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ECSA Bulletin

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Scotland

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Instructions to authors

The ECSA Bulletin is issued in JANUARY and JULY. Articles, reviews, notices of forthcoming meetings, news of personal and joint research projects, etc. are invited and should be sent to the Editor. Closing dates for submission of copy (news, articles, notices, reports, etc.) for the relevant numbers are **15 November** and **15 May**. These dates will be strictly adhered to in order to expedite publication. Articles must be submitted at least ***5 weeks before*** these dates in order to be edited and revised in time for the next issue of the Bulletin; otherwise they may appear in a subsequent issue. Authors are encouraged to consult an earlier issue of the Bulletin and adhere to the style of the publication.

Suggested word limits are as follows: obituaries (1500 words); articles (3000/4000 words); reports on meetings (2000 words); reports on ECSA grants (1000 words); reviews (1500 words); letters to the Editor (500 words); abstracts (500 words). Authors are requested to submit their work electronically as **Word for Windows** documents (no other software is to be used). Figures and photographs must be sent as separate copies in **JPEG format**. Articles in the series "Estuaries in Focus" should present current and planned research on a specific site which will be introduced by text and photographs. The suggested format for these articles is as follows: (1) Site characteristics, (2) current research, (3) future developments. Papers for "Introducing institutions" should be fully illustrated with (as a minimum) a photograph of the building and people at work in the field and in the lab. They should emphasise the expertise of the organisation and give full details with address, telephone number, e-mail, web-site, etc.

All papers and correspondence to:

Jean-Paul Ducrotoy, editor
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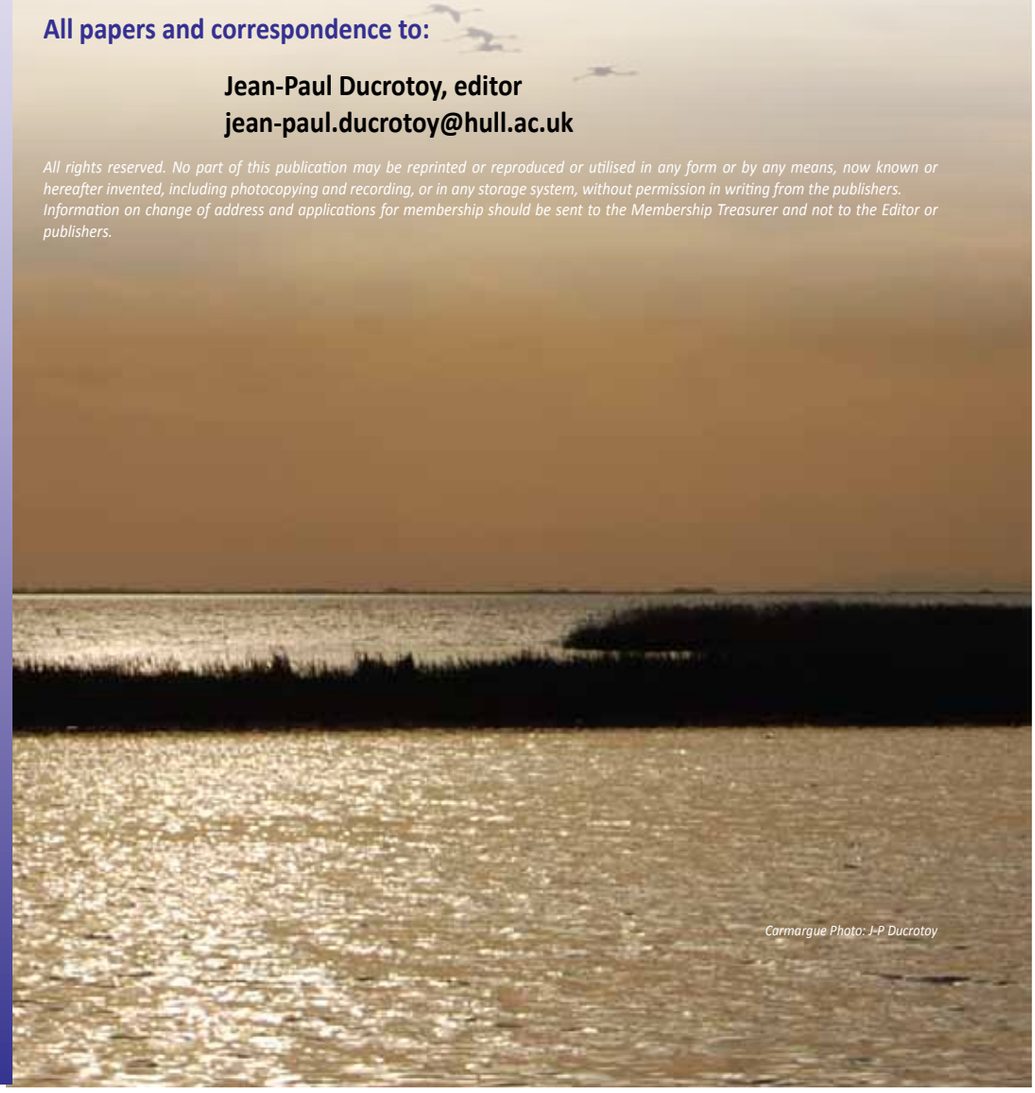

