile radius of Aubrey Valley, so only one sample was obtained. The sample was sent into the Washington Animal Disease Diagnostic Laboratory (WADDL) for testing and results have not yet been received. Additional samples were also collected at the annual Antelope Eaters predator hunt on March 6 and 7. Project personnel were able to get nine samples; three of which

were within 10 miles of Aubrey Valley. The remaining samples were from the surrounding area within 20 miles of Aubrey Valley with some samples from areas near the Espee Ranch. Samples from seven coyotes and two gray foxes were also taken during the two day event. Tissue samples were collected to test for CDV, and Nobuto strips were used for blood collection to test for plague. These samples will also be sent to the WADDL.

Jeff Corcoran attended the National BFF subcommittee meeting in Colorado in January 2010. In conjunction with the meeting, a Prairie Dog Workshop on Methodologies for Estimating Prairie Dog Abundance was held, where he presented a presentation on the density mapping method technique developed and currently used on the Arizona project.

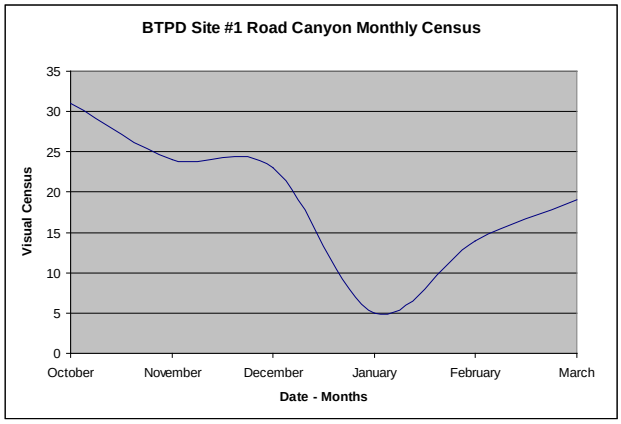
The Arizona black-footed ferret Working Group met on February 18 to discuss the upcoming Allocation Request for ferrets and to update the group on recent events. The group was in agreement with the 2010 proposal, and it was submitted to Eric Larson on March 15.

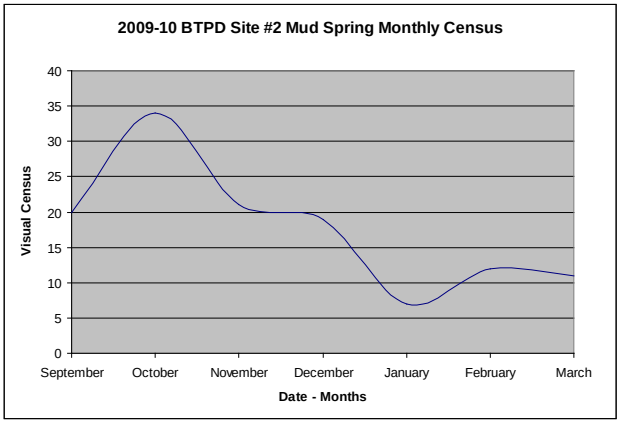
As of the date of this report and pending lab results, the Aubrey Valley remains "plague free". Opportunistic sampling for CDV is planned to occur throughout the year. A large spotlighting event is planned for March 25-30 using about 100 volunteers. Dr. Julie Swenson (vet from the Phoenix Zoo) is planning on attending the event and will teach Jeff Corcoran blood drawing methods for badgers. The project plans to trap badgers in the Aubrey Valley in April and possibly on the Espee Ranch for disease testing. Badgers are not as transient as coyotes and are better indicators of plague presence in a local area versus being exposed in another area and just passing through.

BLACK-TAILED PRAIRIE DOG

The Department continued with activities to re-establish black-tailed prairie dogs (BTPD) to southeastern Arizona during this period. On September 21 and October 8, 2010, a total of 107 BTPD were released at two different sites within the Las Cienegas National Conservation Area (LCNCA). Following the release, monitoring was conducted weekly at both sites through January and monthly since. Monitoring involves visual censuses to indicate the population size and the expansion of the released BTPD.

The following graphs display the numbers of prairie dogs counted at each site since their release. Winter months result in lower BTPD counts because BTPD will spend the majority of their time underground. Overall temperatures this winter have been below average with precipitation amounts above average. This results in BTPD spending an increased amount of time underground. As temperatures continue to rise, the numbers of BTPD are expected to increase. Reproduction occurred in the spring following the release last year, so it is expected to occur again this season which will also increase the population at each site.





Currently, the Department is preparing the next release site. The site had mesquite cut down two to three years ago which needed to be removed. The Department worked with BLM employees and volunteers from Sky Island Alliance and Sierra Club to remove the downed mesquite and dig and install 25 artificial burrows for the release that will occur this fall. A source of BTPD for this fall's release has not been determined yet.

