



U.S. Fish and Wildlife Service
DESERT TORTOISE RECOVERY OFFICE
1340 Financial Blvd., Suite 234
Reno, Nevada 89502
Ph: 775-861-6300 ~ Fax: 775-861-6301



Recovery Action Workshop Summaries

Arizona-Nevada-Utah Recovery Planning Work Group: May 9-10, 2007
Marriott Suites, Las Vegas, Nevada

California Recovery Planning Work Group: May 22-23, 2007
University of Redlands, Redlands, California

Desired Outcomes:

- Prioritized list of proposed site-specific recovery actions from each agency with land management and regulatory jurisdiction over desert tortoise habitat.
- Preliminary articulation of rationale and justification for proposed recovery actions, i.e., which threats would be addressed and what operational criteria are most salient.
- Prioritized list of collective proposed site-specific recovery actions for each agency group (agencies operating within the same BLM Planning Area).
- Preliminary identification of monitoring priorities for each agency group (topical and geographic). What actions need to be monitored most?
- Revised specific recovery action map reflecting regional priorities.
- Collect preliminary feedback on prototype decision support system for desert tortoise recovery.
- Continuing commitment to actively participate in development/refinement of a decision support system and recovery monitoring program for desert tortoise.

Meeting Summary (Day 1):

Both workshops began with an update on the recovery planning process, mainly focused on the steps between this workshop and the deadline to complete a revised draft recovery plan by September 2007. The planning process has identified many of the threats to the tortoise, and what is needed now is to identify actions that are discrete, site specific, implementable, and able to be monitored over time. Another key item for the recovery plan is an implementation schedule, with cost estimates for near term, next 5 years, and for the next 25 years. The goal for this round of workshops is to develop a prioritized list of proposed site-specific recovery actions - by agency, and regionally, to see how things match across jurisdictions.

Following the process update and explanation of the overall goals for the workshop, a brief explanation of the Decision Support System (DSS) was provided. Workshop participants are being asked to provide additional information on proposed recovery actions in order to help prioritize the actions for inclusion in the recovery plan.

Staff from the Redlands Institute provided an overview of the updated data on threats and recovery actions. Over 260 datasets have been provided to date and public agencies and land managers have been very helpful in providing updated data. However, additional information is needed to accurately document where off-highway vehicle use is occurring, as well as pollution data (air, toxic waste, etc), projected growth, and vegetation data.

The remainder of the first day was spent completing and revising worksheets aimed at 1) identifying the most frequently used criteria for reviewing recovery actions; and 2) developing complete lists of prioritized potential recovery actions for each agency by planning area.

Meeting Summary (Day 2):

The day began in each workshop by presenting the prioritized data generated during day 1 to develop a shared understanding of which criteria and actions are most used, less used, and not frequently used at all. Phillip Murphy presented the findings from the day 1 worksheets on overheads. Agency staff shared their observations regarding the criteria and what issues their respective agencies encounter while trying to implement recovery actions.

At the Las Vegas workshop, the top criteria for selecting recovery actions were:

- Action already in progress
- Being proactive instead of reactive
- Finding and maintaining good habitat

At the California workshop, the top criteria were:

- Is the action a result of required mitigation?
- How much does the action cost to implement?
- Does the action benefit multiple species?

The least used criteria were:

- Is there an overall positive public perception about the action?
- Is the action easily monitored and at low cost?
- Is funding available for monitoring?

Following the discussion, regional break-out groups were formed to identify recovery areas or areas that lend themselves to recovery actions for the recovery plan. Following the work session, groups shared their challenges, opportunities for efficiency, etc. Highlights of recovery action priorities from each regional group are presented below.

Red Cliffs Desert Reserve/Washington County

- Suppressing fires, identified important areas, prioritize areas in the reserve.
- Develop a strategic plan for fire suppression: focus on areas that are super-important DT habitat, areas with natural breaks.
- Recreation - legal vs illegal recreation, motorized vs non-motorized zone within RCDR.
- Headstarting and translocation of DTs to areas that are not susceptible to fire.
- Post-fire rehabilitation - focus on areas more likely to be restored, also, based on value of area by whether it can connect habitats.

