1145-92-1369 Camille Hankel and Judith R. Miller* (judith.miller@georgetown.edu). Invasion by competing types in a heterogeneous environment. Preliminary report.

We model competition between two subtypes of an asexually reproducing species in a discrete environment where two habitat types alternate periodically. Each habitat type favors a different species subtype. We study the long-term behavior of the modeled populations, showing that in some cases it differs qualitatively from what is known to occur in a continuous environment. For example, in the discrete environment, competition can "pin" the range of a subtype that would have expanded without bound in the absence of its competitor. Furthermore, increasing the growth rate of each type in its less favorable habitat at times leads to worse outcomes for a focal type (e. g. extinction rather than pinning). (Received September 21, 2018)