

Winter Wren and Pacific Wren Observations in Sacramento County, California

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The American Ornithologists' Union split the North American members of the Winter Wren complex (formerly *Troglodytes troglodytes*, which now refers to the Eurasian Wren) into two species in 2010. The birds breeding in California and elsewhere in the Pacific region, now classified as Pacific Wrens (*T. pacificus*), are rare to uncommon wintering birds in dense riparian habitat in portions of the Central Valley of California. The eastern birds, which do not regularly interbreed with Pacific Wrens, retain the common name Winter Wren, but the scientific name has been changed (*T. hiemalis*) to reflect their new species status (Chesser, et al. 2010).

In addition to the two records discussed below, there are currently six Winter Wren records for California that have been accepted by the California Bird Records Committee (CBRC), with the earliest from Inyo County in 1987. Additional accepted records are from San Francisco County, 2002; Mono County, 2004; Los Angeles County, 2005; Santa Barbara County, 2009; and San Diego County, 2010 (Pyle, et al. 2011, CBRC Database: californiabirds.org/cbrcdb.html). Now that many birders are aware of this species' potential occurrence and distinctive vocalizations, additional records are likely throughout the state, including the Central Valley.

WINTER WREN AT COSUMNES RIVER PRESERVE

During a monthly survey of the Orr Forest, a closed portion of Cosumnes River Preserve (CRP), a Winter Wren responded to a broadcast Pacific Wren song at approximately 1025 on 27 November 2011. It flew in and called on and off for about 10 minutes. It was extremely agitated, calling rapidly, with dozens of repeated call-notes, followed by brief pauses. Most of its call sequences consisted of a steady stream of repeated notes, followed by several seconds of silence, and interspersed with occasional double calls (paired notes isolated from a longer series). The bird called 250 to 500 times during this short encounter. It required only occasional "pishing" and squeaking to keep it calling, and it was briefly brought into view to be documented by video, including audio. This is apparently the second Winter Wren documented in the Central Valley, with the first being a much briefer observation on 5 December 2009 (see below) along the American River Parkway (ARP).

Within seconds of hearing the 2011 bird I thought it might be a Winter Wren. The call was clearly not the Wilson's Warbler-like (*Cardellina pusilla*) "imp" of a Pacific Wren, an uncommon to rare winter resident at this location (see below). Although the Winter Wren's call is often likened to that of a Song Sparrow (*Melospiza melodia*), this bird did not sound very much like that to me, but was nonetheless very distinctive. It had less of a Pacific Wren's "nasal" tone and was very insistent. It sounded very similar to recordings of Winter Wrens from eastern North America, such as those found on the xento-canto Web site (xeno-canto.org).

When the bird flew in I quickly ruled out superficially similar species such as House Wren (*Troglodytes aedon*), Bewick's Wren (*Thryomanes bewickii*), and Wrentit (*Chamaea fasciata*) by the call, extremely short tail, and very small size. The bird's behavior of moving low in the dense tangles of California blackberry (*Rubus ursinus*) and scattered Himalaya berry (*Rubus discolor*), California rose (*Rosa californica*), and other mostly native vines and scrubs at this location was similar to my experience elsewhere with Pacific Wrens; I have very limited experience with Winter Wrens in eastern North America. This bird did not have the rich reddish-to-chocolate brown tones of a Pacific Wren. Most obvious in the field was the very pale throat, a lack of suffusion by reddish brown to the underparts and paler areas that are found on Pacific Wrens. The supercilium was whiter than on a Pacific Wren and also lacked the suffusion of reddish brown. Since I was alone, I spent much of my effort trying to document the bird by video rather than just observing it.

I took video with a Canon PowerShot SX130 IS digital camera, using the basic video function. A total of 10 short videos were taken, some only recording sound, with vegetation obscuring the bird. The four best, including calls and clear views of the bird are available online (www.flickr.com/photos/conardc/sets/72157628189120863/). The sound quality of the calls in the recordings is very similar to what I remember from the field. All of the videos were submitted to the CBRC and the identification was accepted (Record 2011-241).