- Outreach & education - ongoing but could be expanded from kids to general population.

BLM and Counties

- Protection and habitat assessment - being proactive rather than reactive. Create fuel breaks, use herbicide to have non-weed infested areas, so that an area is prepped and ready when lightning strikes.
 - We also need an effective management network.
 - Access control - people going into the area - this is hard to do.
 - Desired plant community and desired future condition. Identify methods of monitoring, and making sure the area functions like the DT habitat.
 - Put high-nutrition plants out there.
- Outreach, volunteers - volunteers are very effective - Mohave talked about getting grants, putting signs and kiosks for education.
- Law enforcement agreements so we can enforce on each other's property.
 - Increase fines - hit violators with something hard, so they get something they will talk to others about - educate their neighbors.
- ESA compliance.
- Reintroduction, translocation, etc.

Clark County and NDOW

- Management of the BCCE.
- Tortoise fencing on roads - new fencing, maintaining old fences - throughout Clark Co.
- "PIE" - Public Info and Education - we would do these even if we don't have enough \$\$.
- Tortoise pickup, handling, translocation, identifying new translocation areas - rangewide, multiple agencies.
- Fire management - fire breaks, response time.
- Implement CMS Plans.
- Mitigation possibilities range-wide. FWS, Ecological Services.
- Tortoise mitigation banking - flexible, can be spent outside the state.
- DT Conservation Center.
- Rehabilitate fire-damaged areas.

West Mojave

- Fence parts of 395, 58, I15, I40, Hwy 247 that pass through or are adjacent to critical habitat.
- Fence Johnson Valley Open Area, Camp Rock Rd. in tortoise habitat.
- Fence urban/desert edge (control human spill-over effects, disease, how to deal with jack rabbit community).
- Head-starting (population augmentation in conjunction with raven control).
- Raven reduction (take total numbers down).
- Strategy to deal with sick & diseased animals.
- Land purchase in DWMAs.
- Manage lands - Reveg, illegal route reduction.
- Increase law enforcement.

- Continue Permanent Study Plots.

Colorado Deserts

- Restore closed routes.
- Signing open/closed routes, washes.
- Fencing culverts, I10, 95.
- Land acquisition.
- Env. education, kiosks, point of access.
- Raven reduction.
- Strategy for sick animals.
- Fix dirt roads berms.
- Fence RR (if it is going to be used).
- Control OHV use off road.
- Dedicate Chemehuevi to tortoise.

East Mojave

- Headstart.
- Land acquisition.
- Fence roads.
- Raven control.
- RR fencing.
- Fencing around Goffs.
- Graded roads though tortoise habitat - fix berms.
- Monitor for disease.

Lastly, participants were asked to consider suggested monitoring actions/priorities - where and what, and why. At the California workshop, the work group completed an effectiveness monitoring exercise. For particular recovery actions, the following elements were identified: ultimate goal of action, threat addressed, and short-term (1-5 yrs) and long-term (15-20 yrs) indicators of success. Results are summarized below

Action - Raven Control

Concern common to all areas, less common in southern part of Chuckwalla.

- Ultimate goal: increased recruitment to adult population.
- Threat: raven predation, primarily on juveniles but some on adults.
 - Related threat: raven predation on other species may increase other predation on tortoises.
 - Short-term indicator: no evidence of killed babies under raven nests, more short-lived lizards.
 - Long-term indicator: more evidence of live babies, increased biodiversity of vertebrates.

