We say that a real $X$ is $n$-generic relative to a perfect tree $T$ if $X$ is a path through $T$ and for every $\Sigma_n(T)$ set $S$ there exists a number $k$ such that either $X - k$ is in $S$ or every string extending $X - k$ is not in $S$. A real $X$ is $n$-generic relative to a perfect tree if there exists such a $T$. We show that for every number $n$ all but countably many reals are $n$-generic relative to a perfect tree. Second, we show that for every ordinal $\alpha$ below the least fixed point of the function which maps $m$ to the $m$-th admissable, the $\alpha$ iterated hyperjump is not $5$-generic relative to a perfect tree. Finally, we demonstrate some necessary and sufficient conditions for a real to be $1$-generic relative to a perfect tree.