Tethys Blast

October 17, 2014

Welcome to another October edition of the Tethys Blast! A new Tethys Blast will be sent to you every 2 weeks, unless you choose to unsubscribe; instructions to unsubscribe are at the bottom of this email.

Tethys Blasts will keep you updated with new information available on Tethys, new features on Tethys, and current news articles of international interest on offshore renewable energy. We hope that this becomes a valuable tool to help you stay connected to your colleagues and to introduce you to new research, new contacts, and ongoing milestones in renewable ocean energy development.

New Articles on Tethys

A total of 10 new documents have been added to Tethys in the last two weeks. These documents have been hand-selected for their relevance to the environmental effects of offshore renewable energy. The listings below are short introductions to several popular documents that can be accessed through the accompanying Tethys links:

Physical and Numerical Large-Scale Wave Basin Modeling of Fluid-Structure Interaction and Wave Impact Phenomena – Yim et al

> Physical and numerical large-scale wave basin (LSWB) modeling of fluid-structure interaction (FSI) and wave impact phenomena are examined in this study. In particular, the role of numerical modeling and simulation in design and analysis of physical LSWB FSI and wave impact experiments using a numerical wave basin (NWB) modeling approach is examined.

In Situ Mortality Experiments with Juvenile Sea Bass (Dicentrarchus labrax) in Relation to Impulsive Sound Levels Caused by Pile Driving of Windmill Foundations – Dubusschere et al

> Impact assessments of offshore wind farm installations and operations on the marine fauna are performed in many countries. Yet, only limited quantitative data on the physiological impact of impulsive sounds on (juvenile) fishes during pile driving of offshore wind farm foundations are available.

Source Levels of the Underwater Calls of a Male Leopard Seal - Rogers

> Leopard seals (*Hydrurga leptonyx*) are top predators in the Antarctic ecosystem. They produce stereotyped calls as part of a stylized underwater vocal display. Understanding of their acoustic behavior is improved by identifying the amplitude of their calls.

Great Skua (Stercorarius skua) Movements at Sea in Relation to Marine Renewable Energy Developments – Wade et al

> Our ability to fully predict potential effects is limited by a lack of knowledge regarding movements of seabirds at sea. We used GPS tracking to improve our understanding of the movements at sea of a protected seabird species breeding in Scotland, the great skua (*Stercorarius skua*), to better predict how this species may be affected by MREDs.

The Ecology of Benthopelagic Fishes at Offshore Wind Farms: A Synthesis of 4 Years of Research – Reubens et al

> In the next 10–20 years, thousands of wind turbines will be present in the North Sea. In this paper, we investigate the impact of these windmill artificial reefs (WARs) on the ecology of benthopelagic fish. More specifically we will try to resolve the attraction-ecological trap-production issue for Atlantic cod and pouting at WARs and link the information to opportunities for fisheries activities.

Current News

Current news articles of international interest on offshore renewable energy include:

Go Ahead Given to Offshore Wind Farm Off Coast of Angus

> The Scottish Government has given consent to the massive Inch Cape wind farm project off the Angus coastline. Friday’s decision also gave consent to three other North Sea locations, two off Angus and one off the Fife coast, and the government predicts the four projects could generate £314m to £1.2bn for the Scottish economy, and create tens of thousands of jobs, if they go ahead.

MHK Technology Developer Minesto Honored with WWL Orcelle Award

Marine energy technology developer Minesto AB was honored as the 2014 recipient of the Wallenius Wilhelmsen Logistics (WWL) Orcelle Award at the Ocean Exchange's recent conference in Savannah, Ga.

Suzlon Energy Announces Plan for 300 MW Offshore Wind Energy Project in India

Indian wind energy giant Suzlon Energy has announced plans to set up a 300 MW offshore wind energy pilot project in the state of Gujarat. The integrated single window policy for offshore wind energy projects which is expected to be launched by next year has triggered Suzlon to come up with this project.

Falmouth Marine Firm Joins 'Groundbreaking' Tidal Energy Project

Falmouth marine engineers Mojo Maritime have secured a contract on a 'groundbreaking' Scottish marine energy project. The company has signed a partnership agreement with James Fisher Marine Services for the MeyGen Inner Sound tidal project at the Pentland Firth, Scotland.