



## A hot issue

Not by its content, but rather the temperature outside in the North hemisphere, with heat waves hitting some places !! I guess this explains why this issue is quite empty this time. In order to refresh you a bit, have a look on how are doing some Antarctica bioturbators. FG

## Third Nereis Park Conference news

The website of the Third Nereis Park Conference can be reached at this address:

<http://www.nereispark2011.org/>

It is partially under development, but the *Registration information and Important dates* are already available as well as the opening and plenary speakers:

Magali Gerino - *Macrofaunal bioturbation history*

Bob Diaz - *Anthropogenic impacts*

Bess Ward - *Novel tools and techniques*

Simon Thrush - *Functional (bio)diversity*



*The Organizing committee*



Adélie penguins in ice burrows, Litchfield Island, Antarctica.

*Credits: Bill Fraser (Polar Oceans Research Group)*

## Recent papers

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### **Bioturbating shrimp alter the structure and diversity of bacterial communities in coastal marine sediments**

By Bonnie Laverock *et al.* (doi: 10.1038/ismej.2010.86). Soon published in ISME.

In this study, terminal-restriction fragment length polymorphism analysis was used to investigate variation in the structure of bacterial communities in sediment bioturbated by the burrowing shrimp *Upogebia deltaura* or *Callinassa subterranea*.

This study shows that bioturbation can result in significant structural and compositional changes in sediment bacterial communities, increasing bacterial diversity in surface sediments and resulting in distinct bacterial communities even at depth within the burrow. In an area of high macrofaunal abundance, this could lead to alterations in the microbial transformations of important nutrients at the sediment–water interface.

*Bonnie Laverock*

### **Effects of hypoxia on benthic macrofauna and bioturbation in the Estuary and Gulf of St. Lawrence, Canada**

By Rénaud Belley *et al.* (Continental Shelf Research 30 (2010) 1302–1313)

The bottom water in the 4300 m deep Lower St. Lawrence Estuary (LSLE) is persistently hypoxic in contrast to the normoxic bottom waters in the Gulf of St. Lawrence (GSL). Based on photos of the seabed taken at 11 stations in the Estuary and Gulf of St. Lawrence (EGSL) during the summers 2006 and 2007 and analysed to identify bioturbation traces (lebensspuren) and benthic macrofauna, the objective of this study was to identify the environmental variables that influence the density and diversity of benthic macrofauna and bioturbation traces, and the differences that exist among regions with high, medium and low oxygen levels in the bottom water.

*Rénaud Belley*