Abstract. In this paper, we show that the failure of the unique branch hypothesis (UBH) for tame trees implies that in some homogenous generic extension of $V$ there is a transitive model $M$ containing $\text{Ord} \cup \mathbb{R}$ such that $M \models \text{AD}^+ + \Theta > \theta_0$. In particular, this implies the existence (in $V$) of a non-tame mouse. The results of this paper significantly extend J. R. Steel’s earlier results for tame trees.