BIRDS

BALD EAGLE

The USFWS announced the results of their status review of the bald eagle in the Sonoran Desert area on February 25, 2010. Similar to their 90 day finding on July 7, 2007, but contrary to the Department's recommendation, the USFWS determined the bald eagle in the Sonoran Desert area was discrete, but not significant under the Distinct Population Segment policy (DPS). Since both criteria were not met, the USFWS did not designate the population as a DPS, and therefore a listing action was not necessary. The Department recommended the USFWS should designate the bald eagle in the Sonoran Desert area a DPS, but not to list the population under the ESA. The reason behind their decision is expressed in the Federal Register:

> *"The mere fact that a species persists in an ecological setting that differs to some degree from other ecological settings in which it is found does not mandate a finding that a population is significant to the taxon to which it belongs."*

The USFWS has filed a motion of dissolution with the Federal Court that enjoined them from delisting the bald eagle in the Sonoran Desert area to remove the injunction so the species can be delisted. The bald eagle in the Sonoran Desert area remains listed as threatened under the ESA until the court rules on that motion.

CALIFORNIA CONDOR

Breeding

The 2009 breeding season resulted in two wild-hatched chicks, but both have since disappeared and are assumed dead. The first chick, Condor 515, hatched from its nest cave near the Vermilion cliffs release site. 515 was the third chick produced by seasoned pair, Condors 114 and 126. 515 was visiting the release site regularly with its parents, but suddenly disappeared in late December 2009. The second wild-hatched chick of 2009, Condor 527, disappeared in the Grand Canyon in October 2009 about the time it was due to fledge. This was the first chick produced by the newly formed pair of Condors 122 and 210 (both produced chicks with prior mates). Since 2003, eleven wild-hatched chicks have been produced in Arizona; currently seven survive in the wild.

The 2010 breeding season is officially underway. In mid-February, Condors 114 and 126 laid the first egg of the season in their Vermilion Cliffs nest cave. A second pair, 13-year-old male Condor 162 and seven-year-old female Condor 296, appear to be incubating an egg which was laid in mid-March. This pair has also nested in the Vermilion Cliffs area. 296 is a first time breeder and 162's former mate died in 2008. Up to four additional pairs could attempt nesting in 2010.

Mortalities

Three confirmed condor mortalities occurred during this reporting period. Lead toxicity was determined by necropsy to be the cause of all three mortalities. The total number of confirmed lead poisonings now stands at 15 and remains the leading cause of death of condors in the Arizona/Utah population.

The carcass of Condor 127, a 14-year-old-female, was recovered on December 10, 2010, deep within the Grand Canyon. 127 was a veteran breeder, producing three chicks in the wild with mate 123. Telemetry data indicates that 127 was foraging primarily in Utah prior to her death from lead poisoning. Lead bullet fragments were found in 127's digestive tract.

The carcass of Condor 329, a five-year-old male, was recovered in Arizona near the Utah border on December 31, 2009. Telemetry data also indicates that 329 was foraging mostly in Utah prior to his death from lead poisoning. Lead bullet fragments were recovered from 329's digestive tract.

The carcass of Condor 472, the 2008 wild-hatched female chick of Condor 123 and 127, was recovered near its nest cave in the Grand Canyon on January 4, 2010. 472 was still dependant on its parents, so it is likely that Condor 127 fed its chick, Condor 472 some lead-tainted meat, since 472 had not yet left the area of Grand Canyon National Park. Lead bullet fragments were also recovered from the digestive tract of 472.

Soon after the lead poisonings of Condors 127 and 472, 127's mate, Condor 123 was captured and tested for lead exposure. His lead levels were within the acceptable range and he was released without treatment.

Releases

Condors 442 and 484 were released at the Vermilion Cliffs on March 6, 2010 during the 15th annual public condor release. Approximately 100 people were in attendance, including representatives from several cooperating agencies. The event also marked the 10-year anniversary of the Vermilion Cliff's designation as a National Monument.

Condor Movements

Significant snowfall amounts resulted in considerable transportation issues for biologists tracking the condors this winter. For the first time since the reintroduction project began in late 1996, travel up to the Vermilion Cliffs release site was restricted. One biologist was forced to hike down from the release site after being stranded for three days. The Peregrine Fund scrambled to borrow snowmobiles from the BLM in order to transport food to the condors in the release pen. The Department came to the condors' aid by providing emergency funding to purchase winter transportation for The Peregrine Fund. For over a month, travel to the release site was only possible via snowmobile or quads with snowtracks. Travel in southern Utah and along the Kaibab Plateau has also been, at best, difficult this winter. Condors continue to forage in lower elevations within the Kaibab Plateau and Grand Canyon areas. As typical during the winter months, increased condor activity is apparent at the Vermilion Cliffs release site. Several condors, however, continue to forage away from the release site, possibly taking advantage of higher wildlife and range mortality rates due to harsh winter conditions.