With one exception, additional attempts to find the bird were unsuccessful. The site is closed to the public and requires a 5 km (3 mi) round trip hike to access. It is located within an area of over 50 hectares (~130 acres) of dense riparian forest, dominated by a high canopy of valley oak (*Quercus lobata*), a mid-story layer of box elder (*Acer negundo*) and Oregon ash (*Fraxinus latifolia*), and dense understory including native and non-native blackberry, California rose, poison oak (*Toxicodendron diversilobum*), downed limbs, and many surfaces covered with California wild grape (*Vitis californica*), moss, lichen, and abundant spider webs. I led a concerted effort to refind the bird on 4 December 2011, searching the area of the original detection and intermittently broadcasting song from approximately 0800 to 0845 and 0955 to 1020, but failed to detect it. Shortly after 1000, a Pacific Wren responded,

called repeatedly and was easily visible, though it hadn't responded on the first attempt that morning; nor was a Pacific Wren found at this immediate location on any other visit during the season (except that John Trochet detected one about 120 meters to the west on 3 March). Scheduled monthly surveys on 30 December 2011 and 29 January 2012, and the Rio Cosumnes Christmas Bird Count (CBC) on 3 January 2012, plus additional checks to find the Winter Wren during the week of the CBC, failed to produce this hard-to-detect bird.

After nearly three months without detection, on 25 February 2012 I played Winter Wren and Pacific Wren song recordings in the area where the bird was found on 27 November. The Winter Wren began calling at 0855, about two minutes after the broadcasts ceased. I viewed the bird only briefly, but it called 50 or more times and I made additional video recordings. Shortly after this detection, I called John Trochet, one of few people with access to the site, and at approximately 1045 he heard the Winter Wren make two double calls after prompting it with a recording. He searched for an additional hour with no further detections. When I found it at 0855 it was 10-15 meters south of the first observation and John Trochet found it 40 meters north of that site. The following day, 26 February, an additional attempt to find the bird was mostly unsuccessful, but I believe I heard single notes twice: once at approximately 0745 and once more 40 minutes later. A further attempt by John Trochet on 3 March was unsuccessful, and access to the site was blocked by flooding on a 17 March survey of the area.

Shortly before this issue of the *Bulletin* was going to press, on 11 October 2012 John Trochet had brief views of a very vocal Winter Wren about 200 meters northwest of the site of the 27 November 2011 detection; it is likely the same bird that returned for a second winter although a visit on 27 October 12 failed to detect it.

WINTER WREN ALONG THE AMERICAN RIVER PARKWAY

I heard a bird with Scott Dietrich on 5 December 2009 with a call that at the time seemed more like a Song Sparrow than a typical Pacific Wren. This bird was along the ARP on an island near the Mayhew Drain, on the south side of the river, downstream of the Gristmill access. Scott Dietrich found a "Winter Wren" (as both species were known at the time) at the same site on 28 September 2009, which was likely the same bird, since Pacific Wrens are quite rare on the ARP. The call was unlike what I had previously heard from a Pacific Wren. It called and approached in response to pishing and I recorded it with the video function on my digital camera at the time, a Canon PowerShot S2 IS (the only recording and an image of the bird are posted at the Web site referenced above). The bird called for perhaps a minute, though fleeting views totaled mere seconds.

The 2009 ARP observation was made prior to the split of the Winter Wren complex and I didn't widely share the recording until finding the bird at CRP in 2011. The 2009 bird did not sound like a typical Pacific Wren, but sounded more Song Sparrow-like to me than the 2011 bird. Initially, I was less confident in the identification of the 2009 bird than the 2011 bird, since my views were fleeting and the video image is small, but the identification is primarily based on the recorded call notes. I submitted the videos to the CBRC (Record 2011-219), and it was accepted as a Winter Wren—the first for Sacramento County and the Central Valley.

PACIFIC WRENS IN SACRAMENTO COUNTY

Pacific Wrens are rare-but-regular to uncommon winter residents in dense riparian forest in Sacramento County, but the number of detections is variable and has declined in recent years (Table 1). They are typically found at sites with large patches of California blackberry, downed logs, and associated tangles of vines and shrubs, beneath a canopy of valley oak or other large riparian trees, including Fremont cottonwood (*Populus fremontii*).

