



YPEP Seminar on Marine Invasive Species

1-3 September 2008 Brorfelde Observatory, Denmark

On 1-3 September 2008, <u>DANCORE</u> (the Danish Network for Coastal Research) will host an international seminar on Marine Invasive Species at the <u>Brorfelde Observatory</u> which is situated in the central part of Zealand, Denmark.

The seminar, which is aimed at young researchers and professionals, will focus on Danish and other European researchers' experience with invasive species both within flora and fauna. Cases within and outside Europe will be presented focusing on the dissemination of knowledge and networking of young researchers and professionals.

The seminar is subsidized by DANCORE and the fee is consequently **DKK 500 (or EUR 70 + transfer fee)**. This covers lectures, food and accommodation. Please note that membership of your national coastal network is a prerequisite for participation. The maximum number of participants is 30 and the final deadline for registration is **4 August 2008** to office@dancore.dk. If you wish to apply for a YPEP grant, please contact your national coordination office.

In case you have any questions, please do not hesitate to contact us.

We look forward to seeing you at Brorfelde.

Best regards DANCORE

Mads Solgaard Thomsen (DMU), Karen Edelvang (DHI) & Lotte Hjort Jorgensen (DHI) The Coordination Committee





The Brorfelde Observatory and Conference Facilities





Tentative Programme

1 Sept. 2008	17:00-18:30 18:30-20:00 20:00-21:00 21:00-22:00	Arrival and coffee Welcome and dinner Short presentation of the participants Demonstration of the Observatory
2 Sept. 2008	08:30-09:00 09:00-09:45	Breakfast "An Introduction to Invasion Ecology and Impacts; are invaders just colonizers with a human facilitated transport history?" Mads Solgaard Thomsen,
	09:45-10:00 10:00-10:45	The Danish National Environmental Research Institute Discussion "Characterization of a Brown Invasion" Aschwin H. Engelen
	10:45-11:00	Marine Plant Ecology Research Group, Centre of Marine Sciences, Portugal Discussion
	11:00-11:30	Coffee
	11:30-12:15	"Introduced Macroalgae in Denmark; when, where, how and which effects?" Peter Stæhr
	12:15-12:30	Freshwater Biological Laboratory, Univ. of Copenhagen Discussion
	12:30-13:30	Lunch
	13:30-17:30	Guided tour to the Viking Ship Museum in Roskilde
	17:30-18:00	incl. 1½ hour boat trip on Roskilde Fjord Coffee
	18:00-18:45	"Invasive Ctenophore Mnemiopsis Leidyi in Danish Waters; assessment of abundance and predation effects" Hans Ulrik Riisgård
	18:45-19:00 19:00	Marine Biological Research Centre, Univ. of Southern Denmark Discussion Dinner
3 Sept. 2008	08:30-09:00	Breakfast
	09:00-09:45	"Vulnerability of Marine Communities to Invasion; the native side of invasions" Francisco Arenas
		Interdisciplinary Centre of Environmental and Marine Research, Laboratory of Coastal Biodiversity, Portugal
	09:45-10:00	Discussion
	10:00-10:45	"Invasion through Ships" Stephan Gollasch, GoConsult, Germany
	10:45-11:00	Discussion
	11:00-11:30	Coffee
	11:30-12:15	Lecture: <i>Title?</i> Name of lecturer, Institution?
	12:15-12:30	Discussion
	12:30-13:30	Lunch
	13:30-14:15	Lecture: Title?
		Name of lecturer, Institution?
	14:15-14:30	Discussion Was up and evaluation
	14:30-15:00	Wrap-up and evaluation





Coordinators:

Mads Solgaard Thomsen, DMU, <u>m.thomsen@ecu.edu.au</u> Karen Edelvang, DHI, <u>kae@dhigroup.com</u> Lotte Hjort Jorgensen, DHI, <u>office@dancore.dk</u>

Lecturers:

Mads Solgaard Thomsen, Post-doc, PhD, Marine Section, Danish National Environmental Research Institute (DMU), University of Aarhus, DK-4000 Roskilde, Denmark, m.thomsen@ecu.edu.au

Aschwin H. Engelen, Post-doc, PhD, Marine Plant Ecology Research Group, Centre of Marine Sciences, Faro, Portugal, aengelen@ualg.pt

Peter Anton Stæhr, Post-doc, PhD, Freshwater Biological Laboratory, University of Copenhagen, Helsingørsgade 51, DK-3400 Hillerød, Denmark, pastahr@bio.ku.dk

Hans Ulrik Riisgård, Professor, PhD & D.Sc., Marine Biological Research Centre, University of Southern Denmark, Hindsholmvej 11, DK-5300 Kerteminde, Denmark, hur@biology.sdu.dk

Francisco Arenas, Researcher, PhD, Interdisciplinary Centre of Environmental and Marine Research, Laboratory of Coastal Biodiversity, Porto, Portugal, farenas@ciimar.up.pt

Stephan Gollasch, PhD, Researcher and Consultant, GoConsult, Grosse Brunnenstr. 61, 22763 Hamburg, Germany, sgollasch@aol.com

Lecturer No 7

Lecturer No 8

Profiles:

Mads Solgaard Thomsen

Mads Solgaard Thomsen is a coastal ecologist who has studied plant and animal communities in soft-bottom estuaries and on hard-bottom reefs in the USA, Northern Europe and Australasia. Mads is particularly interested in 'invasion ecology', researching three fundamental questions; 'what traits characterize successful invaders?', 'What characteristics make systems susceptible to invasions?' and 'What are the ecological impacts of invasions?' Mads has used seaweeds in his research to represent model invaders, as they are fast-growing habitat formers, are represented by >250 introduced species worldwide, and are easy to manipulate and control in field and laboratory experiments. During his Masters (1997-1998), PhD (2000-2004) and a postdoc project (2006-2007) Mads researched the ecology of several of the most invasive species in the world, including Sargassum muticum, Gracilaria vermiculophylla Codium fragile and several Caulerpa species. Most recently, Mads initiated a new post-doc project that aims to review and synthesize information on what is known about impacts of marine invaders, with a specific emphasis on Danish conditions.

