

YUMA CLAPPER RAIL SURVEY PROTOCOL
JANUARY 2000

These instructions are for the official surveys for Yuma clapper rail (*Rallus longirostris yumanensis*) which are used to provide information on population trends of this endangered species. Significant changes have been made from earlier survey protocols and these instructions require the use of the new survey tape. These instructions will be in place for the 2000-2004 survey seasons, after which the Fish and Wildlife Service will review them in concert with the Yuma Clapper Rail Recovery Team. If there are questions about this survey protocol, or to obtain cassette tapes for use in the survey, please contact the Arizona Ecological Services Office at the address at the end of this document.

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1. Please review the list of official survey locations on pages 3 and 4. If your agency will be unable to survey any or all of the assigned locations, please contact the AESO as soon as possible so we can try and find volunteers to survey the location.
 2. Before any survey for the Yuma clapper rail, review the training tape and the survey tape to become familiar with the various calls. The tapes repeat various "clatter" and "kek" calls and are 60 minutes long. This will allow you to complete several stops before having to rewind. Also, make sure your tape recorder and speaker produce good quality sound at 80 decibels, measured one meter from the speaker.
 3. Use 1:24000 USGS topographic maps for base maps. Sections of the map should be enlarged to show the survey location and route. Before beginning the survey, review maps of past surveys. Note especially the placement of "stops" from previous years. The same stops should be used, maintaining the same number. Any new stops added should have a unique number and be recorded on the map. GPS may be used to more carefully delineate stop locations.
 4. All official surveys must be conducted between March 15 and May 15. The survey protocol calls for 2 surveys of each location or route per year. A third survey can be added if time and staff resources permit. There is a minimum of one week between surveys. Surveys should be conducted on the same routes used in previous years. Survey stops should be at 150-200 meter intervals unless local conditions warrant a different distance. Make sure the route and all stops are clearly recorded on the survey map.
 5. Arrive at the survey location to begin surveying about 30 minutes before sunrise. Surveys should continue no later than 3 hours after sunrise. No evening surveys should be conducted for the official survey.
 6. Upon reaching the location, fill in the weather information section of the cover sheet. If the wind speed is greater than 10 mph (a breeze that keeps leaves and small twigs in constant motion or extends a light flag), do not conduct official surveys. Responses to the calls are difficult to hear over the rustling of marsh vegetation.

7. For the survey, get as close to the marsh vegetation as possible at each stop. Note the time in the "time start" column. Wait quietly for one minute to listen for rails. Then play the tape, directing the speaker toward the marsh and at approximately 80 decibels volume. At each stop, play the tape for 2 minutes, turn it off for 2 minutes, turn it on for 2 minutes and turn it off then listen for one minute (total survey time 7 minutes). Keep to the 2 minute intervals as carefully as possible. Listen for rail responses during the entire period and record responses on the data sheet.
8. Record responses from each rail on a different line. If you do see/hear a pair, record the individuals separately and check the "was rail paired" column. All rails seen or heard at stops during the survey are to be counted. If you hear the same rail twice, only count it as one bird. Rails heard or seen at other times while on site during the survey are incidental and are recorded at the bottom of the data sheet. Since some observers are interested in other species, there is a column to record other species of birds observed during the survey on the data sheet.
9. After the survey has been completed, record on the cover sheet any events or disturbances that may have affected the survey results (other loud birds, boat or vehicle noise, etc.). Also, record the weather conditions. Make any other notes of observations of other species (as appropriate).
10. Please make sure the cover and data sheets are clearly filled out. The information can be used to define rails/station (all rails seen/heard), rails/stop (rails seen/heard at each stop or an average) and rails/hour (each stop has 7 minutes of survey time) after the surveys have been completed. The official survey will continue to look at rails per station.
11. Completed reports are due to AESO by July 1 of the survey year. Reports will include cover and data sheets and a map showing the survey route. Send completed survey forms and maps to:

Yuma Clapper Rail Coordinator
USFWS-AESO
2321 W. Royal Palm Rd. Suite 103
Phoenix, Arizona 85021
602/640-2720 FAX 602/640-2730

YUMA CLAPPER RAIL OFFICIAL SURVEY LOCATIONS

ANNUAL SURVEY REQUIRED

Topock Marsh	Fish and Wildlife Service (FWS)
Topock Gorge	Bureau of Reclamation (BOR)
Bill Williams Delta	FWS
Cibola NWR	FWS
Imperial Division	Bureau of Land Management (BLM)#
Imperial NWR	FWS
Mittry Lake/Teal Alley/YPG Slough	Arizona Game and Fish Department (AGFD)
Gila River (Buckeye-Arlington)	AGFD, FWS, Dick Todd
Other Internal Arizona Areas	AGFD, FWS
IWA: Wister Unit	California Department of Fish and Game (CDFG)
Sonny Bono-Salton Sea NWR	FWS
Barnacle Beach (Salton Sea)	FWS
Cienega de Santa Clara	University of Arizona, AGFD, FWS

SURVEY ON THREE YEAR ROTATION*

SURVEY IN 2000 and 2003

Mohave Division	BOR
Parker Division	CDFG, Colorado River Indian Tribes (CRIT)
Laguna Division	AGFD, BLM
Yuma Valley Drains	BOR

SURVEY IN 2001 and 2004

Lake Havasu	BLM
Palo Verde Division	CDFG
Yuma Division	AGFD
Lower Gila River/Quigley Pond	AGFD

SURVEY IN 2002

Parker Strip (CRIT)	CRIT
Cibola Division	CDFG, FWS
Limitrophe Division	AGFD

BLM has requested assistance from other agencies to complete this location

*locations in this category can be surveyed more often if the responsible agency wishes.

LOCATIONS THAT MAY BE ADDED TO THE SURVEY

These areas may or may not contain rail populations. During the next 5 years, the assigned agencies will survey these areas to determine if they should be added to the annual or 3-year rotation official survey location list.

Lake Mead/Virgin River/other Nevada
Hautelin and Bard Lakes
Verde River
Painted Rock Reservoir

Nevada Division of Wildlife (NDOW)
BLM
AGFD, FWS
No assigned agency

YUMA CLAPPER RAIL SURVEY
COVER SHEET
(JANUARY 2000)

Date: _____

Location Information:

Location Name _____ Route _____

Map Name _____ Township/Range/Section _____

Observer(s) _____

Weather:

Start %Cloud Cover _____ Temp _____ Wind Speed _____

End % Cloud Cover _____ Temp _____ Wind Speed _____

Data Summary:

1) Total individual rails seen or heard while surveying _____

2) Number of other rails seen or heard (incidentals) _____

Total rails per route or location equals #1+#2 _____

For rails/hour, each stop is 7 minutes

Observations:

Events during survey that may have affected results:

Other Observations/Comments:

