

DateLife Workflows

Luna L. Sanchez Reyes

2019-02-01

Taxon Fringilidae

There are 475 species in the Open Tree of Life Taxonomy for the taxon Fringilidae. Information on time of divergence is available for 286 of these species across 13 published and peer-reviewed chronograms from the following studies:

1. Hooper, Daniel M., Trevor D. Price. 2017. Chromosomal inversion differences correlate with range overlap in passerine birds. *Nature Ecology & Evolution* 1 (10): 1526-1534
2. Hedges, S. Blair, Julie Marin, Michael Suleski, Madeline Paymer, Sudhir Kumar. 2015. Tree of life reveals clock-like speciation and diversification. *Molecular Biology and Evolution* 32 (4): 835-845
3. Claramunt, Santiago, Joel Cracraft. 2015. A new time tree reveals Earth history's imprint on the evolution of modern birds. *Science Advances* 1 (11): e1501005-e1501005
4. Gibb, Gillian C., Ryan England, Gerrit Hartig, P.A. (Trish) McLennan, Briar L. Taylor Smith, Bennet J. McComish, Alan Cooper, David Penny. 2015. New Zealand passerines help clarify the diversification of major songbird lineages during the Oligocene. *Genome Biology and Evolution* 7 (11): 2983-2995.
5. Barker, F. Keith, Kevin J. Burns, John Klicka, Scott M. Lanyon, Irby J. Lovette. 2015. New insights into New World biogeography: An integrated view from the phylogeny of blackbirds, cardinals, sparrows, tanagers, warblers, and allies. *The Auk* 132 (2): 333-348.
6. Jetz, W., G. H. Thomas, J. B. Joy, K. Hartmann, A. O. Mooers. 2012. The global diversity of birds in space and time. *Nature* 491 (7424): 444-448
7. Barker, F. K., K. J. Burns, J. Klicka, S. M. Lanyon, I. J. Lovette. 2013. Going to extremes: contrasting rates of diversification in a recent radiation of New World passerine birds. *Systematic Biology* 62 (2): 298-320.

8. Burns, Kevin J., Allison J. Shultz, Pascal O. Title, Nicholas A. Mason, F. Keith Barker, John Klicka, Scott M. Lanyon, Irby J. Lovette. 2014. Phylogenetics and diversification of tanagers (Passeriformes: Thraupidae), the largest radiation of Neotropical songbirds. *Molecular Phylogenetics and Evolution* 75: 41-77.

9. Price, Trevor D., Daniel M. Hooper, Caitlyn D. Buchanan, Ulf S. Johansson, D. Thomas Tietze, Per Alström, Urban Olsson, Mousumi Ghosh-Harihar, Farah Ishtiaq, Sandeep K. Gupta, Jochen Martens, Bettina Harr, Pratap Singh, Dhananjai Mohan. 2014. Niche filling slows the diversification of Himalayan songbirds. *Nature* 509: 222-225.