Condor tracking via satellite GPS transmitters proved to be an invaluable monitoring tool this winter. An additional 12 GPS transmitters purchased by The Peregrine Fund last year were attached to condors during the recent fall/winter trapping season. Location data obtained from these transmitters, combined with the tracking signals obtained from conventional VHS transmitters, have served as the only means to tracks some birds this winter due to travel restrictions.

Lead Reduction Efforts

2009 marked the fifth year of the Department's free non-lead ammunition program. Due to budget restrictions, fall big game hunters from Units 12A/B and 13A/B were eligible for one free box of non-lead ammunition in 2009 (versus two free boxes the four years prior). Voluntary participation from Kaibab hunters remained high at 85%, but there was a slight drop in participation rates from the previous year. Both the percentage of hunters using non-lead ammunition and the percentage of hunters using lead who packed out their gut pile declined. See table below for a summary of the free non-lead ammunition program results.

Table of 2005-2009 Kaibab Voluntary Lead Reduction Results
Data represents successful 12A hunters who checked their deer at the Jacob Lake Check Station

Year	Successful Hunters	Took Lead Reduction Actions	Used Non-lead Ammo	Took Head or Neck Shot	Packed Out Gutpile	% Hunters Using Lead Who Packed Out Gutpile	Took No Lead Reduction Action
2009	717	607 (85%)	476 (66%)	12 (2%)	119 (17%)	52%	110 (15%)
2008	910	814 (89%)	654 (72%)	13 (1%)	147 (16%)	60%	96 (11%)
2007	767	633 (83%)	465 (61%)	9 (1%)	159 (21%)	54%	134 (17%)
2006	548	329 (60%)	316 (58%)	6 (1%)	7 (1%)	3%	219 (40%)
2005	909	455 (50%)	455 (50%)	N/A	N/A	N/A	454 (50%)
2004		<5%					

Lead Exposure

Final condor lead exposure rates are pending. One bird, Condor 133 is currently being treated for lead poisoning, but is expected to recover. Winter trapping and lead testing is still in progress. Preliminary data indicates that lead exposures and chelation treatments increased slightly in 2009, however. Condor foraging in Utah during the fall hunting season continued to increase in 2009. Due to the propensity of the condors to feed in both southern Utah and northern Arizona during the hunting season, it is difficult to pinpoint where these lead exposures are occurring. Therefore, the true effects of Arizona's lead reduction program will not be known until a similar program is implemented in southern Utah. The Department is optimistic this will occur in 2010, and has been working with the Utah Department of Wildlife Resources and NGO Utah Wildlife in Need to facilitate the process.

Outreach

Outreach efforts reached over 1,100 people during this reporting period and included: a non-lead ammunition booth at the International Sportsman's Expo, a public condor release, and several presentations. Upcoming outreach efforts will include a non-lead ammunition booth at the Navajo Sportsman's Expo, a non-lead shooting booth at the Department's Outdoor Expo, and a voluntary lead reduction presentation to the Oregon Department of Fish and Wildlife.

California and Baja

- Six out of eight wild-hatched condors fledged in California in 2009.
- California is in the second year of its lead ammunition ban within condor range. Two condors have been shot (not fatally) and two have died from lead toxicity since the ban was implemented.
- The one 2009 wild-hatched condor in Baja died shortly after it fledged.
- A condor in Baja died from bobcat predation in December 2009.

Condor Numbers

Total population: 345
Captive: 161
Wild: 184

Arizona/Utah: 73
California: 94
Baja: 17

Arizona/Utah Numbers
Condors Released: 123
Wild-hatched: 11
Mortalities: 51
Returned to Captivity: 10
Current Population: 73
Awaiting Release: 3

Mortalities
Confirmed Lead Toxicity: 15
Suspected Lead Toxicity: 2
Predation: 11 (Coyote: 8; Golden Eagle: 3)
Missing/Unknown: 13
Starvation: 3
Shot: 3
Impaction (coins): 2
Powerline Collision: 1
Infection: 1

CACTUS FERRUGINOUS PYGMY-OWL

The USFWS is delaying the publication of the status review for the cactus ferruginous pygmy-owl until an internal Distinct Population Segment (DPS) policy revision occurs. The revision is examining the consistency between the term "significance" under the DPS policy and the ESA. It is anticipated the USFWS will announce the results of the status review following the policy change, but that is not expected to occur until 2012.