Carmargue Photo: J-P Ducrotoy

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Cover photograph: Jean-Paul Ducrotoy

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with thanks to all contributors.

Editorial ECSA 60

There is a general consensus amongst ECSA scientists that protecting the marine environment is ethically correct. To most of us, this resolution is not only justifiable but an ethical imperative. But is it so self-evident and axiomatic? It is an interesting intellectual exercise to consider why, as scientists, we have these compulsion and opinion?

We all agree that the general principles supporting the WFD and the MSFD directives and other similar legislation are fundamentally sound and justified even if we do not fully agree on how to implement them. Why, on the contrary, should a scientist not endorse pollution and unrestrained exploitation of estuarine and coastal habitats? It is interesting to consider why this opinion could be fundamentally wrong. Strong values underlie any discourse on "conservation". Do these values co-exist as a set package of opinions or can different values lead in fact to the same 'belief' or attitude? Is it relevant to examine the philosophical reasoning behind such concepts?

Let us firstly consider the theological approach, whereby people believe that it is entirely inappropriate to damage God's creation. Religious individuals do not consider faith and scientific findings regarding human life as conflicting. Humans are regarded as a special creation, and the existence of God is required to explain both monogenism (the theory of common descent of all humans) and the spiritual component of human origins.

Other people believe that it would be wrong in itself to damage the environment. To them, nature (as a whole) has an intrinsic value independent of humans. Some spiritual groups believe that "Mother Nature" is good in it(her)self, but that the human race is its enemy. They give an intrinsic value to ecological features. An object with intrinsic value may be regarded as an end-in-itself. So "nature" is good in itself and there is a small step to take before claiming that humans are intrinsically "bad" (a threat to "nature"). The concept of intrinsic value is contrasted with instrumental value (or extrinsic value), the value of which depends on how much it generates intrinsic value. Pragmatically, one does not accept intrinsic value as an inherent or enduring property of things. It stands as an illusory product of our ethical attitude to the environment. Put back in the context of the ecosystem where they come from, goods and services produced by ecosystems are only intrinsic relative to a situation. To the ecologist, there are only "relative" intrinsic values.

Most scientists are utilitarians. They think that the environment is useful to the human race, because humans are inseparable from it, they are part of it. Utilitarianism is typically assumed to assess the rightness or wrongness of an action by considering only the consequences of that action. Goods and services have to be shared according to social justice but without altering the functioning of ecosystems. In this context, goodness is best understood as an instrumental value, with no contrasting intrinsic goodness. To the utilitarian view most colleagues will add the argument that, as scientist as well as citizens, we are "responsible" Most would add to the utilitarian argument that scientists are also normal citizens who have a share of the societal responsibility. I remember organising an international conference in 2006, the title of which was "Co-development of enclosed coastal-seas: our shared responsibility". But, who is responsible? Whom do we have to answer to? God? Then, we are back to the theistic position. Most of our readers would answer that the responsibility is towards future generations. Truly, the general themes of "co-development" and "shared responsibility" encompass the philosophy that the environment belongs to all and it follows therefore that we share responsibility for its sustainable use and protection for the benefit of people yet to be born. Who are these yet unborn humans? And will they even ever exist? What are our responsibilities towards as yet non-existent human beings? How can biological diversity be expressed in such terms? Following this thread, to scientists, a key-element is pluridisciplinarity, particularly building bridges between science, education and socio-economics (conservation, agriculture, fisheries and industry). To educationalists, the main aim is to encourage cross-linkages between education and policy-making, in this case integrating the management of natural resources and environmental awareness cost-effectively through education and by local participation.