Areas where Pacific Wrens have been regularly found include the Tall Forest, Orr Forest, and other dense forest blocks at CRP. They are found more sporadically in the lower Morrison Creek riparian forest of the Sacramento Regional County Sanitation District Bufferlands. They are occasionally found in dense patches of remnant habitat along the Sacramento River, mostly between the levee tops and the river off the Garden Highway and Riverside Avenue. They are occasionally reported from portions of ARP, including Discovery Park, and especially the stretch from Sacramento State to Ancil Hoffman Park, but these detections average fewer than one report per year for the ARP in the past ten years (eBird data and CV Birds listserv reports). Without convenient access points, the Sacramento River habitat gets far less coverage than the ARP. Most Sacramento River detections occur during the Sacramento CBC at sites that are not regularly visited at other times. The trail through the remnant forest at Reichmuth Park in South Sacramento is the best publicly accessible site to find Pacific Wrens in Sacramento County, but they appear to be absent in some years—especially so during the past five years. Suitable sites in adjacent areas of Contra Costa County (eBird data) suggest that Pacific Wrens could occur in the Delta portions of Sacramento County, where access and coverage are limited or nonexistent.

Because of the paucity of Winter Wren records in the region, there is no basis on which to assess possible differences in the habitats selected by Winter Wrens and Pacific Wrens. A very small percentage of reported wrens reported as Winter Wrens (but now recognized after the taxonomic split as Pacific Wrens) may have actually been eastern Winter Wrens, since most observers were not expecting to find them.

Review of Regional Data Sources

Volunteer monthly surveys at CRP provide the most complete source of data for this species in Sacramento County. Of four regular surveys, only the Tall Forest and Orr Forest sites contain habitat with dense understory suitable for Pacific Wrens. Comparison of CRP records from earlier and later periods (the fall-winter seasons of 1995-96 to 2002-03 versus 2003-04 to 2011-12) shows significantly more detections during the earlier period (χ^2 1 d.f.=53.42, $p<0.0005$; Table 1). The species has been scarce since 2007, but it is uncertain if this truly indicates a declining trend or reflects year-to-year variability driven by local and regional factors not fully understood. To further illustrate the fluctuations and uncertainty of this apparent trend, with only two monthly Orr Forest surveys completed in 2012-13, a total of five Pacific Wrens have been detected—the most since the 2006-2007 season. CBC data, described below, indicate earlier periods of local scarcity, followed by increased detections. If numbers stay very low for the next five to ten years, it will be reasonable to conclude that an actual decline has occurred on this portion of the wintering grounds.

Yearly variation in flooding and access also complicates the comparison of annual numbers detected. Severe flooding makes many sites temporarily unsuitable for Pacific Wrens and other forest dwellers, while also making some areas that may harbor the wrens difficult for surveyors to reach. At other times, moderate flooding can concentrate birds in limited patches of dry habitat, making detection easier. Most observations in Sacramento County are from October-March, with a handful of April records and one intriguing observation of two birds on 22 May 2004 (Table 1).

Local CBCs are also useful in documenting the presence and abundance of Pacific Wrens (Table 1). The Rio Cosumnes CBC, initiated in 1995 (Count Year [CY] 96), covers the CRP, Bufferlands, and other areas of potential wintering habitat. The data are a good reflection of local abundance, but the previous caveats regarding effects of flooding apply. The Sacramento CBC has a much longer history, beginning in 1949 (CY 50). Pacific Wrens have been detected 32 times over 63 counts. From 1949 (CY 50) to 1964 (CY 65), the species was found in 10 of 16 years, with a high count of three. During nine years from 1965 (CY 66) to 1973 (CY 74), the species was missed every year. Since 1974 (CY 75), they have been found on 22 of 38 counts, with a high of five.

Pacific Wrens also have been recorded regularly on the Stockton CBC, a count circle in San Joaquin County, that has a northern boundary within five km of sites on CRP with regular Pacific Wren detections. In 43 years (CY 69-112), the species has been recorded 21 times. It was missed 14 times in the count's first 16 years, but has only been missed three times since 1996 (CY 97). There was a high of 10 individuals reported in 1985 (CY 86), with six in

1998 (CY 99), but no other reports of more than three. Weather, access, observer numbers and experience can vary widely on CBCs, but the data are consistent with the CRP surveys, indicating considerable annual population variability and a significant decline in detections, comparing CY96-103 to CY 104-112 (χ^2_1 d.f.=4.02, p=0.045). The species is much rarer away from the low floodplain as indicated by only two detections in 34 years on the Folsom CBC situated at the edge of the valley and the low foothills.

