



Sam Bird

Nesting Habits of *Eurycea bislineata*

Major: Ecology and Evolutionary Biology

For my project, I wanted to look at the nesting habits of *Eurycea bislineata*, the northern two-lined salamander, to see if they lay their eggs communally, in a group, or by themselves.

Additionally, I was investigating what factors might cause them to pick the area they chose to lay their eggs over other locations nearby. In order to do this, I located two streams with nesting sites within them (typically under rocks in the streams) in the spring. Over the spring and summer, I visited these nesting sites and took photos of them on a weekly basis. I also established paired sites, one within three feet of each nesting site, as well as random sites, which were randomly selected rocks throughout the stream. For each of these sites, I measured the average water depth, stream width, distance from shore, canopy cover, and the surface area of the underside of the rock. I found that *Eurycea bislineata* appear to use a mix of communal and solitary oviposition. One salamander can lay up to about 50 eggs, and there were several nesting sites with more than that, one even having 709 eggs. However, in terms of nesting site selection, I could not find any significant differences between nesting sites and the random or paired sites for the variables that I checked for the two streams. As not much research has been done on communal oviposition in *Eurycea bislineata*, this is an interesting insight into how this species behaves. I would recommend repeated testing related to nest site selection for this species in the future, perhaps with other factors that I did not consider in this study.