Since the 1960s, many writers have used consequentialism instead of utilitarianism with the view that the rightness of an action entirely depends on the value of its consequences. However, it has been argued that it is impossible to do a scientific calculation that consequentialism requires because consequences are inherently unknown. There is a misunderstanding here. Scientists can help in predicting or identifying which activities, and in what proportion, would be deleterious to the functioning of ecosystems. In ecology, the notion of carrying capacity, for instance, is essential to derive solutions to environmental problems. So, what is needed is high quality science. More than ever ECSA is promoting this view. Even if the world around us is changing, let's adapt to the new conditions but without forgetting our primal mission: producing (and help producing) robust scientific work.

Jean-Paul A Ducrotoy
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Photo: J-P Ducrotoy

Chesapeake Bay, USA

View from the Chair

It has been a great pleasure to be elected as President of the Estuarine and Coastal Sciences Association and I hope to match the excellent standard set by my predecessor, Dr Reg Uncles from Plymouth Marine Laboratory. In my opinion, ECSA is one of the most pre-eminent professional organisations in Europe having been in existence for more than 40 years. I have been a member since 1976, a Councillor from time to time and, most recently, a trustee. Therefore, I appreciate that the fundamental responsibility of the President is to maintain and enhance the reputation of the Association by promoting excellence in estuarine and coastal science, technology and management. This can only be achieved if the President is supported by members of ECSA Council, all of whom give freely of their time. Each of the current Councillors is committed to carrying out his or her individual task geared to securing the long-term future of the Association. I am very fortunate, as President, to be working with such an enthusiastic group of colleagues and I am extremely grateful for their individual contributions to the continued success of ECSA.

It is important to re-emphasise to all our members the comment made by Reg Uncles in the previous edition of the Bulletin, namely that ECSA is in "good health". The resounding success, in Venice, of ECSA-50, hosted in partnership with the publisher Elsevier, and the first ECSA Conference in Lithuania are both confirmation of the Association's robustness. We intend to build on these achievements and to enhance our joint venture with Elsevier in the management of future annual conferences. Council will continue to augment its first-class portfolio of conferences and workshops, will provide as much support as possible for fundamental research and will enhance its role as a hub for the publication of scientific excellence. During my tenure, a particular aspiration will be for the Council to reinforce its commitment to post-graduate researchers and early-career academic staff.

However, ECSA, in common with many other scientific organisations, is facing headwinds due to growing pressures within the scientific community, particularly arising from competition for funds and the added stress of research assessment. Traditionally, our membership originates from developed countries, such as the UK and the European mainland, where the incentive for senior scientists, and their research staff, to join professional organisations appears not to be as personally rewarding as it once was. Although our membership is relatively stable, ECSA needs to create greater opportunities resulting from on-going globalisation. For example, the number of members from the emerging economies, such as China, south east Asia and south America, is still relatively low and their scientific involvement in the Association needs to be better explored. Membership improved slightly following ECSA-50 and Council is committed to recruiting more new members from the Far East during our Annual Conference in Shanghai in October 2013. Therefore, I take this opportunity to encourage all members to promote the values of the Association wherever and whenever possible so that, together, we can inspire other scientists from across the world to join ECSA.

For my part, I intend to focus my attention on greater engagement with scientists in Thailand because for 2012-2013 I hold a Visiting Scholarship awarded by the Scientific Committee on Ocean Research (SCOR). However, there could be collaborative opportunities for ECSA, and its members, throughout south east Asia. This region, defined here as Bangladesh, Cambodia, Myanmar, Thailand and Vietnam, has under its jurisdiction important estuaries and coastal seas, as shown in the image below.

South east Asia. Note the location of Dawei, Myanmar, which is being developed as a deep water port (Source of image: Google Earth).

