A recurrence sequence is one in which each term depends on those preceding it. When this dependence is linear, the resulting sequences have attracted a lot of attention, with their most famous member being the Fibonacci numbers. A natural question number theorists ask about such sequences is "how prime" their terms are. One way of studying this is to examine the set of primes dividing at least one term of the sequence; if this set is sparse then in some sense the terms are close to being prime. I'll give a natural definition of the density of a set of primes, and state some results about the density of prime divisors of several well-known linear recurrences. Then I will discuss examples of non-linear recurrences, and state a result of mine about the density of primes dividing such sequences. Finally, I'll speak more broadly about the area of arithmetic dynamics, and state the best-known conjecture in the field.