

**Chiricahua Leopard Frog Recovery Team
SE Arizona – SW New Mexico Stakeholders Group Meeting
Douglas District Office, Douglas Arizona
October 30, 2007**

Recovery Update for Recovery Units (RUs) 1-4

Likely extant populations in RUs 1, 2, 3 and 4 as of October 2007: 37 (7 of which are Ramsey Cyn leopard frog)

Status of recovery plan – The Recovery plan was signed in April 2007 and is available at: <http://www.fws.gov/southwest/es/arizona/CLF.htm>. There were no major substantive changes from the draft, but minor edits and revisions were made in response to comments on the document and some new information (see Appendix M).

Chiricahua leopard frog Safe Harbor Agreements – Two SHAs are now in place: Malpai Borderlands Group – extreme SE AZ and SW NM (Magoffin Ranch signed on), and 2) Statewide SHA between US Fish and Wildlife Service – Ecological Services (USFWS-ES) and Arizona Game and Fish Department (AGFD) (entire range in AZ). These SHAs allow interested non-Federal parties to enter into a SHA with the USFWS-ES through a Certificate of Inclusion with Malpai or AGFD. We are in the process of evaluating potential SHA projects, many of which will support recovery activities in SE Arizona or SW New Mexico.

USFWS biological opinion on the USFS Southwest Region LRMP - The “big BO” establishes the following baseline for Chiricahua leopard frogs on the Coronado National Forest (CNF):

- Nogales Ranger District: 11 populations extant, most are in stock tanks.
- Sierra Vista Ranger District: 9 populations extant, most are in stock tanks
- Douglas Ranger District: 1 population extant.
- Safford Ranger District: 1 population extant.
- Santa Catalina Ranger District: 0 extant populations known, Santa Catalina and Rincon mountains are not within historic range.

If numbers of fall below the baseline, reinitiation of consultation may be warranted.

Chiricahua Leopard Frog Recovery Greatest Needs SE Arizona/SW New Mexico in 08

In general we need help to: 1) monitor extant populations, 2) survey for additional extant populations, 3) survey for habitat; identify and assess potential reestablishment sites, 4) identify and implement habitat improvements in each management unit (MA); 5) establish additional populations; and 6) find additional partners in recovery through the Safe Harbor Agreements or other conservation tools.

These actions need to occur rangewide, in many Recovery Units, to help meet the recovery criteria (e.g. “at least two metapopulations in different drainages plus at least one isolated and robust population in each RU exhibit long-term persistence and stability”).

Accomplishments in 2007 and Proposed Work in 2008

RU1, Pajarito Wilderness / Pena Blanca – Peck Cyn/Buenos Aires Central Tanks MAs

Participants: University of Arizona, AGFD, CNF, Buenos Aires NWR, Buenos Aires NWR, USFWS-ES

Review of 2007:

- ✓ Bullfrog removal
- ✓ Limited monitoring
- ✓ Survey Certification Workshop
- ✓ Enhancement of pond at Pena Blanca Spring
- ✓ New populations discovered in the Sierrita Mtns
- ✓ New populations at Buenos Aires NWR

Proposed for 2008:

- Monitor extant populations, especially those that have not been visited recently.
- Identify potential non-native (i.e. bullfrog) removal projects
- Enroll willing partners into SHA
- Other????

RU2, Santa Rita Mtns MA (Nogales RD)

Participants: AGFD, CNF, ASDM, USFWS-ES

Review of 2007:

- ✓ Reared tadpoles from Louisiana Gulch to establish captive breeding population at ASDM.

Proposed for 2008:

- Monitor extant population at the corral in Louisiana Gulch.
- Surveys for additional populations and potential habitat.
- Identify potential re-establishment sites and habitat improvement projects.
- Enroll willing partners into SHA
- Other????

RU2, Patagonia Mtns MA - San Rafael Valley MA (Sierra Vista RD)

Participants: AGFD, CNF, Ross Humphreys, USFWS-ES

Review of 2007:

- ✓ Bullfrog control at 5 tanks in the southeastern SRV
- ✓ Completion of tanks on the San Rafael Ranch (Partners/Livestock-Crop Grants)

Proposed for 2008:

- Survey for extant populations; visit historical sites that have not been visited recently.
- Non-native eradication
- San Rafael Ranch Habitat Conservation Plan?
- Enroll willing partners into SHA
- Other???