The Bay of Bengal, Gulf of Martaban (Andaman Sea), the Gulf of Thailand and the South China Sea receive fluvial inputs from some of the largest river systems in the world. Rivers such as the Ganges, Brahmaputra, Irrawaddy, Salween and Mekong have discharges in the range 5,000 to 20,000 m3 s-1 and, since they drain areas of huge populations, their estuarine and coastal waters are severely impacted by anthropogenic and industrial activities. Other rivers have recently caused major flooding problems in urban areas, for example in November 2011 the Chao Phraya (Thailand) flooded Bangkok. In 2004, a tsunami had a massive human and environmental impact on vulnerable coastal zones, including Yangon River and the delta of the Irrawaddy in Myanmar. People in the east of the region also suffer from the annual impacts of tropical typhoons, as recently demonstrated by the impact of typhoon Son-Tinh on the coastal provinces of Vietnam. Therefore, there is strong regional impetus to develop advanced strategies that support sustainable management of their natural environment, often in collaboration with scientists from the west.

Arguably, Thailand has the most advanced research and monitoring activities in the marine environment since it, and also Vietnam, have been members of the International Scientific Union (ISU) for decades, whereas Bangladesh, Cambodia and Myanmar are not ISU members. Myanmar, however, has attracted significant attention recently as major social change has opened up the country to political reform and greater involvement of the international community is being encouraged. Importantly, Myanmar, being a poor country, has the intention of exploiting its natural resources, such as the gas fields in the Gulf of Martaban and, to increase trade in the region, a major deep water port is being constructed near Dawei (called Tavoy under the British) in a coastal area where, currently, there are pristine mangroves. However, research into the estuaries and coasts of this region has not had wider international exposure, which is vital for countries where economic development is proceeding rapidly, possibly without a focus on the protection and management of the marine environment.

It is evident that Thailand occupies a pivotal, collaborative role within the region having several universities involved in marine and coastal research, such as Chulalongkorn and Kasetsart in Bangkok and Walailak and Prince Songkla in southern Thailand. There is also a major government institute called the Marine Biological Research Centre in Phuket. Thailand is, therefore, well positioned to host international meetings involving countries from within the region. I am optimistic ways could be found for the Association to expand its operations in south east Asia where the aquatic environment, and scientific infrastructure, offer significant opportunities to compare and contrast tropical and temperate estuaries.

Finally, I welcome any comments, suggestions and ideas you may have. Positive feedback from the membership will be of great benefit to Council as it considers a future strategy for ECSA over a 5 to10 year horizon.

Best wishes,

Geoff Millward

President ECSA
Plymouth University
gmillward@plymouth.ac.uk

115h ECSA Council Meeting at Queen Mary College London (November 2012), chaired by Geoff Millward

TIDE Final Conference

Tidal River Development

CHALLENGES OF ESTUARINE MANAGEMENT
Experiences from inter-estuarine comparisons

April 23rd - 25th, 2013 - Hamburg
SAVE THE DATE!

Estuaries are both ecological systems of high value being protected by European and national nature legislation and at the same time arteries for the economic growth of regions as they are used as shipping channels towards major seaports. They also deliver important goods and services to society, for example recreational space or a buffer against flooding. Estuaries are subject to many anthropogenic uses that may cause changes in hydrodynamics, habitat loss, and nutrient and pollutant levels – changes that may even be amplified by the effects of climate change.

Therefore the sustainable management of these complex and dynamic systems means a huge challenge to their managing authorities.

Within the INTERREG IV B North Sea Region project "TIDE – Tidal River Development" partners from environment agencies, port authorities, universities and waterways administrations from the Elbe (DE), Weser (DE), Scheldt (BE/NL) and the Humber (UK) estuary have joined forces during the last three years in order to develop tools and strategies to support estuary managers. This partnership has carried out numerous interdisciplinary and inter-estuarine comparative studies on natural processes and management systems. This project has developed a web-based toolbox of valuable knowledge, management methods and good practises.

Scientists, managers, policy makers and stakeholders involved in estuarine management are invited to participate in this conference which will present and discuss methods to address the challenges of estuarine management. It will include a panel discussion and presentations of leading international experts & decision makers.

Please save the date for this international conference on estuarine management!

Venue: Patriotische Gesellschaft Hamburg, Trostbrücke 4-6, 20457 Hamburg, Germany
Organisation: Hamburg Port Authority
Date: 23rd – 25th April 2013

Registration to open soon.
Conference Fee: 50,- €

www.tide-project.eu

The Interreg IVB North Sea Region Programme

European Union
European Regional Development Fund

Forthcoming International Symposia

2013

ECSA 53: Estuaries and coastal areas in times of intense change

13 – 17 October 2013, Shanghai, China

Submit abstracts by 12 April 2013

Abstracts for oral and poster presentations are invited on the below topics and should be submitted using the online submission system.

