

CA/NV Golden Eagle Research Subgroup Meeting Notes

Grand Sierra Resort in Reno, Nevada

January 28, 2014, 8:00-12:00

- 1) **Steering committee** re: Golden Eagle (GOEA) symposium.
 - a) Next symposium discussion, possibly to be held in concert with the Raptor Research Foundation meeting in fall 2015 (San Francisco or Sacramento, CA).
 - b) Those who volunteered for Steering Committee were Adam Duerr, Mike Collopy, Jeff Smith, Carie Battistone and Heather Beeler.
 1. Need to develop the most important things to cover at a symposium.
 2. Discussion regarding the need, and attendance.
 3. US Forest Service (USFS) offered space in Sacramento; however there were also comments to have it in NV, linked to the Wildlife Society meeting.
 4. Discussion ensued on the best timing; late winter and spring conferences and meetings are difficult for field folks who have limited time to observe and catch eagles. Fall seems to be an easier time for most folks to attend; however federal and state attendees need to consider end of year budgets.
 5. Importance of peer reviewed literature; should proceedings be published and by whom? Comments ensued that current peer reviewed literature should be used, as proceedings are often not as 'potent' in readership and impact value.
 6. All entities need to continue to bring forth the information and data to share with each other; build on the concepts behind the inception of the GOEA working groups.
 7. What should be covered at a GOEA symposium (from discussion):
 - a. Standards for mitigation and offsets
 - b. Protocol vs standard practices of methods; establish set of best practices
 - c. Winter ecology
 - d. Prey ecology
 - e. Recommendations to balance other impacts
 - f. Disease and contaminants
 - g. Illegal take; i.e. shooting (poaching and idiocy) and trapping
 - h. Public education
 - i. Risk from solar facilities [habitat loss, infra-structure, power lines, impact, burning/super heating (from flux)]
 - j. Consistent terminology, methodology, and protocols
 - i. Discussion ensued regarding Nongame Migratory Bird Technical Committee of the Pacific Flyway Council includes Federal and State agencies. A subcommittee is working to develop consistent terminology along with the USFWS ETAT group. Carie Battistone and Cris Tomlinson

- are both on this committee. Cris and Jamie Driscoll will circulate a white paper to some members of the GEWG Research Subgroup for review.
 - ii. Discussion ensued regarding monitoring methodology; Jeep Pagel, Daniel Driscoll and Brian Millsap working on redevelopment of Pagel et al. 2010 monitoring protocol
 - k. Habitat loss and fragmentation
 - l. Brainstorms and rank problems; group action.
 - i. Discussion ensued that this had been done in the Pagel 2010 document from the GOEA Science meeting in Fort Collins and at the first GEWG Research Subgroup meeting. No need to repeat.
 - m. Updates from the USFWS regarding new rules and regulations, as well as case studies.
 - n. Use of forest by tree nesting Golden Eagles
 - o. Genetics
8. The working group will need to work on sharing ideas for a symposium, or another 1.5 day working group meeting. Discussed what worked during Sacramento meeting last year;
- a. Should there be video connections with other than just the USFS? Concern expressed about video recording of presentations and comments. USFS liked having it.
 - b. Follow-up discussions, panels, and also unscheduled time for discussions and conversations.
 - c. Lunch together was important.
 - d. Many folks liked that it was technical
 - e. Great organization; Jeff Smith given kudos for coordination of last year's event
 - f. Future events:
 - i. Need remote access for future events with the papers
 - ii. Could be a bigger event (but at what size does it defeat its purpose?)
 - iii. Follow up panel discussion would be helpful
 - iv. Subcommittees should be given opportunities to work together

2) Volunteer Monitoring

- a) Coordination with rehabilitation centers; discussed status of this effort.
- b) CDFW Wildlife Investigations Laboratory (WIL) will be working to develop a system to start small to get data from extant GOEA turned into rehab facilities. Eventually, all CA GOEA will go through WIL prior to being sent to the USFWS National Eagle Repository.
- c) Field monitoring; very large task in CA. May consider adapting the Oregon model, however positive and difficult aspects were discussed; i.e. consistency of field data, scientific rigor, coverage, etc.
- d) Is there a need for field monitoring by volunteers; what would this effort look like.
- e) Does the GEWG Research Subgroup want to work on developing this idea? Carie Battistone offered to participate.

- f) Training would need to be developed; could use the OR model as well for material.
- g) Volunteer efforts need considerable training, and concurrent public education.
- h) Strong need to manage the program very tightly; care and feeding of volunteers can be more work than just spending the money and having it done by agency or cooperators.
- i) Need to capitalize on folks already in the field (e.g. office of law enforcement and wardens)
- j) Scott (Thomas) is proposing a pilot effort in southern California.
 - i) Need to define objectives
 - ii) Use nest occupancy model (via E.B. Parks)
 - iii) Establish small work group: Eric Jepson, Todd Katzner, Joe Di Donata, Carie Battistone, Allen Fish, UCD Raptor Center, Orange County Audubon
- k) Should the subcommittee propose a statewide survey?