CALIFORNIA LEAST TERN

The Interior and California races of Least Tern are listed as federally endangered. Each spring and summer, typically fewer than a dozen scattered individuals would be observed migrating through Arizona to unknown destinations. The species was never expected to nest in Arizona, and thus was not a species that concerned the Department. However, in mid-May 2009, a pair of Least Terns was discovered by an observer birding at a Salt River Project's (SRP) water recharge facility in Glendale. This tern pair soon began to exhibit courtship behavior, and a second pair of terns joined them at the facility. Nest site selection behavior was observed, and the first pair began incubating eggs May 29 on one of the facilities gravel roads. The Department met with several officials from SRP on June 1 and decided to close road access to give the terns the best chance for breeding success. The second pair began incubating eggs in mid June at another scrape on the gravel road near the first pair. One chick hatched on June 19 and took its first flight on July 10. The tern's progress was monitored almost daily by volunteers, and updates

were provided to the Department and SRP several times a week. Two adults and the juvenile continued into early August with the young bird last observed on August 7 when it likely departed for wintering grounds in South America.

This is the first known nesting attempt for Least Tern in Arizona. The close and relatively swift coordination and cooperation between the Department, SRP, USFWS and volunteers greatly enhanced the success of this unexpected nesting event.

GOLDEN EAGLE

The USFWS is drafting implementation guidance for the Bald and Golden Eagle Protection Act for the administration of permits. This guidance will be followed by a USFWS draft Golden Eagle Conservation Strategy which will standardize language and protocols so data range-wide is comparable. Currently there are no "take" permits available for golden eagles until the USFWS receives adequate information the population can withstand the issuance of permits. The Department is working toward developing a Golden Eagle Management Program to start assessing the golden eagle population status in Arizona, and developing an oversight committee of interested partners. The Department is working toward conducting baseline surveys and spatial distribution assessment for the species.

THICK-BILLED PARROT

The previous Nongame Subprogram Briefing (April 1 – July 31, 2009) included an update on the USFWS recent clarification on its position regarding the listing status of the thick-billed parrot. Historically the USFWS had considered the parrot as endangered only where it currently occurs (the existing Mexican population). The new USFWS finding published in FR 7-14-09 declares the parrot to be endangered throughout is entire range (current and historical). Following this new finding Wildearth Guardians filed suit (2-5-10) against the USFWS to develop and implement a Recovery Plan for the parrot. There are no immediate implications to the Department, as the parrot does not occur in Arizona. However, it would complicate any future releases as they would result in the release of a fully protected species or require designation of an Experimental Population status (10j.) or the use of a 10(a)(1)(A) Research Permit.

AMPHIBIANS

CHIRICAHUA LEOPARD FROG

The Department continued with the implementation of the Chiricahua leopard frog recovery plan. Specific activities during this time period included coordinating with partners throughout the range of the frog, as well as assessing impacts of statewide sportfish stocking on Chiricahua leopard frogs. During Chiricahua leopard frog steering committee meetings held in Payson (February 10) and Portal (February 18), Department personnel coordinated with partners from the USFWS, USFS, and several others to discuss achievements and future recovery activities throughout the frog's range. The Department also coordinated with partners in local recovery

groups from Recovery Units 4 (March 2 and 24) and 6 (February 25) to discuss progress and develop 2010 work plans.

During this time frame, the USFWS officially subsumed the Ramsey Canyon leopard frog within Chiricahua leopard frog. The Federal Register notice acknowledged genetic data published in 2004 and coauthored by Department staff that indicated Ramsey Canyon leopard frogs and Chiricahua leopard frogs did not differ enough to be recognized as separate species. The Department has anticipated this change for some time, and has been working with partners and stakeholders within the range of Ramsey Canyon leopard frogs to ensure a smooth transition in the continued implementation of management objectives.

NORTHERN LEOPARD FROG

On December 3, the Department provided comments to the USFWS regarding the 12-month status review of northern leopard frogs, which have been petitioned for listing under the ESA in the western United States. In addition to a summary of the current known status of the frog, the Department recommended the USFWS work with the Department to seek alternatives to listing. Also, for much of this time frame the Department assessed impacts of statewide sportfish stocking on northern leopard frogs.

The Department provided comments on a draft EA prepared by the BLM for a northern leopard frog project on the Paria Plateau (Soap Creek Tank No. 2). The project involves reinforcing the tank's spillway and releasing larvae or frogs reared from eggs collected in Utah. In March, frogs and egg masses were detected at one of three occupied sites on House Rock Wildlife Area.

BULLFROGS

The Department, along with BLM, USFWS, and Museum of Northern Arizona; Grand Canyon Wildlands Council partners, initiated a multiagency effort to eliminate invasive exotic species (including bullfrogs) and to improve habitat for relict leopard frog (a federal candidate) at Pakoon Spring, Mohave County. Bullfrog removal is being planned for two other areas within the range of the Chiricahua leopard frog.

