

## The Marsh Wren

### One Species or Two?

*By Warren Uxley*

Recently I spent the day at Killbuck Marsh, one of the few places in Ohio that still supports a significant population of Marsh Wrens. They move furtively through the cattails rising only occasionally to transmit their rattling calls across the wetland. Like other Wren species, the males are highly territorial and are quick to react to any trespasser, but they approach an intruder unseen as they move through the emergent vegetation.

Many years ago I was in the Klamath basin which straddles the border between California and Oregon. Marsh Wrens are abundant there, but they behave and sound different from their eastern counterparts. The Klamath Wrens were bolder, spending a great deal of time in full view, chattering constantly, and their songs were different in a way that I could not quite define. At the time I thought it was just my imagination; they couldn't be that different.

Researchers have discovered that there are indeed some very real differences between the eastern and western versions of the Marsh Wren. In the west, the males have a repertoire of between 100 and 200 different songs; the eastern males have repertoires of from 30 to 50 songs. The western males are rigorous about singing their full repertoire in a strict sequence, never deviating, while the eastern males do a lot of mixing. The western males also have more complex songs than the eastern males. And, there is the audacious display behavior of the western males.

There is a convergence zone in the Great Plains from Saskatchewan to Nebraska where the eastern and western versions of the Marsh Wren will often share the same patch of wetland. The question arose, "Will they freely mate with one another?" The answer is a resounding NO! The eastern females are turned off by the western males and the same situation prevails with the western females and the eastern males. "Hybrids" are virtually unknown; they are behaving as if they are different species. DNA analysis also supports the idea that there are two Marsh Wrens. Physically they look identical but the argument for two species is compelling.

So what caused this situation to arise? The advance of glaciers into the heart of North American caused the ancestral Marsh Wren to split into two populations that then lived in isolation from one another for thousands of years. The glaciers retreated and the two Wren populations came into contact once again. But, in those thousands of years of isolation, each population had changed to the point where they no longer recognized each other as brethren.

This has happened to several bird species. There are now Eastern and Western Meadowlarks; Eastern and Western Kingbirds; Eastern and Western Peewees, Red and Yellow Shafted Flickers; Bullocks and Baltimore Orioles and Spotted and Eastern Towhees, to name just a few. In each case, where there was once one species there are now two. All were created by the action of advancing glacial ice.

Because the putative two species of Marsh Wren are indistinguishable visually, the officially sanctioned split may be a long time coming. The American Ornithologists Union is the entity that makes such decisions and that organization is somewhat plodding in its decision making process. The Wrens, of course, don't care what the AOU decides – they have already made their decision. East shall not meet west in the marshes.