

NOTES | 6/21/2010 Conference Call**Altamont Pass Wind Resource Area Scientific Review Committee**

Prepared by the Center for Collaborative Policy

Reviewed but not yet approved by the SRC

SRC Members Present:**Joanna Burger (listening only due to technical problems)****Jim Estep****Sue Orloff****Shawn Smallwood****Julie Yee****Discussion Topics****Review & Guidance on KB Datasheets****Meeting Outcomes**

- SRC members agreed that the Monitoring Report should not use the 48-Hour Search Interval (KB) Study data as the basis for small bird adjustment factors, but should discuss the KB data and its implications for small raptor fatalities.

Next Meeting

SRC conference call meeting, June 29

Possible date for next in-person meeting:

- August 4-5

Review & Guidance on KB Datasheets**Related Documents/Web Links**[KB Datasheets.zip](#)[P154 Smallwood KB Removal Rates](#)[M32 APWRA Draft 48-Hour Search Interval \(KB\) Study, June 2009](#)

Jesse Schwartz of the Monitoring Team said the Team needs SRC guidance on how to handle data from the 48-Hour Search Interval (KB) Study for the purposes of the Monitoring Report, due to be released in late June. The study used every-other-day searches of kestrel and burrowing owl carcasses in an attempt to develop a greater understanding of the timing of scavenger removals of these species to inform fatality adjustment rates for small raptors. The study found and followed 28 carcasses. Schwartz said the Team has found that a significant amount of the data is ambiguous, and in some cases it is difficult to determine when a scavenger removal occurred. The preponderance of evidence seems to show that the scavenger carcass removal process is more nonlinear or ambiguous than previously thought. He is seeking SRC guidance on the following questions:

- How to treat records to make them non-ambiguous
- How to establish a distinction between records to keep and records to discard
- Whether this data set should or should not be used for the Monitoring Report

Brian Karas of the Monitoring Team reviewed the Team's criteria for determining whether remains constitute a carcass or not. Each find must include at least 5 tail feathers or 2 primaries within at least 5 meters of each other, or a total of 10 feathers.

Participants on the call then reviewed datasheets and some photographs related to specific finds, or believed to be related to specific finds (see Related Documents/Web Links above). Examples included remains that were determined to no longer be a carcass, but were later determined to have remained a carcass longer. In one case, for example, searchers continued to follow a set of bones that were later determined to be mammal bones, but about the same time as that determination, found a raptor mandible nearby.

SRC and Monitoring Team Discussion

In discussion, SRC members raised the following points:

- At least two SRC members agreed that the KB study differs from regular monitoring in that searchers return to a known carcass. In regular monitoring, searchers do not know where fatalities are. The knowledge can cause a bias.
- Records are most likely to show carcasses that are subject to a scavenging process, rather than carcasses that are removed within a short timeframe, because there would be no records of birds not found due to quick removal by scavengers.
- There was discomfort that some datasheets do not include discrete values, or a judgment on whether the carcass constitutes a turbine-related fatality, and other possible causes.
- One approach to identifying the date of carcass removal would be to take the average of the two days of the search interval. This happens with conventional scavenger removal trials.
- A new report tracked carcasses until the end of the trials, looking for any kind of evidence. The result was very long mean days of removal.
- The study is very educational about what happens to carcasses over time, including the fact that evidence persists in new locations. This study should be used as a stepping stone to designing a better study.
- Some remains were determined to no longer be a carcass, and were later determined to have continued as a carcass when more feathers or a body part was found. One SRC member was concerned that in conventional scavenger removal trials, the remains are no longer followed once they are determined to no longer be a carcass. Doing so would help to keep the searcher detection error constant. Another SRC member was concerned about stopping searches on remains as soon as the definition is not met.

On this latter point, members of the Monitoring Team said the process used was called for in the protocol. In addition, there is a statistical problem in the evidence in the estimate of a removal rate versus evidence of searcher efficiency. Making a final determination through the photographs allows more evidence to be used and would support a null hypothesis approach. Taking a conservative approach to the KB data would result in a shallow curve and a rate closer to Smallwood 2007 and P154.

SRC Agreement

One SRC member was concerned that the searcher detection adjustment should correspond with the fatality persistence found in this study, and data of the corresponding searcher detection are not available.

Another SRC member was concerned that the primary purpose of the KB study was to determine if more small birds are found if searches occur more often. The study did confirm that more birds and bats are found.

SRC members on the call recommended that the Monitoring Team not use the KB data to generate a scavenger removal curve for small bird fatality adjustments in the Monitoring Report, and instead go back to the adjustment estimates in Smallwood 2007. Because the KB study found 2.5 times more small raptors than monitoring searches, the Report should include a discussion of the limitations of the adjustment factors used and indicating the evidence of this greater value.

Public Comment

Renee Culver of NextEra said she agreed with the SRC and Monitoring Team members in their conclusion.

Next Steps

- The term definition subcommittee (Joanna Burger and Jim Estep) will prepare a first draft of term definitions for consideration by the SRC at the June 14-15 meeting.

NOTE: SRC Member Joanna Burger indicated by e-mail after the meeting that she was able to listen to the meeting but was not able to speak. However, she agreed with the direction of the SRC recommendation.

Wrap Up and Next Steps

Conference Call Meeting

The SRC agreed to hold a conference call meeting on Tuesday, June 29, to discuss assumptions for the Monitoring Team's analysis of the new SRC-recommended baseline. The time originally agreed to in the call (9-11 AM) was later shifted to 10:30 a.m. to 12:30 p.m. to accommodate a scheduling conflict.

Next In-Person Meeting

The SRC set a tentative date for its next in-person meeting of August 4-5, and the facilitator will recirculate a scheduler to determine if other options exist. This would replace the meeting originally scheduled for July 28-29.

ATTENDEES

SRC

Joanna Burger (listening only due to technical problems)

Jim Estep

Sue Orloff

Shawn Smallwood

Julie Yee

Consultants

Doug Leslie

Brian Karas

Jesse Schwartz

Identified Public

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