

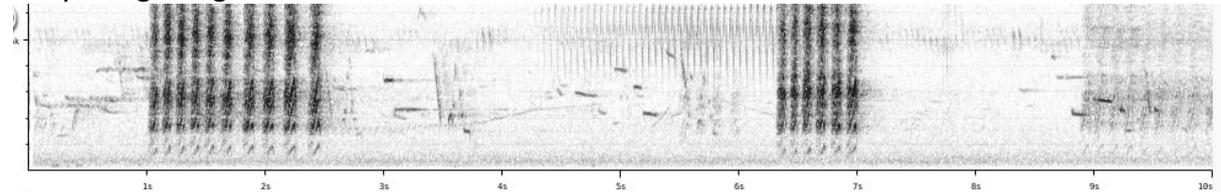
Notes on the vocalizations of Black-billed Magpie (*Pica hudsonia*) and Yellow-billed Magpie (*Pica nuttalli*)

Peter Boesman

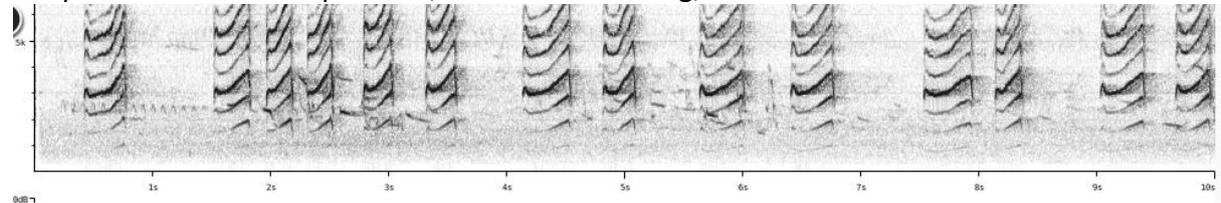
In the following we briefly analyze and compare voice of Black-billed Magpie (*Pica hudsonia*) and Yellow-billed Magpie (*Pica nuttalli*). We also try to quantify the extent of any vocal differences using the criteria proposed by Tobias *et al.* (2010), as a support for taxonomic review. We have made use of sound recordings available on-line from Xeno Canto (XC) and Macaulay Library (ML).

The two most common vocalizations of Black-billed Magpie by far are:

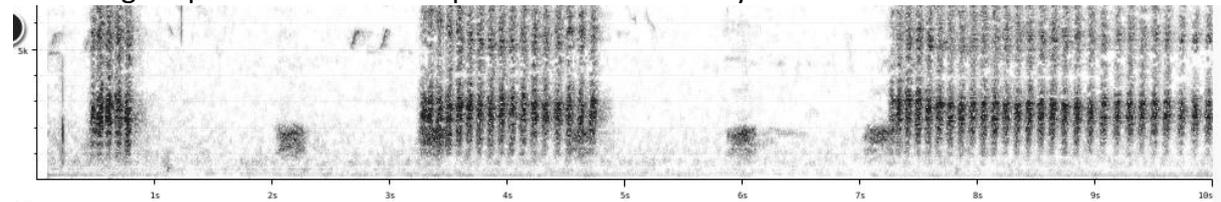
A Jay-like grating chatter:



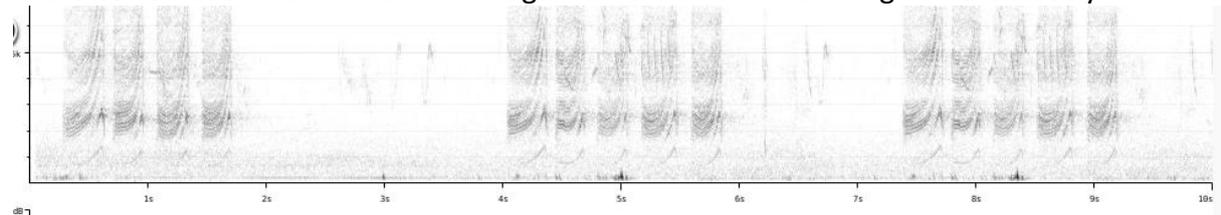
A repeated drawn-out upsurred, somewhat whining, nasal note



The former vocalization is shared with *Pica pica*, although this one chatters typically at a much higher pace and lacks the upsurred trend in every note:



The latter is not unlike *P. asirensis* but again different when zooming in more closely:

