Meeting: 1003, Atlanta, Georgia, MAA CP II, MAA Session on Initializing and Sustaining Undergraduate Research Projects and Programs

1003-I1-693 Rene A. Salinas* (salinasra@appstate.edu), Mathematical Sciences, Appalachian State University, Boone, NC 28608. Linking undergraduates in math and biology with research projects at Tennessee.

Over the past year and a half, a group of three undergraduate biology and three undergraduate math students have taken part in an interdisciplinary program funded by a supplement to an NSF award (DMS-0110920) on spatial control in biological systems. The objective is to encourage interdisciplinarity through projects related to spatial aspects of invasion biology. This is a two-year project that encourages students to participate in both lab and field research projects and couples these experiences with quantitative approaches. Phase 1 of this project involved extensive, wide-ranging discussions amongst the very enthusiastic students regarding potential group research projects. The students went on to Phase 2 in which they chose to perform multiple microcosm experiments. The experiments were linked to regular discussions of mathematical modeling in population biology. Results were presented in a student poster session at Tennessee, the Society of Mathematical Biology annual meeting, and here at the math joint meetings. Summer efforts included additional field and lab exposure, and participation in an ongoing summer REU program for math students. In this talk, I will discuss the progress of the students as well as how we have adapted our approaches throughout the project. (Received September 27, 2004)