Further reflections on rugosity and egg laying by *Biomphalaria glabrata*

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Rugosity is a noun based on the adjective rugose, meaning wrinkled. In an ecological context, this is related to the structure of landscape/substratum. Scale is of paramount importance to both an organism and substratum under study, thus affecting all further considerations. In a freshwater environment rugosity can and must be related to other ecological aspects such as, the Reynolds number, and energy use, the Froude number and Manning's 'n'.

These aspects are of great importance to aquatic organisms which are affected by hydraulic phenomena. For aquatic snails, this is especially important, as they are often found upon aquatic plants which support the food supply of the snails as well as offering a place of relatively safety for egg deposition .Several different rugosities are being tested in the laboratory, to see whether snails have a preference for any particular type of surface.

Land snail diversity in Sri Lanka

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Sri Lanka has a rich land-snail fauna, which has been neglected since pioneering work done during the British Colonial Period. A key objective of a recently completed three year Darwin Initiative Project on Sri Lankan land-snail diversity has been to develop a basic understanding of the distribution and conservation status of the snail fauna. Surveys of Sri Lanka's three major climatic zones, the so-called dry, wet and intermediate zones were carried out. Preliminary findings show that the wet zone harbours a substantial share of the island's land-snail diversity and endemism, with many wet zone species having highly localised distributions. Our data also strongly support the view that there are two distinct landnail communities in the lowland and montane regions of the wet zone.

Geographic variation of the land snail *Granaria frumentum* (Draparnaud, 1801) in central and southeast Europe.

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Granaria frumentum (Drap. 1801) is a widely distributed and mostly xerophilous land snail species. The status of the subspecies *illyrica* was critically investigated by us. We used 15-30 specimen samples of the species collected at each locality from various sites of South and Central Europe. We measured and counted several morphological variables and characters on the shells, like height of shell, width of shell, height of aperture, width of aperture, height of the ultimate and the penultimate whorl, presence/absence of apertural folds, marginal flange and cervical thickening at the aperture of the shells. We performed statistical analyses for evaluating our data. Our results show the separation of the Central European, the Dinaric and the Central Balkanian forms on the basis of the measured morphological variables. The pattern is different concerning the shell characters, the subspecies *illyrica* is confined to a narrow zone along the Adriatic Sea.

Holocene molluscan successions from Ireland: palaeoecological and biogeographical significance

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In Britain, land snail analysis of Holocene (last 10,000 years) deposits has revealed detailed successions often tied to secure radiocarbon-dated chronologies. These have provided information on community development and local environmental change, including episodes of prehistoric human activity, from the end of the last glacial period. In comparison, records of Holocene land snail successions from Ireland are sparse. Consequently there is little understanding of Irish historical biogeography. This project aims to increase the number and knowledge of well-dated Holocene molluscan successions from Ireland. Two recently discovered extensive tufa sites in west Ireland offer the potential of obtaining detailed fossil mollusc records with a high temporal resolution. Profiles from various locations across both tufas have been sampled. The deposits are extremely rich in land snails and contain numerous horizons with abundant charcoal and burnt stones. This allows the exciting possibility of directly linking snail faunas with known episodes of human activity. [POSTER]

Electron microscope analysis of bivalve larvae cilia structure from velar and mantle regions

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Analysis of veliger anatomy is important in understanding their adaptation to the planktonic environment. Scanning and Transmission Electron Microscopy has been used to examine the ciliature of the mantle and velum of both *Crassostrea gigas and Ostrea edulis.* Differences were observed in the cilia patterning of velum between the two, with *O. edulis*