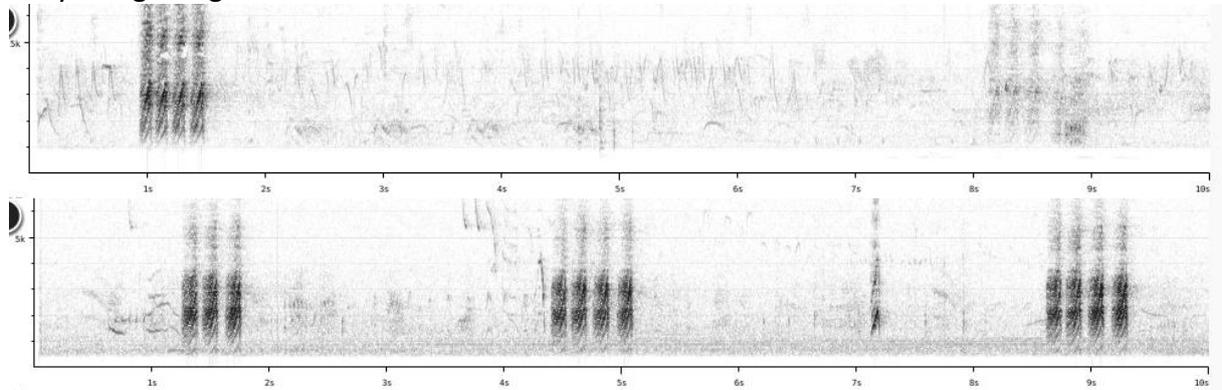


There are no recordings available of race *P.p.camtschatica* (which bridges somewhat the considerable geographical gap between *P. pica* and *P. hudsonia*) to verify whether this race is intermediate in voice.

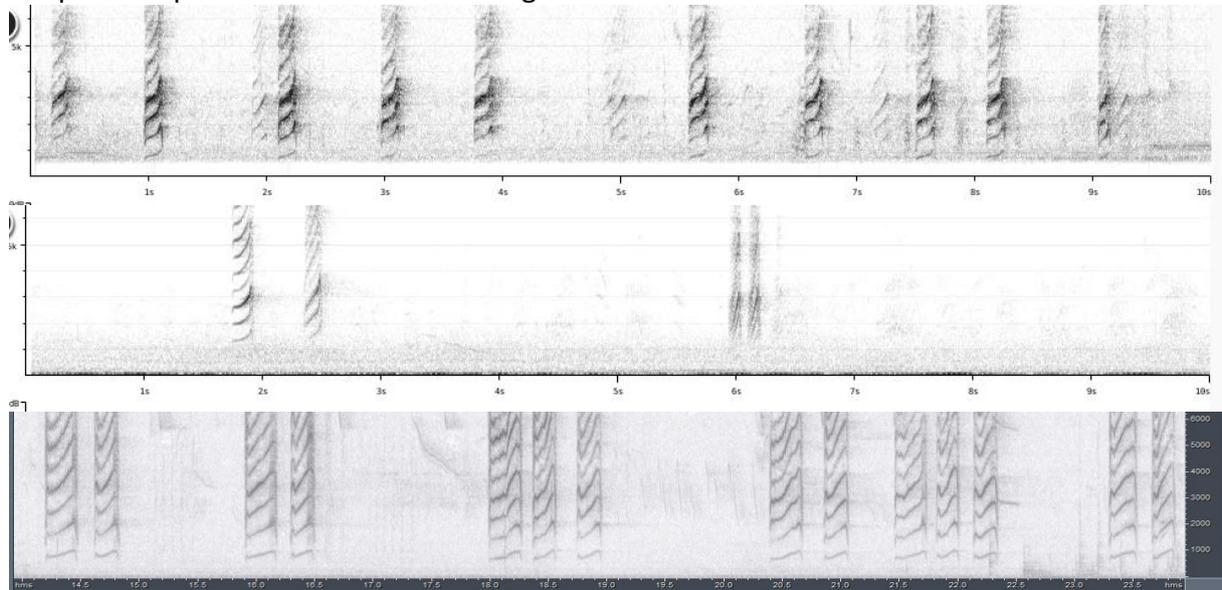
Surprisingly few recordings are available for Yellow-billed Magpie.

The two most common vocalizations by far are:

A Jay-like grating chatter:



A repeated upslurred somewhat whining nasal note



These can be immediately recognized as the two homologous vocalizations in comparison with Black-billed Magpie, and thus voice of these two taxa is closer to each other, than any of the two is in comparison with *Pica pica*.

Based on present evidence, with one of the two main vocalizations not shared with *Pica pica* (score 3) and a different pace of chattering (score 1-2), both North-American taxa have vocal differences with *P.pica* reaching a total vocal score of about 4.

Between Black-billed and Yellow-billed Magpie, vocal differences are more subtle. In the case of the latter:

* Chatter sounds are slightly higher-pitched by ear. More detailed comparison of the energy levels (peak frequency) would be needed for confirmation (tentative score 1)

* The upslurred whining note is usually shorter in length, although there is slight overlap (score 1-2).

Vocal differences are thus quite small, with a total vocal score of about 2.

This note was finalized on 27th January 2016, using sound recordings available on-line at that moment. We would like to thank in particular the sound recordists who placed their recordings for this species on XC and ML.

References

Tobias, J.A., Seddon, N., Spottiswoode, C.N., Pilgrim, J.D., Fishpool, L.D.C. & Collar, N.J. (2010). Quantitative criteria for species delimitation. *Ibis* 152(4): 724–746.

Recommended citation

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