Notes on the vocalizations of Red-eyed Vireo (*Vireo olivaceus*)

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In the following we briefly analyze and compare voice of the different races of Red-eyed Vireo (*Vireo olivaceus*). We also try to quantify the extent of any vocal differences using the criteria proposed by Tobias *et al.* (2010), as a support for taxonomic review. We have made use of sound recordings available on-line from Xeno Canto (XC).

From a quick comparison, it is quite clear that races of North America have a slightly different song compared to races of South America. There is however some overlap:

**North America:**
Song is a a series of short phrases which are typically mostly different one from another. Phrases consist mainly of two irregularly modulated notes, in about half of the cases in a clearly different frequency range. Often, notes reach frequencies up to 6500-7000Hz. Some examples from across the large distributional range:

**Quebec**

![Sonic visualization of Quebec song]

**Massachusetts**

![Sonic visualization of Massachusetts song]

**Minnesota**

![Sonic visualization of Minnesota song]

**Colorado**

![Sonic visualization of Colorado song]
South America:
Song is a series of short phrases which are typically all rather similar. Phrases consist mainly of two rather simple notes, which are usually in a similar frequency range. Notes only exceed 5000Hz in less than about 1/3 of the cases.
Some examples from across the large distributional range:
Suriname

Amazonas, Brazil

Iquitos, Peru

Rio, Brazil

Salta, Argentina

While there is overlap in most basic sound parameters, typical songs can be identified safely as pertaining to one of both groups.
Main differences in song are that South-American races have less high-pitched notes, notes within each phrase have mainly overlapping frequency ranges, and overall a more repetitive pattern in subsequent phrases.

It would lead us too far to perform detailed measurements of all relevant sound parameters on the large set of available recordings (and there are ten subspecies), but it is extremely likely that such study would find clearly quantifiable vocal differences between at least the North-American and South American group.

This note was finalized on 21st October 2015, using sound recordings available on-line at that moment. We would like to thank in particular the many sound recordists who placed their recordings for this species on XC.

References


Recommended citation