In the 1980s, Veit Elser introduced a random graph model for percolation. Studying this model combinatorially naturally leads to the consideration of a collection of numbers $\text{els}_k(G)$ called Elser numbers of a graph $G$. In his original paper, Elser conjectured that for a simple graph $G$ and nonnegative integer $k$, the Elser number was nonnegative. By interpreting the Elser numbers as Euler characteristics of certain simplicial complexes, we prove and strengthen Elser’s conjecture. (Received August 20, 2019)