RU2 Red Rock – Sonoita Peak MA (Nogales RD)

Participants: CNF, AGFD, USFWS-ES, Reclamation

Review of 2007:

- ✓ Planning for Redrock Cyn Restoration

Proposed for 2008:

- Participate in Redrock Canyon renovation planning

RU2, Empire Cienega MA

Participants: BLM, D. Caldwell, P. Rosen, AGFD, USFWS

Review of 2007:

- ✓ Created headstarting ponds, colonized by Chiricahua leopard frogs

Proposed for 2008:

- Monitor new ponds and frogs
- Other????

RU2, Huachuca Mtns MA (Sierra Vista RD)

Participants: CNF, Sky Island Alliance, TNC, USFWS-ES, AGFD, RCLFCT

Review of 2007:

- ✓ Planned for and began restoration work in Scotia Cyn
- ✓ Monitored Ramsey Cyn leopard frog (RCLF) sites
- ✓ Moved RCLF from breeding enclosures in Ramsey Cyn to Trout Pond
- ✓ Conducted Bd monitoring at RCLF sites
- ✓ Assessed additional sites for establishing RCLF populations
- ✓ Renewed the RCLF Conservation Agreement and Strategy

Proposed for 2008:

- Participate in Scotia Canyon renovation implementation
- Continue implementation of RCLF Conservation Agreement and Strategy
- Enroll willing partners into SHA
- Other?????

RU3, North and South Chiricahua Mtns MAs (Douglas RD)

Participants: AGFD, CNF, USFWS-ES

Review of 2007:

- ✓ Surveyed numerous historical localities (no Chiricahua leopard frogs observed)
- ✓ Developing habitat enhancement project near Portal as a reintroduction site

Proposed for 2008:

- Surveys for frogs and habitat
- Identify potential habitat improvement projects
- Potentially reestablish frogs at improved habitat near Portal
- Enroll willing partners into SHA
- Other??????

RU3, Peloncillo Mtns, Animas and San Bernardino Valleys MA

Participants: Malpai Borderlands Group, Sky Island Alliance, USFWS-ES, San Bernardino NWR, Douglas High School, AGFD, NMDGF

Review of 2007:

- ✓ Magoffin Ranch signed onto Malpai SHA

- ✓ Partners Project to build a Headstarting/Captive Propagation Facility at Douglas High School
- ✓ Malpai Habitat Conservation Plan nearing completion
- ✓ New populations found in the Peloncillo Mtns (NM)
- ✓ Surveyed populations
- ✓ Cloverdale Cienega Restoration Project funded

Proposed for 2008:

- Surveys for frogs and habitat
- Enroll additional partners in SHAs
- Identify potential habitat improvement projects
- Establish a captive population at the Douglas High School facility
- Renovate Cloverdale Cienega
- Complete Malpai HCP
- Reestablish frogs at Lard Tank (from High Lonesome Tank)
- Other????

RU3, Mexico Portion

Participants: USFWS-ES, NMDGF, Naturalia, BIDA, Phoenix Zoo, AGFD, Africam Safari

Review of 2007:

- ✓ Developed grant proposal (USFWS Wildlife Without Borders Program) to conduct capacity building for amphibian conservation in Northwestern Mexico
- ✓ Compiled records of Chiricahua leopard frogs from museums and other sources for Sonora and Chihuahua

Proposed for 2008:

- Conduct 3 Amphibian Workshops at Rancho Los Fresnos, Sonora
- Conduct surveys in the Río San Pedro basin of Sonora and establish a headstarting facility and refugium pond at Rancho Los Fresnos as part of the Workshop
- Other????

RU4, Dragoon Mtns MA (Douglas RD)

Participants: AGFD, CNF, Sonja Gasho, USFWS-ES

Review of 2007:

- ✓ Monitored the extant population at Middlemarch Canyon mine shaft (seems robust, 36 egg masses observed).
- ✓ Monitored reestablished frogs at Shaw Tank (doing well)
- ✓ Transplanted 5.5 egg masses from Middlemarch Canyon mine shaft to Shaw Tank and Halfmoon Tank (latter was not successful – tank dried)
- ✓ Monitored sites that were chosen as potential reestablishment sites
- ✓ Renovated sites in preparation of 2008 reestablishments

Proposed for 2008:

- Monitor extant populations at Middlemarch Canyon mine shaft and Shaw Tank
- Monitor sites that were chosen as potential reestablishment sites to make sure they are still reliable and suitable (Halfmoon Tank, Forest Tank, Black Diamond Tank, Smelter Tank, Black Diamond Spring, and South Fork Dam).

