The castorid *Steneofiber* from NW Germany and its implications for the taxonomy of Miocene beavers

Thomas Mörs and Clara Stefen


Craniodental remains of a medium-sized beaver from the early middle Miocene of Hambach (MN 5) in the Lower Rhine Basin of northwestern Germany are described and assigned to *Steneofiber depereti*. The relatively rich material (6 mandibles and 56 isolated teeth) was collected from a single locality, Hambach 6C, and comprises specimens representing juvenile to very old individuals. This makes it possible to assess the morphologic and metric variability of a single population of *Steneofiber depereti*. Metrically, the mandibular tooth rows compare favorably in size to those of three subspecies described from the Loire Basin in France: *Steneofiber depereti janvieri*, *Steneofiber d. caliodorensis*, and *Steneofiber d. depereti*. Therefore in our opinion, division into subspecies cannot be applied to *S. depereti* in general. The difference in size between the smaller beaver from Hambach and the contemporaneous larger *S. d. carnutense* from the Loire Basin is remarkable. The taxonomy of early middle Miocene medium-sized castorids, referred to *Steneofiber depereti*, *Steneofiber subpyrenaicus*, and *Chalicomys jaegeri* is discussed. The presence of the derived beaver *C. jaegeri* in MN4 to MN6 is questioned and assignment to *Steneofiber* suggested. The occasional appearance of single *C. jaegeri* features in *S. depereti* supports the existence of a European lineage from the Orleanian *S. depereti* to the Vallesian *C. jaegeri*. The taxonomic status of *S. subpyrenaicus* remains unresolved.

**Key words:** Mammalia, Rodentia, Castoridae, morphology, systematics, Neogene, Hambach, Lower Rhine Basin.

Thomas Mörs [thomas.moers@nrm.se], Department of Palaeozoology, Swedish Museum of Natural History, P.O. Box 50007, SE-104 05 Stockholm, Sweden (corresponding author); Clara Stefen [clara.stefen@senckenberg.de], Senckenberg Naturhistorische Sammlungen Dresden, Museum für Tierkunde, Königsbrücker Landstrasse 159, D-01109 Dresden, Germany.