Given a one-dimensional shift X, let $|F_X(\ell)|$ be the number of follower sets of words of length ℓ in X. We call the sequence

$$\{|F_X(\ell)|\}_{\ell \in \mathbb{N}}$$

the follower set sequence of the shift X. Extender sets are a generalization of follower sets, and we define the extender set sequence similarly. In this paper, we explore which sequences may be realized as follower set sequences and extender set sequences of one-dimensional sofic shifts. We show that any follower set sequence or extender set sequence of a sofic shift must be eventually periodic. We also show that, subject to a few constraints, a wide class of eventually periodic sequences are possible. In fact, any natural number difference in the

$$\limsup$$

and

$$\liminf$$

of these sequences may be achieved, so long as the

$$\liminf$$

of the sequence is sufficiently large.