



FIGURE 6. Temporal distribution and some relationships of Mesozoic orders of mammals and some near-mammals. All the groups shown arose from Triassic Therapsida, usually classified as reptiles. The early relationships among triconodonts, docodonts, and a late Triassic-early Jurassic group related to one or both of them are uncertain at present. The ictidosauroids may be ancestral to one of the later groups shown, but this also is now uncertain. The significance of the "grade lines" and of the "therian clade" is explained in the text.

#### Grade lines:

- I. The dentary acquires an articulation with the squamosal.
- II. The articular and quadrate cease to be a suspensorium for the lower jaw (and presumably become auditory ossicles, although this is not quite certain for all early groups).
- III. Accessory bones (additional to the dentary and articular) cease to form part of the lower jaw.

Simpson, G.G. 1959. The nature and origin of supraspecific taxa. Cold Spring Harbor Symp. Quant. Biol. 24: 255-271.