Aschwin H. Engelen

Aschwin H. Engelen graduated and received his Master and PhD. in Marine Biology from the Royal University of Groningen. Since 2004 he is a post-doc researcher, responsible for the invasion research line in the Marine Plant Ecology Research Group (ALGAE) at the Centre of Marine Sciences (CCMAR), Faro, Portugal. He participated in the EU funded project ALIENS, which dealt with seaweed invasions along European shores and currently coordinates a research project on invasion theory investigating the interaction of





fauna species with the invasive brown seaweed Sargassum muticum. He is mainly interested in marine invasions, but approached from many different angles combining population matrix modelling, population ecology, demography, experimental ecology and population genetics. His work has demonstrated that both characteristics of the invader as well as characteristics of the recipient system are of importance for the outcome of an invasion.

Peter Stæhr

Peter Stæhr is an aquatic ecologist who has studied the ecology and physiology of aquatic plants in Danish lakes and estuaries and on hard-bottom reefs in Western Australia. During his Masters (1997-1998), Peter researched the ecological effects of an invasive macroalgae, Sargassum muticum. In his PhD (1999-2002) he specialised in the importance of microalgae for defining the optical properties of coastal waters. In a post-doc project (2003-2005) he researched temperature effects on primary production in lakes, and the importance of temperature acclimation of micro- and macroalgae. Since 2005, Peter has focused on biological, physical and chemical drivers of whole-lake metabolism, using continuous automatic measurements. Since his master project, Peter has been involved in projects dealing with invasive aquatic species. He is currently a member of the Danish research Centre for Invasive Species (CIS: http://cis.danbif.dk/).

Hans Ulrik Riisgård

Considering the dominant role of the phytoplankton in the primary production in the sea, it is understandable that filter feeding, or suspension feeding, is of widespread occurrence and filter feeders are found in almost all animal classes represented in the sea. Filter-feeding animals are necessary links between the suspended phytoplankton and higher trophic levels in the marine food chains. A large number of filter-feeding animals such as bivalves, polychaetes, ascidians, bryozoans, and sponges graze on the phytoplankton in near-bottom water, and particularly in shallow coastal waters and fjords they may exert a pronounced grazing impact which may keep the water clear (but not clean) in eutrophicated areas. My research deals with a number of related topics, i.e. bioenergetics and energy budgets, functional response, filter pumps and energetic cost of filter feeding, adaptation to environment, water pumping and particle retention efficiency, particle capture mechanisms, switching between deposit and filter feeding, grazing impact of benthic filter feeders, and predation impact of jellyfish. In recent years, I have studied the abundance and predation impact of a new invasive ctenophore, Mnemiopsis leidyi, in Danish waters.

Francisco Arenas

Francisco Arenas is a benthic ecologist currently working as a researcher at the Laboratory of Coastal Biodiversity (CIIMAR), Porto, Portugal. Francisco's first works on invasions were focused on the population dynamics of invasive seaweeds. He investigated processes such as reproductive allocation and density dependent effects on invasive seaweeds. In the last years, Francisco has examined how diversity shapes the resistance of communities to invasion. Francisco uses seaweeds as invader models and works mostly on intertidal systems.

Stephan Gollasch

Stephan Gollasch was involved in the first European ship sampling programme on ballast water, tank sediments and ship hull fouling (1992-1996). His PhD is worldwide the first thesis based on ship sampling. He prepared, together with colleagues from 5 countries, the first risk assessment study for





species invasions in the Baltic Sea, carried out for the Nordic Council of Ministers, Copenhagen. Due to the international aspect of biological invasions Stephan Gollasch became a member of several international working groups, e.g. International Council for the Exploration of the Sea (ICES); International Maritime Organization (IMO), and the Baltic Marine Biologists (BMB). He was also involved in the EU Concerted Action "Introductions with Ships" as cochairman (completed in January 2000). Until the summer of 2001 Stephan Gollasch coordinated a bilateral research initiative together with a Canadian colleague to assess the survival of species in ballast water en-route. From 2005 to 2008 he was involved in the EU Project "Delivering Alien Invasive Species Inventories for Europe (DAISIE)" and since 2006 in the EU Project "Environmental impacts of alien species in aquaculture (IMPASSE)".

Lecturer No 7

Lecturer No 8





Practical Information

Venue: The Brorfelde Observatory

Observator Gyldenkernes Vej 1-13

DK-4340 Tølløse

Denmark

Tel.: +45 59188195

Registration: By e-mail to <u>office@dancore.dk</u>, att.: Lotte Hjort Jorgensen

Deadline: 4 August 2008

Payment: DKK 500 or EUR 70 + transfer fee to:

Bank: Danske Bank

Address: Holmens kanal 2-12

København K

Name of account: DHI Institut for Vand og Miljø

Account number: 4180 4360163369

IBAN: DK38 3000 4360 1633 69

SWIFT Code: DABADKKK

Please specify "11710711-1 YPEP + your full name" on the transfer.

How to reach Brorfelde:



From Copenhagen Airport you go by train to the Central Railway Station in Copenhagen. Here you catch the train to Tølløse which departures several times an hour. The total travelling time is estimated at 70 minutes.

Pick-up at Tølløse Station will be organised.