

Additional file 7

State coding used on ancestral state reconstruction analyses. Number of upper premolars were coded as one (1) or two (2), and number of pairs of mammae were coded as three (3), four (4), or five (5). Taxonomic identifications follow the new arrangement proposed here (see text for detailed explanation).

Species	Upper premolars	Pairs of mammae
" <i>Microsciurus</i> " "species 2"	2	3
" <i>Microsciurus</i> " <i>flaviventer</i>	2	3
" <i>Microsciurus</i> " <i>sabanillae</i>	2	3
<i>Echinosciurus aureogaster</i>	2	4
<i>Echinosciurus colliaei</i>	2	4
<i>Echinosciurus deppei</i>	2	3
<i>Echinosciurus variegatoides</i>	2	4
<i>Echinosciurus yucatanensis</i>	2	4
<i>Guerlinguetus aestuans</i> "a"	1	4
<i>Guerlinguetus aestuans</i> "b"	1	4
<i>Guerlinguetus aestuans</i> "c"	1	4
<i>Guerlinguetus brasiliensis</i>	1	4
<i>Hadrosociurus</i> "species 3"	1	4
<i>Hadrosociurus ignitus</i>	1	3
<i>Hadrosociurus igniventris</i>	1	4
<i>Hadrosociurus pyrrhinus</i>	1	4
<i>Hadrosociurus spadiceus</i>	1	4
<i>Hesperosciurus aberti</i>	2	4
<i>Hesperosciurus griseus</i>	2	4
<i>Leptosociurus boquetensis</i>	2	3
<i>Leptosociurus isthmius</i>	2	3
<i>Leptosociurus mimulus</i>	2	3
<i>Leptosociurus otinus</i>	2	3
<i>Leptosociurus pucheranii</i>	1	3
<i>Leptosociurus similis</i>	2	3
<i>Microsciurus</i> "species 1"	2	3
<i>Microsciurus alfari</i>	2	3
<i>Neosciurus carolinensis</i>	2	4

<i>Parasciurus alleni</i>	1	4
<i>Parasciurus arizonensis</i>	1	4
<i>Parasciurus nayaritensis</i>	1	4
<i>Parasciurus niger</i>	1	4
<i>Parasciurus oculatus</i>	1	4
<i>Rheithrosciurus macrotis</i>	1	3
<i>Sciurus anomalus</i>	1	5
<i>Sciurus lis</i>	2	3
<i>Sciurus vulgaris</i>	2	4
<i>Simosciurus neboxii</i>	1	4
<i>Simosciurus stramineus</i>	1	4
<i>Syntheosciurus brochus</i>	2	3
<i>Syntheosciurus granatensis</i>	1	3
<i>Tamiasciurus douglasii</i>	2	4
<i>Tamiasciurus hudsonicus</i>	2	4