REPTILES

FLAT-TAILED HORNED LIZARD

The Department continues to participate in the two interagency committees to implement the Rangewide Management Strategy for the flat-tailed horned lizard. In 2009, the Department completed its second year of monitoring using a recently-developed standardized protocol. Results showed good populations of lizards within the Yuma Desert Management Area, with particularly good reproduction. Population estimates were similar to those reported first in 1997. In response to a court order, the USFWS published a proposed rule last year to list the species as threatened. The USFWS is gathering information for this decision, which will be made in late 2010.

MEXICAN AND NARROW-HEADED GARTERSNAKES

The Department continues to radio-track five Mexican gartersnakes (four adult females and one adult male) from Bubbling Ponds Hatchery that were captured and implanted with transmitters in 2009. The Department coordinates with external partners and volunteers to ensure the snakes were tracked once a week throughout the snakes' hibernation period. Radio-tracking will continue this spring during which time habitat and behavior data will be collected. Information resulting from this study is being used to inform ongoing efforts to improve fish culture facilities at Bubbling Ponds.

During the Annual Gartersnake (Mexican and narrow-headed gartersnakes) Conservation Working Group Meeting held on January 14, the Department coordinated with partners from USFWS, UA, NAU, TPZ, ASDM, PHS and others to discuss achievements, project updates, and to plan conservation/research activities for the 2010 field season. Also, during much of this timeframe, the Department assessed impacts of statewide sportfish stocking on Mexican and narrow-headed gartersnakes.

DESERT TORTOISES

Department staff compiled monitoring data collected on the Sonoran desert tortoises (SDT) since 1987 on 16 BLM long-term monitoring plots (LTMP) for the USFWS 12-month status review. Because of concerns with the data analysis used in the petition, the Department contracted statisticians from the University of Arizona to analyze independently LTMP data to determine if there were any temporal or statewide trends in SDT populations. Survival rates, rather than abundance estimates, were calculated at each LTMP and year. Survival rates do not have the same limitations in making inferences beyond the scope of each year and LTMP because, unlike abundance estimates, survival rate estimates account for imperfect detection by incorporating recapture probabilities. Annual survival of adult SDT averaged 0.93 across all plots (0.85-0.96 range), which is similar to estimates reported in other SDT survival studies. There was no evidence for a declining linear trend in survival across all LTMPs. Therefore, recognizing the limitations of the data, there was no evidence to suggest survival rates of SDT varied systematically between 1987-2008, i.e., survival remained approximately the same through time and across plots. If adult survival has remained largely unchanged on the plots, there is no evidence to suggest a systematic decline in survivorship of tortoises in Arizona.

TUCSON SHOVEL-NOSED SNAKE

Shovel-nosed snakes are small, burrowing snakes occurring in sandy soils in broad, low valleys throughout much of the Sonoran and Mohave deserts. Three named subspecies of shovel-nosed snakes, defined by color pattern differences, occur in Arizona. One subspecies, the Tucson shovel-nosed snake, is limited to the eastern-most part of the distribution, and occurs most commonly in creosote flats habitats between Phoenix and Tucson.

In December 2004, The Center for Biological Diversity petitioned the Tucson shovel-nosed snake for listing under the ESA as threatened or endangered throughout its distribution. Their primary justification was loss of habitat to development, and evidence for population declines, particularly in the Avra Valley, near Tucson.

Since then, the Department provided funds to address a variety of information needs. Staff participated in informal surveys to address the lack of clear distributional information and to obtain tissue samples for genetic studies. The Department contracted partners to analyze genetics (mitochondrial DNA) of shovel-nosed snakes to address taxonomic confusion, to investigate population status in the Avra Valley, and WMRS conducted a study to determine its status and distribution in and near the Florence Military Reservation. Genetic analyses concluded the Tucson shovel-nosed snake is not evolutionarily distinct, but is part of a continuum of genetic variation that encompasses populations across southern Arizona, from Yuma eastward. The population study concluded shovel-nosed snakes were likely extirpated locally, i.e., in the Avra Valley. The WMRS study found shovel-nosed snakes to be the third most commonly trapped snake species (among those that are normally nocturnal) which is consistent with results seen elsewhere in undisturbed habitats.

The Department provided comments to the USFWS in September 2008, emphasizing the lack of consensus regarding the definition of this particular subspecies and its geographic distribution, and urged the USFWS to postpone a decision until those questions could be answered. On March 31, 2010 the USFWS issued a decision that the Tucson shovel-nosed snake warrants protection under the ESA, but that listing was precluded by higher priorities.

FISH

GILA TOPMINNOW AND DESERT PUPFISH

During this quarter, site evaluations and certificates of inclusion were completed for two new enrolled sites under the statewide SHA for topminnow and pupfish: the Nina Mason Pulliam Rio Salado Audubon Center ponds and the Maricopa County Usery Mountain Regional Park. The Audubon Center ponds were renovated to remove mosquitofish on March 22, and if follow-up monitoring over the next few weeks indicate a successful removal, then topminnow and pupfish will be stocked in early summer. Usery Mountain Regional Park's certificate of inclusion is waiting on the final signature from USFWS before stocking fish, which is also anticipated for early summer.

