

# LOUISIANA BIRD RECORDS COMMITTEE

## REPORT FORM

This form is intended as a convenience in reporting observations of species on the Louisiana Bird Records Committee (LBRC) Review List. The LBRC recommends the use of this form or a similar format when submitting records for review to assure that all pertinent information is accounted for. Attach additional pages or files as necessary. Please print or type for hard copy. For electronic copy, be sure to save this file to your computer before entering text. Attach field notes, drawings, photographs, or tape recordings, if available. Include all photos for more obscurely marked species. When completed (if hard copy), mail to Secretary, Louisiana Bird Records Committee, c/o Museum of Natural Science, 119 Foster Hall, Louisiana State University, Baton Rouge, LA 70803-3216, or e-mail electronic copy as an attachment to Paul Edward Conover at <[zoiseaux@lusfiber.net](mailto:zoiseaux@lusfiber.net)> .

1. English and Scientific names: **Pacific Wren (*Troglodytes pacificus*)**

2. Number of individuals, sexes, ages, general plumage (e.g., 2 in alternate plumage):

**1 Individual observed. No views sufficient to age, and sexing not possible.**

3. Parish: **Orleans**

Specific Locality: **Bayou Sauvage (South Point) some distance down the lake levee (30.130841, -89.892805)**

4. Date(s) when observed:

**Only observed on Sunday, October 25 of 2020**

5. Time(s) of day when observed:

**Bird observed from 11:00 to 11:15 a.m.**

6. Reporting observer and city/state address

Reporting observer: Marquette Mutchler
City: Baton Rouge
State: Louisiana

7. Other observers accompanying reporter who also *identified* the bird(s): After I suggested the ID everyone concluded that this bird sounded like a Pacific Wren. This includes Oscar Johnson, Cathy DiSalvo, David Muth, Mark Meunier, Joan garvey, and John Nelson.

8. Other observers who *independently identified* the bird(s): Only myself (Marquette Mutchler) independently identified the bird originally.

9. Light conditions (position of bird in relation to shade and to direction and amount of light): **Bird slightly backlit, however the sun was almost directly overhead.**

**Condition overcast slowly transitioning to clear skies.**

10. Optical equipment (type, power, condition): **I personally viewed this bird 8x42 Leica Trinovids.**

11. Distance to bird(s): **The bird was maybe 10 feet away at one point, but generally around 20-40 feet.**

12. Duration of observation: **15 Minutes**

13. Habitat: **The bird was in dense undergrowth with taller secondary growth with an overall shrubby appearance. The bird was about 5 feet in from the edge of the vegetation (bordering the mowed levee and lake) and continually associated with the thicker vine-y portions.**

14. Behavior of bird / circumstances of observation (flying, feeding, resting; include and stress habits used in identification; relate events surrounding observation): **Bird was first heard almost immediately. After many attempts at pishing (both by voice and recording), the bird only responded a few times by coming more into the open. These moments were extraordinarily brief, and no photos could be obtained.**

15. Description (include only what was actually seen, *not what "should" have been seen*; include if possible: total length/relative size compared to other familiar species; body bulk, shape, proportions; bill, eye, leg, and plumage characteristics. Stress features that separate it from similar species, *or for species that are known to hybridize frequently, stress features that help eliminate possible hybrids*): **What was seen was a very small, stub-tailed wren. Only at one point was I able to see the bird well enough to see the bird had a lighter brown front, a faint lighter eyebrow, and an almost scaled appearance across the sides. The bird was as expected, a small ping-pong ball shaped with large head, very small vertically held tail, and small bill. This species cannot be reliably told apart by appearance from Winter Wren.**

16. Voice:

**The calls of this bird were what initially excited me to the ID. Other observers heard this call, and a few suggestions were tossed around (Wilson's Warbler was the agreement among most, although we were not totally satisfied with this ID). After the bird called about a dozen or so times, the possibility of this bird being a Pacific Wren clicked in my mind and I managed to record a series of the bird's calls. After extensive review of spectrograms, sound quality, and sharing with other experienced birders, all returned with the same conclusion to the ID. A personal spectrogram analysis is as follows:**

**The most crucial part of identifying Pacific from Winter Wren at this time of year depends on the "jit" (pacific) or "vimp" (winter) call. Upon obtaining a poor recording of this call from the stub-tailed wren observed, I was later able to**

compare it to samples of both Winter and Pacific Wren calls uploaded on Xeno Canto. The selection process of these recordings was mostly based upon quality and “regularity” (choosing cuts that sounded most typical of each species). I did attempt to select a cut or two where the call given by each respective species was a bit different from typical, as variance exists, although this was hardly scientific. I then proceeded to randomly select a call or a set of calls in each recording to screenshot and measure using Raven Pro software. I then crudely pasted the screenshots of each recording together in photoshop and attempted to line up the Y axes as best as possible (This task likely could be achieved in a much neater style using some R package but no one has time for that).

