Seasonal Abundances of Macroinvertebrate Orders in an Intermittent Ozark Headwater Stream

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If passed, a recent proposal by the EPA will take away the Clean Water Act's protection of intermittent headwater streams which make up around 9 million of America's stream miles. Due to the high numbers of people in the world living without clean water, frequent monitoring of the health of our water sources is vital. Goldman Hollow is an intermittent headwater stream in the Ozark mountains and is also a tributary of the Red River. The Red River is home to two of Arkansas's federally endangered species: the Yellowcheek Darter (Etheostoma Morrei) and the Speckled Pocketbook Muscle (Lampsilis streckeri). By studying the Goldman Hollow Stream a holistic view of the watershed can be attained. The abundances of Macroinvertebrates as well as the water chemistry and habitat can be excellent indicators of stream health. Seasonal data can help show how the stream changes throughout the year. Many natural and man made factors can affect the health of a stream such as the use of nitrate and phosphate fertilizer in the spring or the low levels of precipitation in summer. Studying seasonal data can help attain a more targeted conservation plan as well as a view of the watershed's health. Overall, the Macroinvertebrate community showed good diversity and population numbers according to the factors of their season and the water chemistry and habitat appeared healthy.

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