



California Black Rail PCCP Survey Protocol for Projects v.042822

Survey protocol is based on Richmond et al. (2008). This protocol is similar to that used for other playback surveys of Black Rails (Repking and Ohmart 1977, Flores and Eddleman 1995, Legare et al. 1999).

Surveys must be conducted to determine presence/absence of California black rail (BLRA) if a covered activity (typically ground disturbance and/or vegetation removal) is within 500 feet of the perimeter of a fresh emergent wetland > 0.2 acres in size located in either the Valley or Foothills designations of the Plan Area. The survey also applies to Covered Activities that will alter the supply of water feeding potential breeding habitat for BLRA.

1. Background Research and Notification

- a. Contact the Placer Conservation Authority (PCA) to confirm with the Program Biologist which areas require BLRA surveys and to inform when surveys are scheduled.
- b. Conduct CNDDDB query for BLRA and request site-specific occurrence information from the PCA.

2. Survey Timing

- a. Initiate between March 15 and May 15th
 - i. BLRA in the Sierra foothills exist in metapopulations. Unoccupied sites can be colonized before a breeding season, which is why surveys are best done before ground disturbance within the same year.
- b. Conduct a minimum of 4 surveys.
- c. Surveys must be spaced at least 10 days apart.
- d. The 4 surveys must be timed so that they will be completed between March 15/May 15 and the end of June/early July.
- e. The 4 surveys must be conducted the year in which ground disturbance activities begin.*
- f. Surveys must be conducted within 2 hours after civil sunrise or 2 hours before civil sunset.
- g. Surveys will not be conducted during rainfall or when wind speed exceeds 25 km/hr.

3. Survey Location

- a. Map survey points on aerial photo or map of the site before going into the field.
- b. Locate survey points 50 m apart along the **perimeter** of the wetland. The intra-survey point distance of 50 m is intended to be small enough to adequately survey all suitable habitat, but far enough apart to minimize the time the qualified biologist spends potentially disturbing BLRA by traversing wetland habitat and playing calls.
- c. Locate **additional** survey points 50 m apart within the wetland if area within the wetland is > 50 m from a perimeter survey point.
- d. **Begin surveys at perimeter/edge of wetland.**

- e. If a BLRA is not detected from a survey point along the perimeter of the wetland, survey from interior wetland points. The surveyor should take care to minimize disturbance to vegetation when accessing survey points within the wetland.
- f. When the wetland is in an adjacent parcel, call playbacks will be played from the edge of the adjacent parcel, or where most appropriate to elicit a response, without trespassing.
- g. Survey each point using the playback sequence described below until a BLRA is detected, or all points are surveyed. **Once a single call is returned, the survey for the wetland may stop and that wetland will be considered occupied.**

4. Playbacks

- a. Must use playbacks to elicit response.
- b. The qualified biologist will play the call sequence described below at each survey point.
- c. Playbacks will use the “*kic-kic-kerr*” and “*grr*” vocalizations (Eddleman et al. 1994)
- d. Playbacks will be amplified through a small portable speaker
 - i. Broadcast at 81-85 dB measured at 1 m from the speaker.
- e. Playback sequence to consist of:
 - i. 2 min of silent listening,
 - ii. 2 sets of *kic-kic-kerr* calls lasting 30 sec each, followed by 30 sec of listening between sets,
 - iii. 2 sets of *grr* calls lasting 30 sec each, followed by 30 sec of listening between sets,
 - iv. 2 min of silent listening.
- f. The PCA will provide MP3 file of the playback sequence for use by qualified biologists. Additionally, the call is downloadable from UC Berkeley:
https://nature.berkeley.edu/beislab/rail/html/rail_recordings.html

5. Data Collection

- a. Record the location of all call returns and individual sightings using GPS in the field. Note which wetland feature the positive IDs are coming from. Report both the spatial data and survey notes to the PCA.
- b. CNDDDB data forms should be submitted to CA Department of Fish and Wildlife for all positive IDs as well.

*Note: Depending on the complexity, timing, and size of a project and the associated aquatic/wetland complex, the applicant may contact the PCA to discuss potential modifications of this protocol. Each request will be evaluated on a case-by-case basis.