ECSA's next major Symposium, ECSA 53: Estuaries and coastal areas in times of intense change will take place in partnership with one of the most important research institutes of China (East China Normal University).

The close links between ECSA and Elsevier (Estuarine Coastal and Shelf Science)have already proven to be very beneficial and based on that historical success we propose to further intensify our long lasting co-operation. This time this co-operation is to organize a meeting in a part of the world from where we expect further excellent scientific results: China.

The fast economic growth and related human activities in China during the last few decades are dramatically influencing the environment, from river catchments to estuaries and seas; and natural phenomena further amplify these effects. One of these rapidly changing systems is the Yangtze estuary, with Shanghai, the largest city in China, located close to it. The Yangtze is the 3rd largest river in the world, and constitutes an excellent case study for large scale impacts on ecosystems due to human activities and an excellent place for one of the major global events in 2013.

Conference Topics

- Environmental challenges and remediation in view of climate change and related phenomena
- Effects of dams on water resources management and on gomorphology/erosion/sedimentation in estuaries and coastal areas
- Effects of engineering constructions within estuarine systems on geomorphology and sediment input from catchment and sea
- Estuarine Wetlands, their restoration, rehabilitation and use as natural filter
- Eutrophication, anoxia and harmful algal blooms
- Technological advances for monitoring and managing heavily modified estuaries
- Economic development and ecological and socio-cultural risks: the socio-cultural-economic-ecology interface
- Biogeochemical cycles of bio-relevant materials from land and sea
- Estuarine ecosystem 'health'
- Detecting change: technical developments in monitoring
- Strategies for improved estuarine management
- Special sessions
- Writing, refereeing and publishing papers

Conference Chairs

Prof. Victor N. de Jonge, ***Institute of Estuarine and Coastal Studies, Netherlands, The University of Hull, UK***
Prof. Dr. Yunxuan Zhou, ***State Key Laboratory of Estuarine and Coastal Research, East China Normal University, China***

Why you should be there:

Attendance at this conference will enable you to:

- Access unique, high-quality content
- Profit from the inter-disciplinary and multi-disciplinary character of the conference: hear world class speakers and leading researchers on all aspects of estuarine and coastal marine science, as well as on the application of science for conservation and environmental management
- Gain an understanding of about other marine, coastal and transitional systems worldwide
- Catch up on new state of the art techniques, and, at the same time, appreciate the constraints of the science and the management
- Present your latest research
- Network with an interdisciplinary group – including researchers from all fields related to estuarine and coastal marine science

2013

Registration
Early Bird Deadline - 28 June 2013

Standard rate student	300.00 USD
Early bird ECSA members	480.00 USD
Early bird non ECSA members	690.00 USD
Standard rate ECSA members/non members	830.00 USD

Inclusions:

- Access to conference sessions, posters and exhibition area
- Conference materials including abstract book
- Lunch will be included Monday-Thursday
- Mid-session refreshments as scheduled in the conference programme
- Welcome Drinks Reception on Sunday 13 October 2013

Important Conference Deadlines

Abstract Deadline	**12 April 2013**
Author Notification Deadline	**31 May 2013**
Author Registration Deadline	**28 June 2013**
Early Bird Deadline for ECSA Members and Non-Members	**28 June 2013**

Commercial Opportunities

An exhibition will run alongside the conference sessions. Space is available on a first-come, first-served basis. In addition a range of sponsorship opportunities are available.

For full details please contact:

Laurence Zipson
Tel: +44 1235 528881
Email: laurence@lzconsult.com

Conference Supporting Journals

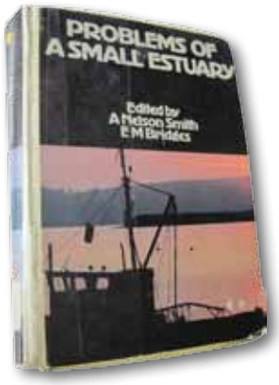
Ocean & Coastal Management is an international journal published 12 times per year dedicated to the study of all aspects of ocean and coastal management at international, national, regional, and local levels.