In terms of analyzing the spectrograms, the first thing I looked at was simply shape. In the winter wren cuts, the calls are characterized by a wide “hump,” where each hump has relatively equal sides (both an up and a down part, although the left side, or the “up” side can regularly be a bit shorter. In Pacific Wren cuts, this shape is more akin to a “ramp.” The right, or down, side is longer and steeper, with the top of the hump a sharp and narrow angle (in some instances Winter Wren can have a sharp angle, but it is wider/less acute).

Next I looked at frequency-specific marks (Y axis numbers in kHz). Every winter wren cut, good or poor recording show a small mark at or below 2kHz in each call. Pacific Wrens do not show a distinct single mark around 2kHz, but rather the lowest part of the call starts at ~3kHz and is a mirror of the sharp angled section as it descends to below 2kHz.

Next I looked at the darkest section of each spectrogram, indicating the loudest part of the call. In Winter Wrens, this darkest or loudest section is the dominant hump shaped call around 3kHz. Some instances the 2kHz mark can be just as dark, but generally 2-3kHz is where the Winter Wren call is the darkest. In Pacific Wren, there are two distinct sections in their call. Both sections are similar in shape (the sharp ramp shape) and are similarly dark. Each ramp shaped section occurs at both 2-4kHz and at 5-7kHz. This distinctly doubled call appears diagnostic.

In terms of variation in this two-parted, ramp shaped call, some Pacific Wren calls show multiple bands within these double bands. In XC422034 (further left) and XC35439(third from left), multiple smaller bands can be seen within the calls. This is actually present in all the given Pacific Wren calls but is harder to see in the others. This is another mark not seen in any Winter Wren calls looked at.

Finally, I will also point out that the harmonics in winter wrens (harmonics are the lighter bands above the darkest section- they look like layers) almost never follow or mirror the shape of the loudest section. These harmonics are generally much shorter and appear as only half of the hump (generally the “up” part).

With all that being said, the Louisiana bird that was recorded gave several calls. All of these calls, although faint, strongly resemble the double-sectioned, ramp-shaped call of Pacific. It even shows smaller bands within the call like Pacific. There is also no 2kHz mark and there are no additional shorter harmonics present.

I also measured length, and it appears that WIWR calls can be longer than Pacific but seem rather variable and possibly not diagnostic.

17. Similar species (include how they were eliminated by your observation):

**Winter Wren: These two cannot be identified by plumage characters. The best way is to identify by voice. Notes on voice included in section above on voice.**

18. Photographs or tape recordings obtained? (by whom? attached?):

**A sound recording was obtained by myself (Marquette Mutchler). We all later returned in hopes of capturing a better recording but never refound the bird.**

19. Previous experience with this species: **My experience with Pacific Wren has been both in their native range (Washington) and with a vagrant (New Mexico). The Washington birds were during summer periods and quite abundant. The New Mexico vagrant was a winter bird and was always detected first by the very same “jit” calls.**

20. Identification aids: (list books, illustrations, other birders, etc. used in identification):

**I personally contacted Caleb Strand and David Tonnessen as they are both knowledgeable in Pacific Wren calls and spectrogram analyses. Oscar Johnson also sent the recording to knowledgeable birders on the west coast (If I recall, a records committee member in Washington), however I do not know the names of those he contacted. He also sent the recording to Matt Brady.**

**I also checked a report made (maybe a week?) earlier from a confirmed Pacific Wren in Michigan. They posted in the ABA Rare Bird Alert Facebook groups and included a short note on spectrogram analysis.**

**Finally, I used Xeno-Canto and the Macaulay Library for comparisons directly after observing the bird and when creating this report.**

a. at time of observation:

**At the time of observation, Oscar Johnson and myself worked on getting the single recording into many hands so that we could attempt to ID it from a spectrogram as fast as possible.**

b. after observation:

**After the observation I personally looked at several recordings in Macaulay and Xeno-Canto to compare our bird to Winter Wren.**

21. This description is written from:

<input type="checkbox"/>	notes made during the observation.	Are notes attached?	<input type="checkbox"/>
X	notes made after the observation.	At what date?	Day of and day after
X	memory		
<input type="checkbox"/>	study of images		

