



Transition Year Science Exciting New Courses for 2009/10

We have designed three new and exciting biology courses specifically for Transition Year Science classes. Each of these half day courses demonstrates the practical applications of biological theory for topical studies of freshwater habitats. The courses build on the ecological skills and concepts learned during Junior Certificate and introduce information that will be addressed at Leaving Certificate.

Biological indicators and water quality

By collecting and identifying freshwater invertebrates, the students apply a biotic index to determine the environmental quality of the water in the system. This course shows how water pollution can be assessed by examining the fauna present in the river. During this course, the students compare the water quality of 2 rivers.

Comparing the diversity of a river and a stream

Biodiversity has recently become a buzz word in the media. This course allows students to compare diversity of these 2 aquatic habitats by collecting kick samples and applying Simpson's Diversity Index to quantify the diversity of the habitats.



How does river velocity affect the invertebrate community?

Comparing freshwater invertebrate communities found in two different microhabitats within a stream. The two microhabitats (riffles and pools) have visibly different water velocities. This study examines the effect of this environmental factor on the communities of freshwater invertebrate present. Competition for resources and adaptations to environmental conditions are also discussed.