

3D fossil reconstruction related to the publication: Body shape and life style of the extinct rodent *Canariomys bravoii* from Tenerife, Canary Islands

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Abstract: This contribution contains the 3D reconstruction of *Canariomys bravoii*, described and figured in the following publication: Michaux J., Hautier L., Hutterer R., Lebrun R., Guy F., García-Talavera F., 2012 : Body shape and life style of the extinct rodent *Canariomys bravoii* (Mammalia, Murinae) from Tenerife, Canary Islands (Spain). *Comptes Rendus Palevol* 11 (7), 485-494. doi:10.1016/j.crpv.2012.06.004

Key words: Canari Islands, Fossil reconstruction, Insularity, Rodentia

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TECHNICAL AND SPECIMEN-RELATED PARAMETERS

Specimen inventory number	TFMVCV872	TFMVCV873
Species	<i>Canariomys bravoii</i>	<i>Canariomys bravoii</i>
Repository institution	Museo de la Naturaleza y el Hombre, Santa Cruz	Museo de la Naturaleza y el Hombre, Santa Cruz
3D data acquisition institution	Université de Poitiers, France	ISE-M, Université Montpellier 2, France
3D data acquisition method	X-ray μ CT	X-ray μ CT
3D data acquisition facility model	Viscom X8050-16	SkyScan 1076
3D data acquisition operator	Franck Guy	Renaud Lebrun
Voxel size of original dataset	0,079 mm	0,036 mm
Author of derived 3D surface model	Renaud Lebrun and Mikaël Antioco	Renaud Lebrun and Mikaël Antioco
Model ID	M3#6_TFMCV872-873	M3#6_TFMCV872-873

METHODS

The present three-dimensional reconstruction of the skeleton of the Holocene giant rat of Tenerife (Canary Islands, Spain) was obtained by computerized microtomography reconstruction. Two distinct specimens were used in this reconstruction, TFMVCV872 and TFMVCV873 (Museo de la Naturaleza y el Hombre, Santa Cruz). TFMVCV872 is an almost complete but disarticulated skeleton of *C. bravoii*. As the mandibles and the cranium of this specimen were not well preserved, a complete skull of *C. bravoii* (TFMVCV873) was added to this reconstruction.

All the bones were extracted within a “labelfield” module of AVIZO 6.3, using the segmentation threshold selection tool. The 3D model is provided in a series of .vtk format, and the whole reconstruction can be opened with ISE-MeshTools (Lebrun, 2014).

DISCUSSION

Murinae rodents observed by Owen (1853) always possess a total amount of 19 thoraco-lumbar vertebrae, most often divided in 13 thoracic and 6 lumbar vertebrae (he also observed at least one specimen of *Rattus norvegicus* possessing 12 thoracic and 7 lumbar vertebrae). This number of 19 thoraco-lumbar vertebrae is observed very often in mammals and is thought to be a plesiomorphic condition for eutherians and metatherians mammals (for a review, see for instance Sánchez-Villagra et al., 2007). The present fossil of *C. bravoii* exhibits a number of 17 thoraco-lumbar vertebrae, so it is likely that 2 vertebrae (either 1 thoracic and 1 lumbar, or 2 lumbar) are missing. Furthermore, the number of caudal vertebrae in Murinae rodents observed by Owen (1853) is often greater than the 21 presented in this reconstruction. The present reconstruction of

Canariomys bravoii does not take into account these potentially missing thoraco-lumbar and caudal vertebrae.

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