

The East Milford Mastodon, its discovery and excavation

R.G. Grantham and K.A. Kozera

Natural History Section, Nova Scotia Museum, Halifax, Nova Scotia B3H 3A6, Canada

On October 22, 1991, Stanley McMullin, an equipment operator for National Gypsum Canada, encountered the partial remains of a *Mammot americanus* while conducting a

stripping operation at the mine. The museum was contacted to identify the unusual find of “a tusk and big teeth”. The authors responded immediately. Upon arrival at the site,

identification was immediate, based on the distinctive molars of the maxilla.

The overburden which is composed of glacial and non-glacial sediments is removed prior to mining. There is a well-developed paleo-karst topography which has in some instances been infilled with Late Wisconsinan non-glacial sediments (Mott *et al.*, 1982). These infills have been encountered several times since mining began in 1954 (Stea *et al.*, 1992).

The mastodon was situated half-way up the exposed 'mud-wall' of a partially excavated sinkhole. It was decided to recover all visible bones in the mud-wall and from the pile of previously removed material. However, because of possible slumping of the site, it was later decided to work through the winter under temporary shelter. Careful stabilization (Kozera and Grantham, 1993A), collection and documentation of the stratigraphy provided the opportunity for sampling by other researchers. The excavation continued into the summer and proceeded until all the bones had been removed. The last bones were removed at the end of August 1992, and the shelter was dismantled in November.

As well as mastodon; there were bones of birds, frogs, and turtles; teeth of fish and muskrat; several species of wood, seeds, cones, leaves and mosses; and several species of

insects and mollusks.

The Mastodon bones and other samples taken are in storage at the Nova Scotia Museum. Conservation of the mastodon is expected to take over three years (Kozera and Grantham, 1993B). It is estimated that there is approximately 60% of the mastodon recovered.

KOZERA, K.A. and GRANTHAM, R.G. 1993A. Field Stabilization of In-Situ Wet Bones of the East Milford Mastodon. Abstract, Atlantic Geoscience Society Annual Meeting, February 12 and 13, 1993, Citadel Inn, Halifax.

——— 1993B. Proposed Wet Bone Conservation Method for the East Milford Mastodon. Abstract, Atlantic Geoscience Society Annual Meeting, February 12 and 13, 1993, Citadel Inn, Halifax.

MOTT, R.J., ANDERSON, T.W., and MATTHEWS, J.V., Jr. 1982. Pollen and Macrofossil Study of an Interglacial Deposit in Nova Scotia. *In* Special Edition Devoted to Papers from the Eleventh INQUA Congress. *Edited by* P. Richard. *Geographie Physique et Quaternaire*, 36, pp. 197-208.

STEA, R.R., FORBES, D.L., and MOTT, R.J. 1992. Stop 3-2: East Milford Quarry. *In* Quaternary Geology and Coastal Evolution of Nova Scotia. Field excursion A-6, Guidebook, Geological Association of Canada Annual Meeting, Wolfville '92.