Action – Tortoise-proof Road Fencing

Road fencing, tortoise fencing to keep tortoises off the roads

- Ultimate goal: rebuild population in areas where high tortoise mortality (tortoise sink near road corridor)
- Threat: road kill
 - Related threat: collecting, poaching
 - Short-term indicator: no dead tortoises on roads
 - Long-term indicator: recovery of population adjacent to roads

Action – Wildland/Urban Interface (WUI) Fencing & Signage

- Ultimate goal: rebuild population in areas where high tortoise mortality (tortoise sink near urban areas)
- Threat: dog predation
 - Short-term indicator: fewer tortoise injuries, less dog scat
 - Long-term indicator: recovery of population adjacent to urban area
- Threat: habitat degradation
 - Short-term indicator: less trash, fewer OHV tracks, fewer tumble mustards
 - Long-term indicator: recovery of population adjacent to urban area, increase in quality habitat, lower raven numbers

Action – Headstarting Program

- Ultimate goal: recover depleted tortoise populations
- Threat: population depletion/no recruitment of baby tortoises
 - Short-term indicator: survival of headstarted tortoises once placed in habitat
 - Long-term indicator: fidelity to release site, growth rate similar to wild tortoises, viable reproduction of 2nd generation

Action – Education at ‘Point of Entry’

- Ultimate goal: compliance with laws and habitat improvements (need to specify what we are ‘educating’ for, various indicators)
- Threat: inappropriate use, collection, raven
 - Short-term indicator: number of people educated
 - Long-term indicator: behavioral use change, habitat improvement, awareness surveys
- (Discussion notes: Caveat – need to specify the objective of the education, as this will determine what you ultimately monitor. Indicators include # of people educated, # of brochures, etc. In the long term, indicators are behavioral. Very long term is habitat improvement. Compliance with laws is the overall goal of the action.)

Action – Raven Control (2nd group)

- Ultimate goal: tortoise recruitment
- Threat: tortoise predation (juvenile)
- Related threat: canine predation
 - Short-term indicator: decreasing number of ravens, shell counts near nests, extent/range of killed tortoises
 - Long-term indicator: increased numbers of juvenile/adolescent detected during sampling

- (Discussion notes: With respect to raven control, concerned with monitoring nesting and shell counts. Also want to measure extent of areas affected by raven predation. Over the long term, increase of juveniles over the vulnerable age.)

Action – Halt unauthorized OHV use

- Ultimate goal: improve habitat
- Threat: OHV misuse
- Related threat: invasive weed spread, tortoise collection, fire
 - Short-term indicator: OHV use number of trails, number of citations issued/compliance
 - Long-term indicator: recovery of habitat
- (Discussion notes: Indicators include law enforcement reports of compliance. Reduction in miles of unauthorized routes is another indicator. Long-term indicator is habitat recovery.)

Action – Developing Disease response

- Ultimate goal: healthier tortoises & increased numbers
- Threat: mortality & spread of disease (communicable URTD, micoplasma)
 - Short-term indicator: use of response protocol, number of tortoises with clinical signs
 - Long-term indicator: decreasing mortality due to disease
- (Discussion notes: Threat is mortality caused by disease. Indicator is number of tortoises with clinical signs of disease. Another indicator is number of personnel using a protocol for dealing with diseased tortoises. Need to get a group of scientists together to determine strategy for managing disease and to develop protocols for field personnel.)

Action – Land Acquisition (not a high priority due to cost & difficulty of implementation & management)

- Ultimate goal: increased tortoise habitat
- Threat: land development & inappropriate use
 - Short-term indicator: number of acres acquired
 - Long-term indicator: quality of habitat on acquired lands, trash dumping
- (Discussion notes: Threat is land development and inappropriate use, including garbage dumping, meth labs. Indicator is number of acres acquired, but some discussion over whether or not # of acres acquired is a suitable indicator. Land acquisition needs to be better targeted to where protection is most needed. Much of the land targeted for acquisition isn't really threatened. Land acquisition is done to deal with land development and inappropriate land uses. 95% of acquired land is under defacto management of the authority agency. Land acquisition is not necessarily a panacea; you still need to manage it, costs a lot of money and doesn't necessarily guarantee protection of species.)