INVERTEBRATES

KANAB AMBERSNAIL

In December 2010, the Department renewed its cooperative agreement with U.S. Geological Survey (USGS) to continue monitoring and management of the endangered Kanab ambersnail at Vaseys Paradise in Grand Canyon. The Department received $13,355 in contract funds to

complete this work in 2010; no match was required. The Department also renewed its NPS scientific collecting and research permit for 2010 for ambersnail work in Grand Canyon. An investigators annual report on ambersnail work in 2009 was submitted to the NPS science website.

PAGE SPRINGSNAIL

In March 2010, Department staff reviewed the EA checklist for the renovation of Bubbling Spring Pond, planned for early April 2010. Bubbling Springs Pond supplies most of the water used at Bubbling Ponds Fish Hatchery for propagation of fish, including endangered razorback suckers and the ESA candidate, roundtail chub. Bubbling Springs Pond is home to the largest population of Page springsnail, also an ESA candidate, which is now protected and managed under a Candidate Conservation Agreement with Assurances (CCAA). Unfortunately that site also contains mosquitofish, a known predator of springsnails and a vector for the fish bacterial infection called "Ich". Over the years, Ich has caused repeated episodes of sickness and death to many of the razorback suckers being propagated at Bubbling Ponds Fish Hatchery, so removing this problem will be a huge benefit. Prior to the planned renovation, Department and USFWS staff will salvage thousands of springsnails and place them in aerated holding tanks during the treatment. Following the renovation, the snails will be returned to the spring pond into their original habitat, this is one of the mitigation options covered under the CCAA.

INTERNATIONAL AND BORDERLAND PROJECTS

BORDER GOVERNOR'S CONFERENCE

Arizona is hosting the 2010 Border Governors Conference (BGC) September 8-10 in Phoenix at the Biltmore Hotel. Arizona and Baja California are Wildlife Table co-chairs. In January 2010, Safari Club International (SCI) hosted the work session of the BGC Wildlife Work Table at the SCI convention in Reno. The Wildlife Table showcased a number of wildlife restoration projects in the Border region. A CD with the presentations is being provided to the members of the Trilateral Executive Table. In March 2010, the SEMARNAT Secretary, the USFWS, and the states of Nuevo León, Tamaulipas, and Texas signed the Lower Rio Grande Ecosystem Memorandum of Understanding for the conservation of flora, fauna, and wildlife corridors. Baja California is working with CONANP on Action Programs for Species Conservation for pronghorn antelope and vaquita marina (Phocoena sinus). A bighorn sheep program will follow. Governor José Guadalupe Osuna presented the five-year State Program for Environmental Protection in March 2010. The Autonomous University of Baja California developed under contract a wildlife surveys manual for wildlife management. The Secretary of the Environment and staff visited other state wildlife agencies to exchange information on wildlife programs and administrative structures. California removed the California Brown Pelican and American Peregrine Falcon from the state endangered species list, first state delistings due to recovery, and is conducting research to evaluate the success of the law that went into effect July 2008 requiring the use of non-lead ammunition in historic California condor range. In collaboration with state and federal agencies, the California Fish and Game Department is working to minimize the

impacts of solar and wind energy developments on wildlife and natural resources. The Department is collaborating on California's Climate Change Adaptation Strategy (CAS) by working on adaptation strategies that will maximize species and habitat resiliency in the face of climate change. It also plays a major role in the control of aquatic invasive species. Tamaulipas developed a state Wildlife Viewing Guide in collaboration with Watchable Wildlife, Inc., and is trying to develop a model local ordinance to promote the use of native plants in urban areas.

PRONGHORN TRANSFER

New Mexico and Mexico's federal government completed an agreement to exchange 300 pronghorn antelope from New Mexico for 10 bighorn sheep from Mexico. Late 2009, 125 pronghorns were transferred to the State of Coahuila. On March 2010, 65 additional pronghorns were translocated in the same area. The Department assisted in this effort.

RETURN OF JAGUAR TO MEXICO

On March 23, the jaguar known as Lucero was returned to Sonora, Mexico. The Department coordinated the transport of the jaguar to the Phoenix Zoo in late 2008 so that it could receive dental treatment (replacement/repair of broken canines).

NEW CEDES ADMINISTRATION

New Director from the Commission on Ecology and Sustainable Development of Sonora (CEDES by its Spanish acronym), Mr. Oscar Tellez, met with Director Voyles to discuss various wildlife projects. Law enforcement training continues to be a high priority for the State of Sonora. Both directors agreed to implement a training workshop during 2010.

