

## Even after dino dieoff, our mammal forebears laid low

by Bend\_Weekly\_News\_Sources

When the cat's away, the mice will play. And for some-what si-m-a-i-lar rea-sons, bi-ol-o-gists have long be-lieved that the ex-tinc-tion of di-no-saurs caused the great flour-ish-ing of mam-mals on Earth - a pro-cess that pro-duced spe-cies in-clud-ing ours.

That's not quite the way things hap-pened, a study has found. A Cape Hy-rax (Pro-ca-via ca-p-en-sis), a small Af-ri-can mam-mal that looks like a ro-dent but is ac-tu-al-ly re-lat-ed to ele-phants. Their com-mon an-ces-tor lived 83 mil-lion years ago, long be-fore the di-no-saurs died out. - Photo: Rich-ard Gren-yer A com-plete new fam-i-ly tree trac-ing the his-to-ry of all Earth's 4,500 mam-mals shows they did-n't start to di-ver-si-fy right af-ter the di-no-saurs' de-mise, as con-ven-tion-al wis-dom holds, re-search-ers say. Rath-er, the pro-cess took at least 10 mil-lion years to start in ear-nest. The sci-en-tists, with Im-pe-ri-al Col-lege Lon-don and the Zo-o-log-i-cal So-ci-e-ty of Lon-don, de-scribed the find-ings in the March 29 is-sue of the re-search jour-nal Na-ture. They found that many of the ge-net-ic an-ces-tors of the mam-mals liv-ing to-day ex-isted 85 mil-lion years ago, and large-ly sur-vived a me-te-or crash thought to have killed the di-no-saurs 65 mil-lion years ago. Through-out the Cre-ta-ceous era, when di-no-saurs reigned, these mam-mal spe-cies had been rel-a-tively few, pre-sum-a-bly blocked from di-ver-si-fying and evol-v-ing in di-no-saur-dominated habi-tats. The fam-i-ly tree in-di-cates that af-ter the mass ex-tinc-tion, some mam-mals did un-der-go a quick di-ver-si-fi-ca-tion and ev-o-lu-tion, the sci-en-tists said. But most of these groups have since ei-ther died out, such as An-drewsarchus "an ag-gres-sive wolf-like cow" or de-clined in di-ver-si-ty, such as the group con-tain-ing sloths and ar-madil-los. The re-search-ers con-tend that our ac-tu-al "an-ces-tors," and those of liv-ing mam-mals, be-gan to di-ver-si-fy around the time of a sud-den in-crease in the tem-pe-rature of the plan-et "10 mil-lion years af-ter the di-no-saur dis-as-ter. An-dy Purvis of Im-pe-ri-al Col-lege said: "For the first 10 or 15 mil-lion years af-ter the di-no-saurs were wiped out, pre-s-ent-day mam-mals kept a very low pro-file, while these oth-er types of mam-mals were run-ning the show. It looks like a lat-er bout of 'global warm-ing' may have kick-started to-day's di-ver-si-ty" not the death of the di-no-saurs. "This discovery rewrites our un-der-stand-ing of how we came to evolve on this plan-et, and the study as a whole gives a much clear-er pic-ture than ev-er be-fore as to our place in na-ture."

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