Historical perspectives on the evolution of warbler diversity, behavior, and ecology

The dawn chorus of nearly every forest or shrubland in the Americas is enlivened by the songs of one to a dozen species of wood-warblers. These small birds have fascinated generations of birders and been the focus of thousands of ornithological papers, becoming exemplars of biological phenomena ranging from sexual selection and habitat partitioning to migration strategies and mating systems. Here, we will look at the present-day diversity of warblers and their great variation in behavior and ecology from a historical perspective, integrating questions about their past pattern of diversification with those about their present-day trait variation. Why are there so many species of warblers in some places, but not others? Over what time-frame did this diversity arise? How might their evolutionary history have influenced the variation we now see in traits like long-distance migration? What signals of history can we discern in their patterns of local and regional community structure? And—to the chagrin of everyone who has had to relearn their taxonomy—why have so darn many of their binomial names changed in the past year?