Species are distributed across chronograms as follows: [1] FALSE

Plot unit: period Stage 1: 17 Stage 2: 12 Stage 3: 15quartz_off_screen 2

The following species were completely absent from chronogram data base: *Acanthis cabaret*, *Acanthis rostrata*, *Akialoa ellisiana*, *Akialoa lanaiensis*, *Akialoa obscura*, *Buarremon apertus*, *Bucanetes crassirostris*, *Calcarius coloratus*, *Cardinalis carneus*, *Cardinalis peninsulae*, *Carduelis ankoberensis*, *Carduelis elegans*, *Carduelis ultima*, *Carpodacus beicki*, *Carpodacus davidianus*, *Carpodacus deserticolor*, *Carpodacus dubius*, *Carpodacus formosanus*, *Carpodacus henrici*, *Carpodacus longirostris*, *Carpodacus lucifer*, *Carpodacus portenkoi*, *Carpodacus rhodopeplus*, *Carpodacus roseatus*, *Carpodacus rubicundus*, *Carpodacus stoliczkae*, *Carpodacus verreauxii*, *Carpodacus waltoni*, *Caryothraustes brasiliensis*, *Caryothraustes scapularis*, *Chaunoproctus ferreorostris*, *Chloridops kona*, *Chloris heinrichi*, *Chloris turkestanica*, *Chrysocorythus mindanensis*, *Ciridops anna*, *Coccothraustes japonicus*, *Coccothraustes migratorius*, *Corytus rhenana*, *Crithagra albifrons*, *Crithagra ankoberensis*, *Crithagra buehneri*, *Crithagra canicapilla*, *Crithagra capistrata*, *Crithagra concolor*, *Crithagra deserti*, *Crithagra donaldsoni*, *Crithagra flavigula*, *Crithagra frontalis*, *Crithagra granti*, *Crithagra hewitti*, *Crithagra hildegardeae*, *Crithagra kikuyensis*, *Crithagra koliensis*, *Crithagra leucoptera*, *Crithagra marshalli*, *Crithagra menachensis*, *Crithagra montanorum*, *Crithagra mozambica*, *Crithagra reichenowi*, *Crithagra rothschildi*, *Crithagra rufobrunnea*, *Crithagra symonsi*, *Crithagra thomensis*, *Crithagra tristriata*, *Crithagra xantholaema*, *Crithagra xanthopygia*, *Cyanerpes holti*, *Cyanerpes isthmicus*, *Cyanerpes microrhynchus*, *Cyanocompsa argentina*, *Cyanocompsa rothschildi*, *Drepanis coccinea*, *Drepanis funerea*, *Drepanis pacifica*, *Dysmorodrepanis munroi*, *Emberiza buturlini*, *Emberiza ciodes*, *Emberiza ciopsis*, *Emberiza continentalis*, *Emberiza elegantula*, *Emberiza erythrogenys*, *Emberiza flemingorum*, *Emberiza fronto*, *Emberiza kuatunensis*, *Emberiza lydiae*, *Emberiza meridionalis*, *Emberiza militaris*, *Emberiza musica*, *Emberiza neobscura*, *Emberiza nivenorum*, *Emberiza omissa*, *Emberiza omoensis*, *Emberiza orientalis*, *Emberiza ornata*, *Emberiza pyrrhulinus*, *Emberiza rufibarba*, *Emberiza rufigularis*, *Emberiza sahari*, *Emberiza semenowi*, *Emberiza sloggetti*, *Emberiza sordida*, *Emberiza vincenti*, *Emberiza zaidamensis*, *Embernagra gossei*, *Eophona magnirostris*, *Eophona sowerbyi*, *Erythropsiza phaenicoptera*, *Euphonia aurantiicollis*, *Eupho-*

nia carnegiei, *Euphonia flavifrons*, *Euphonia gnatho*, *Euphonia nitida*, *Euphonia olivacea*, *Euphonia praetermissa*, *Euphonia purpurascens*, *Euphonia rufivertex*, *Euphonia serrirostris*, *Euphonia tavarae*, *Fringilla albicollis*, *Fringilla bella*, *Fringilla brissonii*, *Fringilla nortoniensis*, *Fringilla palmae*, *Fringilla polatzeki*, *Fringilla syriaca*, *Fringillaria goslingi*, *Fringillaria poliopleura*, *Haemorhous californicus*, *Haemorhous griscomi*, *Hemignathus affinis*, *Hemignathus hanapepe*, *Hemispingus castaneicollis*, *Hemispingus macrophrys*, *Hemispingus ochraceus*, *Hemispingus urubambae*, *Hesperiphona abeillei*, *Hesperiphona cobanensis*, *Hesperiphona montana*, *Himatione fraithii*, *Leucosticte brunneonucha*, *Leucosticte wallowa*, *Leucosticte walteri*, *Linaria harterti*, *Linaria johannis*, *Linaria rufostrigata*, *Linaria yemenensis*, *Linurgus kilimensis*, *Loxia cardinalis*, *Loxia cyanea*, *Loxia dominica*, *Loxia mesamericana*, *Loxops ochraceus*, *Loxops wolstenholmei*, *Melopyrrha taylori*, *Mycerobas melanozanthos*, *Passerina lazula*, *Passerina pallidior*, *Passerina purpurascens*, *Peucaea cohaerens*, *Peucaea ibarorum*, *Peucaea vulcanica*, *Peucedramus micrus*, *Pheucticus aurantiacus*, *Pinicola eschatoza*, *Plectrophenax townsendi*, *Psittirostra psittacea*, *Pyrrhula cineracea*, *Pyrrhula owstoni*, *Pyrrhula rosacea*, *Pyrrhula steerei*, *Pyrrhula uchidai*, *Rhodacanthis flaviceps*, *Rhodacanthis palmeri*, *Rhodopechys alienus*, *Rhodopechys sanguineus*, *Rhynchostruthus louisae*, *Rhynchostruthus percivali*, *Rhynchostruthus socotranus*, *Serinus huillensis*, *Spinus atriceps*, *Spinus colombiana*, *Spinus dominicensis*, *Spinus longirostris*, *Spinus nigricauda*, *Spinus oleacea*, *Spinus perplexa*, *Spinus stejnegeri*, *Viridonia sagittirostris*