a) Creating a DateLife search query

a1) Chose a list of bird species names.



a2) Processed species names with TNRS and standardized to the OpenTree taxonomy.

- Pheucticus tibialis
- Rhodothraupis celaeno
- Emberiza citrinella
- Emberiza leucocephalos
- Emberiza elegans
- Platyspiza crassirostris

- Pheucticus tibialis
- Rhodothraupis celaeno
- Emberiza citrinella
- Emberiza leucocephalos
- Schoeniclus elegans
- Platyspiza crassirostris

Median summary chronogram Emberiza leucocephalos Γaxon pair node ages from studies Median of node ages Barker et al. 2013 Used as calibration Not used Barker et al. 2015 - chronogram Barker et al. 2015 - chronogram 2 Burns et al. 2014 Hedges et al. 2015 - chronogram Emberiza citrinella Hedges et al. 2015 - chronogram 2 Hooper et al. 2017 Jetz et al. 2012 - chronogram 1 Jetz et al. 2012 - chronogram 2 Schoeniclus elegans Pheucticus tibialis Rhodothraupis celaeno Platyspiza crassirostris Paleogene Neogene

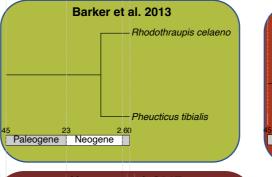
c4) Use summarized ages of congruent nodes to date the chosen tree topology.

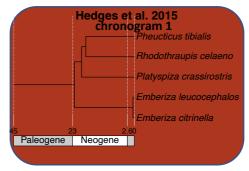
b) Searching DateLife's chronogram database

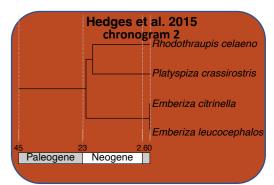
b1) Searched processed names across 253 chronogram in DateLife's database v0.6.2

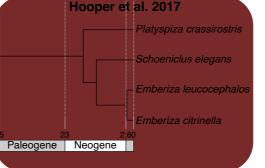


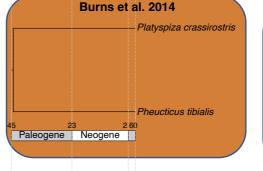
b2) Search resulted in 9 source chronograms from 6 independent, published studies.

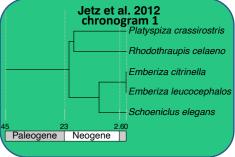


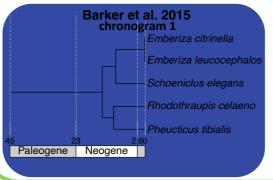


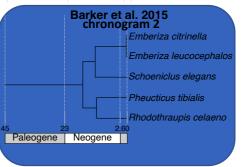


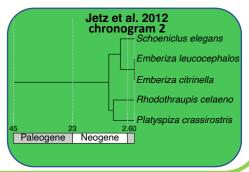












c) Summarizing DateLife's search results

c1) Chose a tree topology from OpenTree's synthetic phylogeny.

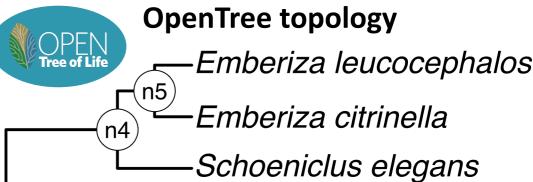
n1



c2) **Congruify** source chronogram nodes to nodes of tree topology.
See Table 1.



c3) **Summarize** ages. See Table 2.



Pheucticus tibialis
Rhodothraupis celaeno
Platyspiza crassirostris