MOU WITH SEMARNAT

Sonoran Pronghorn:
The results of the bi-annual range wide surveys conducted in Mexico from December 7 – 11 are discussed above. The Department provided financial assistance to CEDES and SEMARNAT for their participation during the surveys. A binational meeting to discuss Sonoran pronghorn repatriation to Mexico has been postponed. The new date will be sometime in September.

Wildlife Management Training:
Wildlife management training and capacity building continues to be a high priority to Mexico; a training workshop is being planned for June of 2010 in Monterrey, Nuevo Leon, Mexico. The Department is taking the lead on this effort.

Law Enforcement Training:
The Government of Mexico and CEDES are very interested in receiving law enforcement training. A training session is being planned for 2010. This is also a priority action item within the Arizona-Mexico Commission.

Appendix A. U.S. Fish and Wildlife Service - Species Status Information

Animal Species Listed in Arizona
All tables based in part on information found at: http://ecos.fws.gov/tess_public/

Listed species

Animals – 41

Status	***Species/Listing Name***
E	Ambersnail, Kanab (*Oxyloma haydeni kanabensis*)
E	Bat, lesser long-nosed (*Leptonycteris curasoae yerbabuenae*)
T	Bear, grizzly lower 48 States, except where listed as an experimental population or delisted (*Ursus arctos horribilis*) (NOTE: species not counted in total currently occurring in Arizona)
E	Bobwhite, masked (quail) (*Colinus virginianus ridgwayi*)
T	Catfish, Yaqui (*Ictalurus pricei*)
E	Chub, bonytail entire (*Gila elegans*)
E	Chub, Gila (*Gila intermedia*)
E	Chub, humpback entire (*Gila cypha*)
T	Chub, Sonora (*Gila ditaenia*)
E	Chub, Virgin River (*Gila seminuda (=robusta)*)
E	Chub, Yaqui (*Gila purpurea*)
E	Condor, California U.S.A. only (*Gymnogyps californianus*)
T	Eagle, Bald Sonoran Desert DPS (*Haliaeetus leucocephalus*) – Not on USFWS List
E	Falcon, northern aplomado (*Falco femoralis septentrionalis*)
E	Ferret, black-footed entire population, except where EXPN (*Mustela nigripes*)
E	Flycatcher, southwestern willow (*Empidonax traillii extimus*)
T	Frog, Chiricahua leopard (*Rana chiricahuensis*)
E	Jaguar (*Panthera onca*)
T	Minnow, loach (*Tiaroga cobitis*)
E	Ocelot (*Leopardus (=Felis) pardalis*)

T Owl, Mexican spotted (*Strix occidentalis lucida*)

E Parrot, Thick-billed (Rhynchopsitta pachyrhyncha) – Not on USFWS List

E Pikeminnow, Colorado (*Ptychocheilus lucius*) – Not on USFWS List

E Pronghorn, Sonoran (*Antilocapra americana sonoriensis*)

E Pupfish, desert (*Cyprinodon macularius*)

E Rio Sonoyta [Quitobaquito] Pupfish (*Cyprinodon eremus*) – Not on USFWS List

E Rail, Yuma clapper U.S.A. only (*Rallus longirostris yumanensis*)

T Rattlesnake, New Mexican ridge-nosed (*Crotalus willardi obscurus*)

E Salamander, Sonora tiger (*Ambystoma tigrinum stebbinsi*)

T Shiner, beautiful (*Cyprinella formosa*)

T Spikedace (*Meda fulgida*)

T Spinedace, Little Colorado (*Lepidomeda vittata*)

E Squirrel, Mount Graham red (*Tamiasciurus hudsonicus grahamensis*)

E Sucker, razorback entire (*Xyrauchen texanus*)

E Tern, California Least (Sterna antillarum browni)

E Topminnow, Gila (incl. Yaqui) U.S.A. only (*Poeciliopsis occidentalis*)

T Tortoise, Desert (Mojave population) (*Gopherus agassizii*)

T Trout, Apache (*Oncorhynchus apache*)

T Trout, Gila (*Oncorhynchus gilae*)

E Vole, Hualapai Mexican (*Microtus mexicanus hualpaiensis*)

E Wolf, gray Lower 48 States, except where delisted and where EXPN. Mexico. (*Canis lupus*)

