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Phylogenetic Systematics of the Primate Genus *Aotus* Based on Hyoid Morphology

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**PHYLOGENETIC SYSTEMATICS OF THE PRIMATE GENUS *AOTUS*,
BASED ON HYOID MORPHOLOGY**

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Dissection of a specimen of the South American primate genus Aotus was performed, focussing on the morphology of the hyoid apparatus and surrounding musculature. Data collected from this dissection, along with data from published descriptions of primate genera from both suborders Haplorhini and Strepsirhini, were analyzed using the computer software program PAUP (Phylogenetic Analysis Using Parsimony). This analysis generates possible phylogenetic relationships of Aotus to other primates. Four equally probable phylogenetic trees (=cladograms) were obtained from this analysis. While the cladograms differ in minor detail, they all show that Aotus appears to be more closely related to the more advanced suborder Haplorhini than to the Strepsirhini, and that it is a relatively primitive member of the haplorhine group. This suggests that the ancestor of the New World monkeys arrived in South America very early, at about the time that haplorhine primates were beginning to diverge in the Old World.