- Implement habitat improvement projects (Middlemarch well, introduction of vegetative debris in tanks).
- Conduct headstarting and wild-to-wild translocations of egg masses from the Middlemarch Canyon mine shaft population.
- Release frogs to 3 new sites in addition to Shaw Tank
- Enroll willing partners into SHA
- Other?????

RU4, Galiuro Mtns MA (Safford RD)

Participants: Arizona Game and Fish, Coronado NF

Review of 2007:

- ✓ Monitored the extant population at Oak Creek (0 frogs observed).
- ✓ Potential reestablishment sites evaluated
- ✓ Historical localities surveyed
- ✓ No egg masses, no headstarting

Proposed for 2008:

- Monitor Oak Creek
- Survey historical localities
- Monitor sites that were chosen as potential reestablishment sites to make sure they are still reliable and suitable (Bull Tank, Little Bull Tank, Seeps Tank, Saddle Tank, Cave Tank, Little Red Tank).
- Identify and implement habitat improvement projects
- Plan for reestablishments (source – Dragoon MA if no frogs found in Galiuro MA)
- Other??????

Summary of participants in Chiricahua leopard frog “recovery projects” in Recovery Units 1 – 4

RU	MA or Project	Participants
RU 1	Pajarito/Atascosa Altar Valley	CNF, UoA/USGS, AGFD, USFWS Buenos Aires NWR, R. Humphreys, USFWS-ES
RU 2	Ramsey Cyn Leopard Frog Santa Ritas Las Cienegas Scotia Cyn Redrock Cyn San Rafael Valley	TNC, AGFD, USFWS, CNF, BLM, Ft Huachuca, Beatty's Guest Ranch, Brodkins, Rutherfords, Craven, Phx Zoo CNF, AGFD, ASDM, USFWS BLM, D. Caldwell, P. Rosen, USFWS CNF, Sky Island Alliance, TNC, USFWS, AGFD CNF, BuRec, AGFD, USFWS R. Humphreys, Az State Parks, AGFD, USFWS
RU 3	Malpai Borderlands Mexico	Malpai, USFWS, AGFD, NMDGF, Douglas High School, San Bernardino NWR Naturalia, BIDA, Phoenix Zoo, USFWS, AGFD, TNC
RU 4	Dragoons Galiuros	AGFD, CNF, Sonja Gasho, USFWS AGFD, CNF, USFWS

Brief Overview of Activities in RUs 5-8

RU5 – Frogs have apparently disappeared from the Buckskin Hills of the Coconino NF (West Mogollon MA). However, approximately 40 frogs that were either salvaged from the area in 2005, or are offspring of salvaged frogs, are in captivity primarily at the Phoenix Zoo. Outbreeding experiments with Gentry Creek frogs are being conducted at the Phoenix Zoo and ASDM to increase genetic variability. Renovated tank habitats are available in the Buckskin Hills for reestablishment. In the Gentry Creek MA, much habitat restoration, monitoring, and reestablishment has occurred. Headstarting occurred at the Phoenix Zoo and Bubbling Ponds hatchery, population augmentation occurred at 5 sites and a new population was established at Cherry Creek. Habitat improvements were made at several sites. Chiricahua leopard frogs observed at Ellison Creek in the Upper East Verde River MA in 2006 were not found in 2007, despite repeated surveys.

RU6: Limited monitoring has occurred at Three Forks, AZ, but frogs from this site are being captively propagated by AGFD at their Pinetop Office. Moving forward on a refugium population in RU6 under the AZ Statewide SHA. Gila NF fenced out livestock from three occupied Chiricahua leopard frog streams (Negrito, South Fork Negrito, and North Fork Negrito), and four occupied stock tanks which were fenced to exclude livestock except at a single narrow water point at each tank. Developing headstarting/propagation facility at USFWS, Albuquerque.

RU7: Limited monitoring at Dix Creek and Rattlesnake Pasture Tank, AZ, where frogs are apparently still extant. Developed/enhanced habitat and established two populations of frogs at Burro Cienega, NM.

RU8: Frogs held in captivity at Ft Worth Zoo from Cave Creek on the Ladder Ranch. Monitoring of frogs and Bd at the Ladder. Planning for 8 captive rearing/headstarting facilities at Ladder Ranch, to be ready next year. Planning for establishment of populations in 6 steel tanks at Chino Mines/Phelps Dodge property in 2008.

Also:

USGS rangewide study of the population genetics of *Rana chiricahuensis* and *R. subaquavocalis*
USGS contaminants study