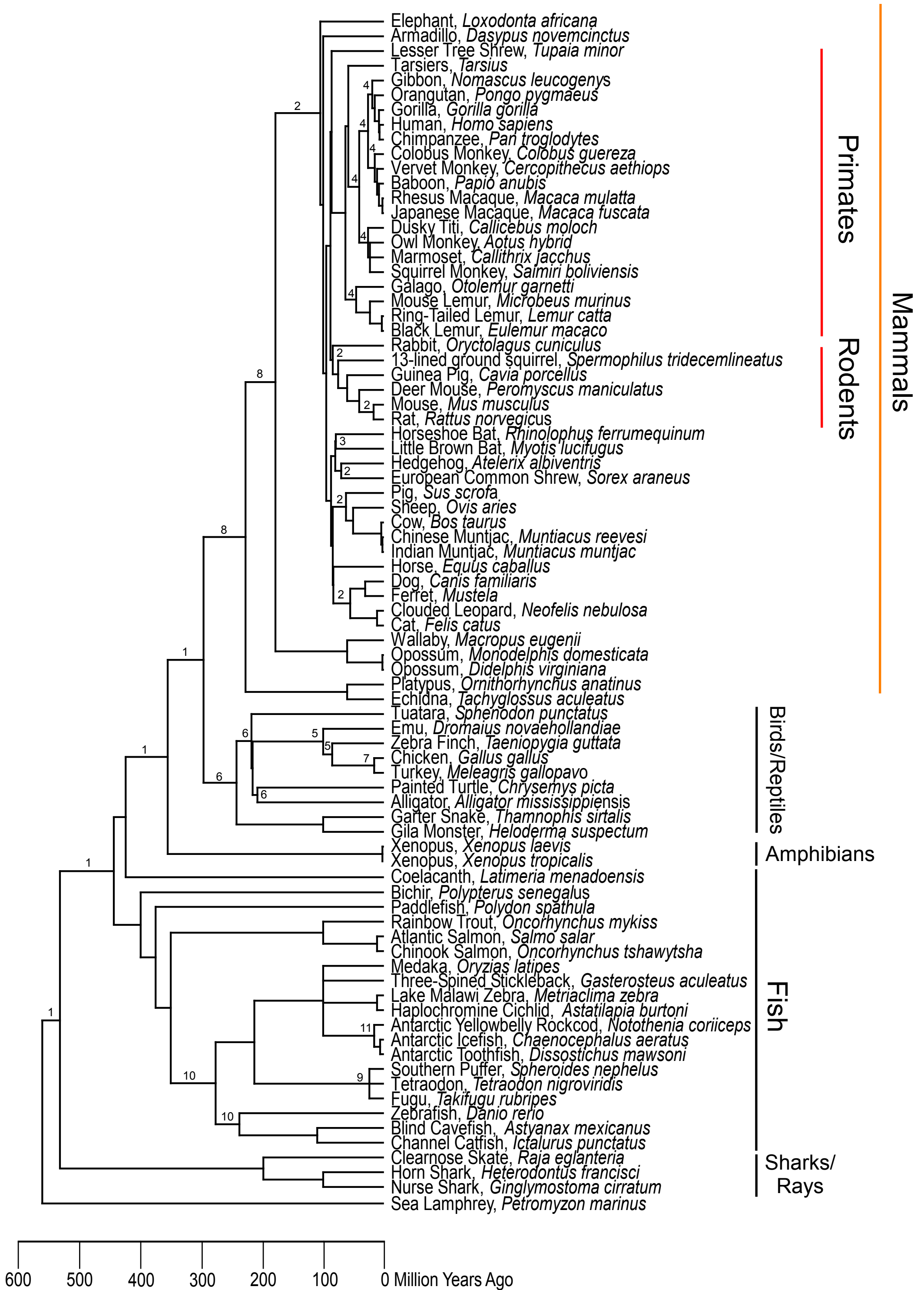


Vertebrate BAC libraries (Feb. 2005)



Phylogenetic tree of vertebrates with BAC libraries available or pending.

The phylogenetic relationship between vertebrates for which there is a BAC library available or pending was inferred from the literature, and when possible estimated dates of divergence. The branch lengths on the tree indicate the distance in millions of years. The numbers indicate the reference used to **estimate** the divergence time at each node. If no number is indicated, an arbitrary branch length was used. (*Please be aware this tree is meant for illustrative purposes, and the primary references should be consulted for the specific underlying divergence dates.*) This list of BAC libraries currently includes n=81 species: n=19 primates, n=23 other placental mammals, n=3 marsupials, n=2 monotremes, n=4 birds, n=5 reptiles, n=2 amphibians, n=19 fish, n=3 sharks and rays, and n=1 lamprey.

References:

1. Kumar, Sudhir and Hedges, S. Blair, 1998. A molecular timescale for vertebrate evolution. *Nature*. 392, 917-920.
2. Springer, Mark S., Murphy, W., Eizirik, E., O'Brien, S., 2003. Placental mammal diversification and the Cretaceous-Tertiary boundary. *PNAS*. 100, 1056-1061.
3. Sakai T, Kikkawa Y, Tsuchiya K, Harada M, Kanoe M, Yoshiyuki M, Yonekawa H., 2003. Molecular phylogeny of Japanese Rhinolophidae based on variations in the complete sequence of the mitochondrial cytochrome b gene.. *Genes & Genetic Systems*. 78, 179-189.
4. Goodman, M., Porter, C., Czelusniak, J., Page, S., Schneider, H., Shoshani, J., Gunnell, G., Groves, C. 1998. Toward a phylogenetic classification of primates based on DNA evidence complemented by fossil evidence. *Mol. Phylogenet. Evol.* 9, 585-598.
5. Tuinen & Hedges, 2001. Calibration of avian molecular clocks. *Mol. Biol. Evol.* 18, 206-213.
6. Hedges, S., Poling, L., 1999. A molecular phylogeny of reptiles. *Science*. 283, 998-1001.
7. Dimcheff, D., Drovetski, S., Mindell, D., 2002. Phylogeny of tetraoninae and other galliform birds using mitochondrial 12S and ND2 genes. *Mol. Phylogenet. Evol.* 24, 208-215.
8. Lee, M., Shroff, R., Cooper, S., Hope, R., 1999. Evolution and molecular characterization of B-Globin gene from the Australian Echidna *Tachyglossus aculeatus* (Monotremata). *Mol. Phylogenet. Evol.* 12, 205-214.
9. Crnogorac-Jurcevic, T., Brown, J. R., Lehrach, H., Schalkwyk, L. C., 1997. Tetraodon fluviatilis, a new puffer fish model for genome studies. *Genomics*. 41, 177-184.
10. Kumazawa, Y., Yamaguchi, M., Nishida, M., 1999. Mitochondrial molecular clocks and the origin of Euteleostean biodiversity: Familial radiation of Perciformes may have predated the Cretaceous/Tertiary boundary. *The Biology of Biodiversity*. 35-52.
11. Bargelloni, L., Ritchie, PA, Patarnello, T, Lambert, DM, Meyer, A. 1994. Molecular evolution of subzero temperatures: Mitochondrial and nuclear phylogenies of fishes from antarctica (suborder Notothenioidae), and the evolution of antifreeze glycopeptides. *Mol. Biol. Evol.* 11:854-863.