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Jonathan Bell* (jbell@umbc.edu), Department of Mathematics & Statistics, UMBC, 1000 Hilltop Circle, Baltimore, MD 21250. *Persistence and Competition in River Networks*. Preliminary report.

Starting with work of Speirs, Gurney, Carlson, and others, we review some work done on persistence in population models in advection-driven environments, which includes river networks as metric tree graphs. Then we discuss the competition model work of Vasilyeva-Lutscher and extensions to a tree graph. Of particular interest here is the nature of the competitive exclusion principle in these environments. We'll also mention further questions to be explored. (Received January 26, 2014)