Table 1. Yearly variation in Pacific Wren detections on seasonal surveys (October-March) and Christmas Bird Counts (CBC'S) in the Sacramento-San Joaquin region.

| Season/CY | Tall Forest | Orr Forest | Rio Cosumnes CBC | Sacramento CBC | Stockton CBC |
|---------------|-------------------|----------------|------------------|----------------|--------------|
| 1995-96/96 | 6 [#] | 2 [#] | 3 | 0 | 0 |
| 1996-97/97 | 0 [#] | 1 [#] | 2 | 0 | 1 |
| 1997-98/98 | 46 [#] | 0 [#] | 2 | 3 | 0 |
| 1998-99/99 | 15 [#] | 0 [#] | 29 | 0 | 6 |
| 1999-2000/100 | 11 ^{# a} | 8 [#] | 8 | 1 | 1 |
| 2000-01/101 | 9 | 17 | 11 | 2 | 2 |
| 2001-02/102 | 4 | 4 | 6 | 2 | 3 |
| 2002-03/103 | 0 | 7 | 4 | 4 | 0 |
| 2003-04/104 | 1 ^a | 3 | 5 | 0 | 1 |
| 2004-05/105 | 5 | 2 | 34 | 0 | 1 |
| 2005-06/106 | 7 [#] | 2 [#] | 1 | 0 | 1 |
| 2006-07/107 | 1 | 12 | 1 | 0 | 3 |
| 2007-08/108 | 0 | 3 | 1 | 1 | 1 |
| 2008-09/109 | 0 | 2 | 2 | 2 | 0 |
| 2009-10/110 | 0 ^b | 3 | 2 | 1 | 1 |
| 2010-11/111 | 1 [#] | 2 [#] | 0 | 1 | 1 |
| 2011-12/112 | 0 | 0 | 1 | 0 | 1 |

[#]Access limited during a portion of the season due to flooding

^aMissing one survey during season

^bMissing two surveys during season

Additional reports were found in the eBird database (past CRP surveys have now been entered in eBird) and on the CV Birds listserv. Pacific Wrens have been recorded on 9 of the 27 annual American River Natural History Association (ARNHA) counts conducted on the first Saturday each December and cover the 37-km (23-mile) ARP.

In summary, recent observations document the occurrence of the newly split Winter Wren as a bird of at least vagrant status during fall and winter in dense riparian habitat on the valley floor in Sacramento County. The species' historical occurrence pattern is clouded by its former conspecific status with the Pacific Wren, but no records earlier than those described

above are known from the Central Valley. Increased awareness among observers since the species split will likely lead to additional detections in the county and surrounding area. Indeed, Todd Easterla photographed a bird that appears to be a Winter Wren on 24 September 2012 along Babel Slough in Yolo County. Ed Harper, Jon Dunn, and Dan Tankersley also found a Winter Wren along Putah Creek in Yolo County west of Winters on 20 November 2012; it was seen and heard, photographed and recorded, through at least 27 November (eBird data and CV Birds listserv reports).

Accumulated records indicate that the Pacific Wren is a regular, but uncommon to rare winter resident in the Sacramento region, exhibiting substantial variability in annual abundance. The records indicate a decline in the species' abundance over the last decade. Whether this apparent decline represents a true trend or natural fluctuation is uncertain, but deserves careful attention in future years. It is difficult to speculate on fundamental causes of the potential decline, since the breeding locations, migratory distances and other basic information about the birds wintering in the Central Valley are unknown. Indeed, little is known about migratory patterns or direct and indirect human impacts to Pacific Wren populations throughout its range (Toews and Irwin 2012).

ACKNOWLEDGEMENTS

Thanks to Guy McCaskie for information on CBRC reports of Winter Wrens, and to Mark Cudney, Andy Engilis, Terry Ronneberg, Jim Rowoth, Andrea Salmi, and John Trochet for providing background info on Pacific Wren status. The Tall Forest survey at CRP has been led by John Trochet since 1995. The Orr Forest survey has been led by Terry Ronneberg, beginning in 1995, and me since 2007 (with both of us often receiving help from John Trochet). Terry Ronneberg maintains the CRP bird database and reviewed a draft of this paper along with Kimya Lambert and John Trochet. Many thanks to Dan Airola for his comments, careful review, and statistical analysis.

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