**Problem.** Proposed by Tamás Erdélyi, Texas A&M University, College Station, TX. Let \( \mathcal{L}_k \) denote the set of all polynomials of degree \( k \) with each of their \( k + 1 \) coefficients in \( \{-1,1\} \). Let \( M_k \) denote the largest possible multiplicity that a zero of a \( P \in \mathcal{L}_k \) can have at 1. Let \( (C_k) \) be an arbitrary sequence of positive integers tending to \( \infty \). Show that

\[
\lim_{n \to \infty} \frac{1}{n} \left| \{k \in \{1, 2, \ldots, n\} : M_k \geq C_k \} \right| = 0.
\]