Marsh Bird Surveys in Topock Gorge

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Topock Gorge Surveys

- Marsh bird surveys – 2006 to present, BLRA, LEBI, VIRA, RIRA.
- 3-LCR-MSCP covered marsh bird species
  - Yuma Ridgway’s Rail
  - California Black Rail
  - Western Least Bittern
Yuma Ridgway’s Rail
(*Rallus obsoletus yumanensis*)
Yuma Ridgway’s Rail (Yuma Clapper Rail)
Status

- Federal – endangered (USDI 1968)
- California – threatened (CDFG 2013)
- Arizona – species of special concern (ADGF 2006)
- Nevada – endangered (NAC 503.050)
- Mexico – threatened (Hinojosa-Huerta et al. 2013)
California Black Rail
(Laterallus jamaicensis coturniculus)
California Black Rail Status

- Federal – bird of conservation concern (USFWS 2008)
- Arizona – wildlife species of special concern (AGFD 2002)
- California – listed as threatened (CDFG 2013)
- Nevada – not listed
- Mexico – listed as endangered (Hinojosa-Huerta 2013)
Western Least Bittern
(*Ixobrychus exilis hesperus*)
Western Least Bittern
Status

• Federal – migratory nongame bird of management concern (USFWS 1995)
• California – species of special concern (Remsen 1978)
• Arizona – species of special concern (AGFD 2001)
• Nevada – not listed
• Mexico – not listed
STANDARDIZED NORTH AMERICAN MARSH BIRD MONITORING PROTOCOLS

by Courtney J. Conway
Wildlife Research Report #2005-04
Survey Protocol

- 3 surveys – March 15 to May 31
- Surveys at same time each year, performed in same order
- Survey start - ½ hour before sunrise
- Surveys end – birds cease calling, < 1000 hrs
- Wind – less than 20 kph
- Rain – no survey today
- All surveyors receive Marsh Bird Training
- Calls played at 80-90 db at 1 m
The Survey

- 9-minute survey
- 5 1-minute periods of silence
- 4 1-minute periods, 1 per species
- 30 seconds of calls, 30 seconds of silence
- Black Rail – kicky-doo, grr
- Least Bittern – coo, kak or yak
- Virginia Rail – grunt, ticket, kicker
- Ridgway’s Rail – clatter, kek, kek-burr
Basic Data Collected

• Date, location, route, surveyors
• Weather – temp., cloud cover, wind speed, precipitation
• Station, time, background noise
• Minute of call / visual detection
• What type call
• Direction & distance
• Previous detection?
• Comments – was it a pair? Vegetation type
**National Marsh Bird Monitoring Program Survey Data Sheet**

**Date:** 27 April 2007  
**Location:** HAVASU NWJ  
**Before/After**

**Route:** Topock Gorge  
**Temperature (°F):** 60  
**Wind speed (mph):** 14  
**Cloud cover (%):** 10  
**Precipitation (see below):** NIN

**Survey replicate #:** 2

*List all observers in order of their contribution to the data collected. Put an "S" in the appropriate column if the bird was seen, an "H" if the bird was heard, and an "SH" if both heard and seen.

<table>
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<th>Station#</th>
<th>Start Time</th>
<th>Type(s)</th>
<th>Cell</th>
<th>Direction (meters)</th>
<th>Distance (meters)</th>
<th>Detected at Previous Point</th>
<th>Comments</th>
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Heard when driving by in boat

Burush

Across river

pair, Burush

pair

pair

pair Burush
Topock Gorge Survey

- 52 survey points all within the Havasu National Wildlife Refuge.
- River Mile 233 to 218
- 35 on east side of mid-channel, Arizona.
- 16 on west side of mid-channel, California.
- 1 in the middle!
- 4 days to complete survey.
Yuma Ridgway’s Rail detections, Topock Gorge, 2006-2016
Least Bittern detections, Topock Gorge, 2006-2016
Black Rail detections, Topock Gorge, 2006-2007
Virginia Rail detections, Topock Gorge, 2006-2016
Topock Gorge Survey Results
2016

March 21-25 – 37 RIRA, 20 LEBI, 1 BLRA, 20 VIRA, 6 SORA, 36 PBGR, 8 COMO

April 12-15 – 70 CLRA, 41 LEBI, 0 BLRA, 9 VIRA, 11 SORA, 68 PBGR, 14 COMO

May 17-20 – 65 CLRA, 73 LEBI, 2 BLRA, 0 VIRA, 0 SORA, 53 PBGR, 3 COMO
Marsh bird detections 2016

- **RIRA**: March 37, April 70, May 65
- **LEBI**: March 20, April 41, May 73
- **BLRA**: March 1, April 0, May 2
- **VIRA**: March 20, April 9, May 0
- **SORA**: March 6, April 11, May 0
A Big Thanks to:

• Barb Raulston, 1994
• Havasu NWR
• Leslie Fitzpatrick
• Dr. Courtney Conway
• Lin Piest, Brenda Zaun, Troy Corman
• 2016 Marsh Bird Training Class
• Topock Gorge surveyors, 1996-2016
Questions?