Timothy Trujillo* (trujillo@shsu.edu). Hypernatural numbers in ultra-Ramsey theory. We present an alternative formalism to deal with ultrafilters grounded on the use of the infinite hypernatural numbers of nonstandard analysis, which - in a precise sense - replace the use of ultrafilters. We then use the formalism to prove a new infinite-dimensional extension of Ramsey's theorem for ultrafilter trees. We conclude by extending the result to the abstract setting of topological Ramsey spaces. (Received September 25, 2017)