E Woundfin (*Plagopterus argentissimus*) – Not on USFWS List

Candidates for Listing in Arizona

Common Name	Scientific Name	Where Listed (if not statewide)
Chub, headwater	(*Gila nigra*)	
Chub, roundtail	*Gila robusta*	Lower Colorado River Basin DPS
Cuckoo, yellow-billed	*Coccyzus americanus*	Western U.S. DPS
Frog, relict leopard	*Rana onca*	
Gartersnake, northern Mexican	*Thamnophis eques megalops*	
Mouse, New Mexican meadow jumping	*Zapus hudsonius luteus*	
Springsnail, Huachuca	*Pyrgulopsis thompsoni*	
Springsnail, Page	*Pyrgulopsis morrisoni*	
Springsnail, San Bernardino	*Pyrgulopsis bernardina*	
Springsnail, Three Forks	*Pyrgulopsis trivialis*	
Sucker, Zuni bluehead	*Catostomus discobolus yarrowi*	
Treefrog, Arizona	*Hyla wrightorum*	Huachuca/Canelo DPS
Turtle, Sonoyta mud	*Kinosternon sonoriense longifemorale*	
Talussnail, Wet Canyon	*Sonorella macrophallus*	
Talussnail, San Xavier	*Sonorella eremite*	

5-Year Status Reviews

Species	**Year Initiate**	**Staff**	**FY 2010 Proposed Status**	**Actual/projected EOY Status**
Hualapai Mexican vole	2005	Kaplan	12-month finding underway	12-month finding scheduled for completion in FY10
Jaguar	2006	Fernandez	Draft to RO spring 2010	Draft not ready in FY 09; draft to RO FY 2010
Apache trout	2006	Gordon	Will complete short template since RP is final.	RP finalized August, 2009; 5-year review will be completed in 2010
Desert pupfish	2006	Duncan	Draft to RO	Underway; trying for end August draft, but dependent on CAP
Arizona cliffrose	2007	Nystedt/Falk	Draft to RO in September 09	On schedule
San Francisco Peaks groundsel	2007	Hedwall	Draft to RO spring 2009	Draft to RO by September 2009
Chiricahua leopard frog	2007	Rorabaugh	RO draft summer 2009	On hold: waiting for genetics report. Draft to RO FY 2010.
Spikedace	2007	Richardson, M	Draft due to RO FY 09	Still hoping for end August, but depends on other workload.
Loach minnow	2007	Richardson, M	Draft due to RO FY 09	ditto
Gila topminnow	2007	Duncan	RP completion delay; FY2010 more likely	Still on hold for FY10 due to recovery plan completion
NM ridge-nosed rattlesnake	2007		Draft to RO September 2009	Species lead transferred to NM field office (Michelle Christman); they will finish the review
Brady pincushion	2008	Gordon/Falk	Draft underway; to RO summer 2010	
Arizona hedgehog	2008	Falk	Draft underway	Draft to RO by September 2009
Kearney blue star	2008	Crawford/Falk	Draft to RO September 2009	
Sonoran pronghorn	2008	Fernandez	Provide assistance to Refuge staff	Draft will not be completed in FY 2009

(CBNWR lead)				
Sonora chub	2008	Douglas	Draft to RO September 2009	
Southwestern willow flycatcher	2008	Beatty	Draft to RO September 2010	
Yaqui fishes (4) SBNWR lead	2008	Duncan/Fitzpatrick	No defined work task for AESO	Review of 2nd completed in 2009 and returned to SBNWR.
Canelo Hills ladies' tresses	2009	Falk	Initiated 2009	
Huachuca water umbel	2009	Falk	Initiated 2009	
Navajo sedge	2009	Nystedt/Falk	Initiated 2009	
Masked bobwhite (BANWR lead)	2009	Richardson, S	Initiated 2009	Draft in review in Tucson office (Feb. 2010)
Gila chub	2009	Knowles	Initiated 2009	
Mexican spotted owl	NA	Hedwall	Waiting for decision on RP.	

For FY 2009, our targets were the completion of five-year reviews for the following species: Sentry milkvetch, Nichol's turks head cactus, Little Colorado spinedace, and Siler pincushion cactus (**bolded** in these tables). Completed five-year reviews:

Species	**Year initiated**	**Date completed**	**Staff**	**Year for new five-year review**
Pima pineapple cactus	2005	2-08-2007	Falk	FY 2012
Lesser long nosed bat	2005	8-30-2007	Richardson, S	FY 2012
Yuma clapper rail	2005	5-30-2007	Fitzpatrick	FY 2012
Cochise pincushion	2006	4-06-2007	Falk/Richardson, S	FY 2012
Peebles Navajo cactus	2006	8-28-2008	Servoss/Falk	FY 2013
Siler pincushion	2006	10-29-2008	Falk	FY 2014
Mt. Graham red squirrel	2006	1-15-2008	Alanen	FY 2013
Sonora tiger salamander	2006	10-04-2007	Rorabaugh	FY 2013
Little Colorado spinedace	2006	10-06-2008	Hedwall	FY 2014

Sentry milkvetch	2007	4-22-2009	Falk	FY 2014
Nichol's turks head cactus	2007	7-27-2009	Robertson/Falk	FY 2014