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C.B. ANDERSEN², AND J. WHEELER³. ¹Biology Dept., ²Earth
and Environmental Sciences Dept., and ³Chemistry Dept., Furman
University, Greenville, SC 29613 -The abundance of *Boyeria*
vinosa larvae in comparison to the physical and chemical properties
of the Enoree River of South Carolina.

The fawn darner, *Boyeria vinosa* (Odonata: Aeshnidae), is a common dragonfly of South Carolina streams. Here, we report on the relationships between the physical and chemical properties of streams and the abundance of *Boyeria vinosa* larvae in five piedmont creeks feeding the Enoree River of South Carolina. Streams varied significantly with respect to many chemical parameters, including temperature, dissolved oxygen, salts (Na⁺, Ca²⁺, K⁺, Mg²⁺, Cl⁻), metals (zinc, manganese, aluminum, iron), nitrate, carbonate and silicates, with associated differences in conductivity and alkalinity. The abundance of *Boyeria* also varied among these streams, but only covaried with dissolved oxygen and metal content. *Boyeria* was more abundant in streams with higher dissolved oxygen and lower metal concentrations. In addition, *Boyeria* was found to be more abundant at sites characterized by sandy bottoms rather than rocky bottoms. Apparently, *Boyeria* is a tolerant species with broad chemical niche parameters.