3) Mortality

- a) Need to examine extant records; i.e. road kill, shootings, etc. Noted current limitations of USFWS Dead Injured Eagle Database (DIED).
- b) Are we focused on all reasons for mortality?
- c) What are ongoing efforts to document mortality (discussion ensued)
- d) Mine waste/toxics?

4) Contaminants

- a) Lead, i.e. Oregon studies
- b) Distribution of rodenticide is difficult to document
- c) EPA involvement? Require limited use of certain rodenticides?
- d) Use raptor mortalities to map 'bad' locations. WIL interested in all raptor deaths, and have been tracking this.
- e) UCD screening for AR
- f) Fraser University (British Columbia) has ongoing analysis of Barn Owls and rodenticide concerns.
- g) Need to consider possible funding sources for more detailed rodenticide work (and other contaminant work, i.e. lead).

5) Prey

- a) USGS- working on demographic models for prey
- b) Populations persist within population cycles (for *scurids* and *lagomorphs*)
- c) Habitat loss of prey very important to consider within NV and CA
- d) Use stable isotopes to link to prey base
- e) Lead in prey: need to quantify, re: recreational shooting of squirrel and prairie dogs
- f) Brian Woodbridge working on diet information
- g) Is good habitat used quantitatively by prey and GOEA?
 - i) Relate demography of prey to productivity of GOEA
 - ii) Need mapping; challenges persist of prey variability per ecoregion
 - iii) What knowledge do we need/want?
 - (1) Distribution

- (2) Diversity
- (3) Annual variation
- (4) Abundance
- (5) Seasonal and annual variation
- iv) Start with literature review?
- h) Index of habitat quality: GIS database?
 - i) Does it already exist, and if so where are the data? Discussion ensued that some data already exist, and that there is a good body of literature on ground squirrels
 - ii) DRECP
 - iii) Habitat relationships
 - iv) Soil maps (re: San Diego Zoo project)
 - v) Habitat relationships
 - vi) Track population patterns and cycles with contemporary research and monitoring

6) Mentoring

- a) Group interest
- b) Raptor Research Foundation already has an early career effort aimed at graduate students and early professionals. TWS also has a program
- c) Discussion ensued on need to investigate collaboration with other programs.
- d) Discussion also ensued on whether or not there is a need, and if any effort done by the working group would duplicate efforts?
- e) Mentoring used to be integral; that system has broken down
- f) Training is needed to develop skills of raptor biologists; considerable learning curve
- g) Need to invest in volunteer monitoring
- h) Need goals and objectives; develop a systematic approach
- i) Mentoring can be a challenge with current corporate and agency policies
- j) Zach Ormsby will investigate

7) Action Items

- a) Convene Symposium steering committee to decide on location, date and subject matter.
- b) GEWG planning committee (Heather Beeler, Cris Tomlinson, Carie Battistone) to meet to discuss next series of meetings
- c) Review Chris Tomlinson and Jamie Driscoll's draft of terminology; might be available in March/April 2014. *NOTE: This will now be initiated by ETAT. PFNTC will engage once ETAT has finished their work.*
- d) Brian Woodbridge and Mike Collopy will work up process for developing consistency with terminology, metrics, and methods/protocols
- e) Jeep Pagel will work with Brian Millsap to get protocol for dead birds to be used by NV and CA.
- f) Discuss protocols for live bird sampling; i.e. methodology. Todd Katzner will work on this for distribution for blood and feather sampling. Very important to make sure that only those with valid permits are sampling from live or dead birds.

- g) Blood will be sent to Todd Katzner, when possible. Again, very important that only those with valid permits are sampling from live or dead birds. Include copy of your permit(s) with the sample when it is sent to Todd.
- h) CA eagles will go to WIL. Will check with Brian Millsap to make sure that there is consistency. Eagles should not be shipped to WIL if the sender does not have a permit (rehab, SCP, etc.). When in doubt, contact OLE, CA Warden, and/or WIL.
- i) All people handling live or dead eagles need to check for, and collect parasites. Discussion about Mexican Chicken bugs. Send parasites to WIL; make sure all samples are properly labeled.
- j) Todd Katzner will get information from E.B. Parks
- k) Jeep Pagel will follow up on mortalities (DIED, as well as additional data from NV and CA); will try to present, with Mark J. and others, data for next GOEA working group meeting
- l) USGS will share literature search information on Lagamorphs/prey with GOEA working group
- m) Diet information will be sent to Brian Woodbridge
- n) Mohave data will be sent to Heather Beeler for eventual distribution
- o) Carie Battistone will look into volunteer program and convene subgroup if needed.
- p) Zach Ormsby will investigate mentoring programs.