22. Are you positive of your identification? If not, explain: Yes, I am positive on this identification.

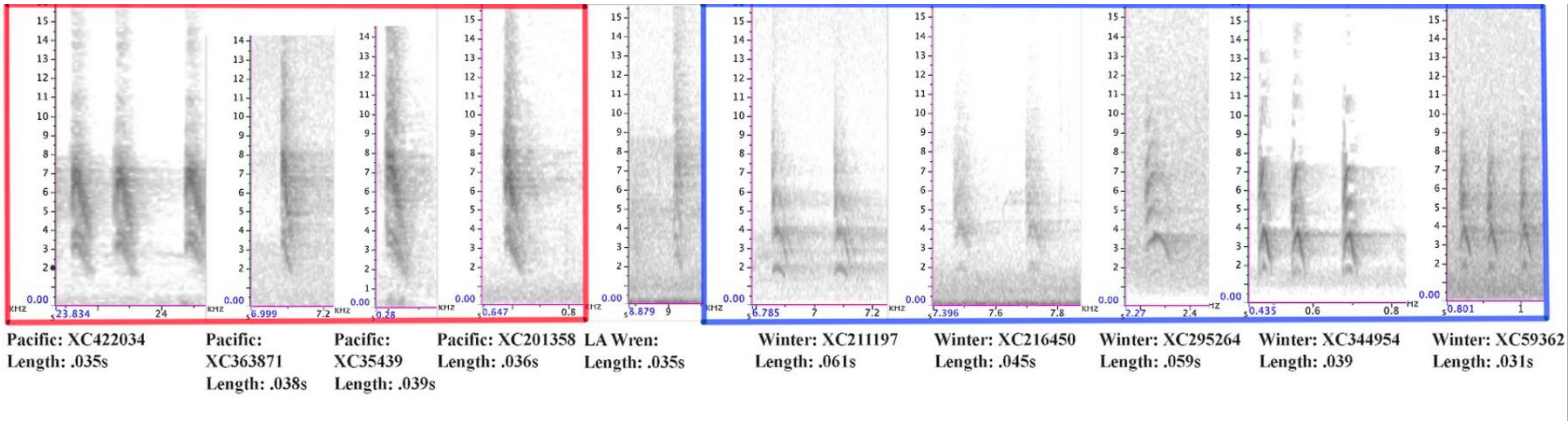
23. Date: November 26, 2020  
 Time: 12:46 p.m.

24. May the LBRC have permission to display in whole or in part this report and accompanying photos on the LOS-LBRC website and LBRC Facebook page?

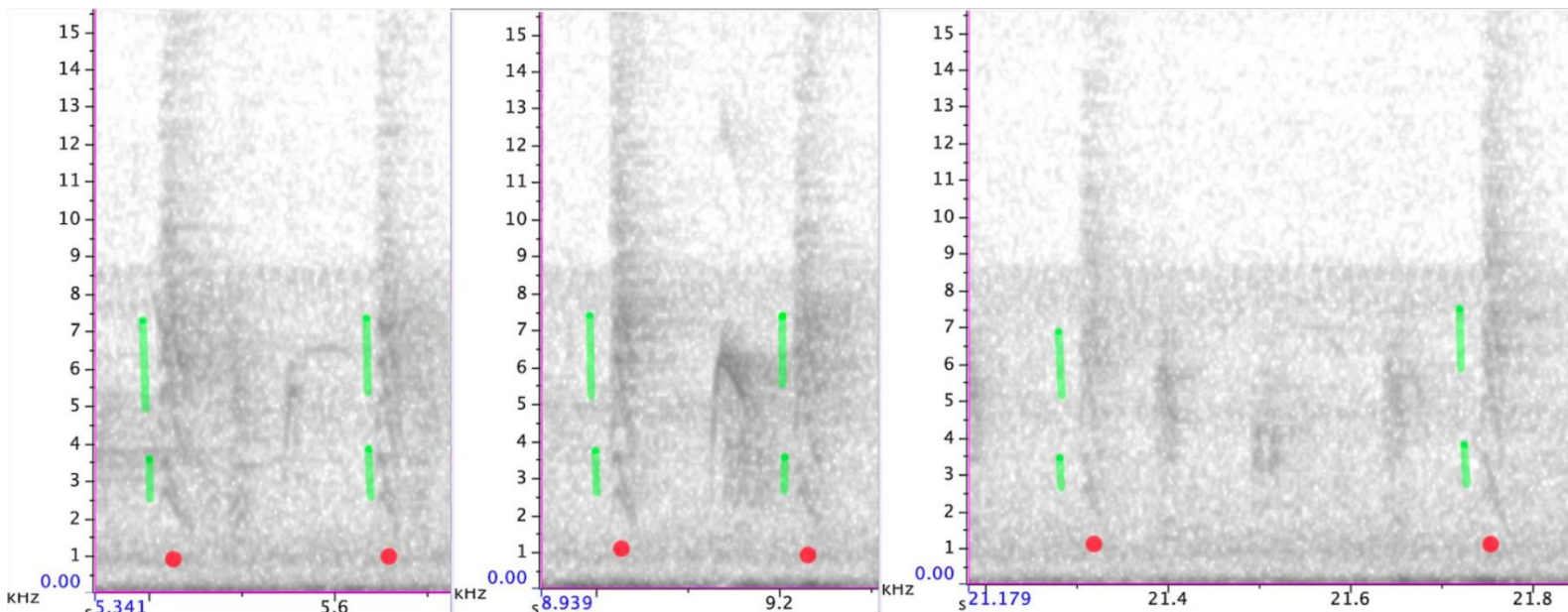
Yes

If yes, may we include your name with the report? Yes

Attached are photos of spectrograms used in the analysis, these go along with the notes under the “voice” section of this report. These recordings are all along a similar X and Y axis-spacing, so as to not “stretch” or “compress” calls deceptively.



Above Photo: Red: Pacific Wren calls  
 Blue: Winter Wren calls  
 Bird from Louisiana in the middle



Above are three sections from the original recording of the Louisiana bird with the loudest and clearest calls. No filter or noise reduction has been applied (only normalization to -3dB)

Green: Showing the two vertical parts of the calls

Red: showing where each call is

The recording can be accessed at: <https://macaulaylibrary.org/asset/274415221>