Sustainable development and conservation of ocean and coastal resources requires the insights of a number of monodisciplinary, multidisciplinary as well as integral studies and approaches. The different disciplines may range from the natural and physical sciences to the social sciences, policy analysis, economics, and law.
Articles from all relevant disciplines are invited, but ***all contributions must make clear the explicit link between fundamental concepts and the central improvement of management practice.***
Comparative studies (e.g. sub-national, cross-national, to other policy areas) are encouraged, as are studies assessing current management approaches. Articles involving analytical approaches, development of theory, and improvement of management practice are especially welcome.

Estuarine, Coastal and Shelf Science is an international multidisciplinary journal devoted to the analysis of saline water phenomena ranging from the outer edge of the continental shelf to the upper limits of the tidal zone. The journal provides a unique forum, unifying the multidisciplinary approaches to the study of the oceanography of estuaries, coastal zones, and continental shelf seas. It features original research papers, review papers and short communications treating such disciplines as zoology, botany, geology, sedimentology, physical oceanography.

Supporting Journals

Local United Kingdom Meetings



The original book on "problems of a small estuary" (1976)

2013

Problems of small estuaries

08 - 12 April 2013, Swansea, UK

Venue: Swansea
Organiser: Dr Ruth Callaway
R.M.Callaway@swansea.ac.uk
Swansea University, Singleton Park, Swansea SA2 8PP, UK


Field sampling in the Burry Inlet, South Wales, UH - photo Ruth Callaway

"In 1976 scientists organised a symposium at the University College of Swansea with the title *'Problems of a Small Estuary'*. It was a gathering of geomorphologists, hydrologists, fisheries experts, biologists and governmental managers who discussed issues affecting the Burry Inlet (Loughor Estuary, South Wales) and other small estuaries.

The 2013 Symposium will focus on understanding what has changed in 40 years. How have research needs changed, and how much more do we understand about the dynamics of small estuaries? Impacts from both the seaward and catchment side have changed. Conservation measures have improved the conditions of some elements of the ecosystem, while other anthropogenic and natural impacts have intensified. Short-term effects, for example of fishing or pollution incidents, are nested in long-term trends due to climatic change. However, there are still gaps in our understanding of fundamental processes in these transitional water bodies. This conference will showcase research and developments particularly in smaller estuaries."

More information: http://www.swansea.ac.uk/seacams/symposiumontheproblemsofsmallestuaries/

Continental Meetings

2013

8th international SedNet conference
'Innovative sediment management; how to do more with less?'

6-9 November 2013

at LNEC, Lisbon, Portugal
ECSA hosts a special session
"Changing Hydrodynamics of Estuaries and Tidal River Systems"
Session organizers: Kate Spencer and Andrew Wither

The Estuarine and Coastal Sciences Association, ECSA, will be hosting a special session at next year's SedNet conference in Portugal. The session will be presented by 3 keynote speakers from ECSA with expertise in estuarine hydrodynamics, contaminant processes and ecology. They will outline current knowledge and tools for understanding and predicting changing hydrodynamics in estuarine systems and explore the implications this may have for the fate of contaminants and nutrients and the ecological status of estuaries. The presentations will be followed by a discussion of the gaps in scientific and technical knowledge and the short- to medium-term consequences for management. There will also be a poster/oral session dedicated to the theme.

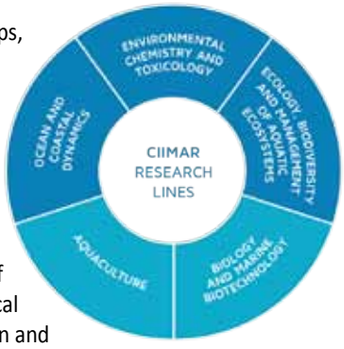
Interdisciplinary Centre of Marine and Environmental Research

The CIIMAR is a research and advanced training institution of the University of Porto (Portugal). Its mission is to develop high-quality research, promote technological development and support public policies in the area of Marine and Environmental Sciences.

CIIMAR IN NUMBERS - 2011

- 125 PhD holders
- 240 Scientific Articles in ISI Publications
- 56% in 1st Quartile ISI Publications
- 80 PhD and MSc thesis concluded

RESEARCH LINES AND EXPERTISE



The centre hosts 18 research groups, organized in 5 research lines, with a scientific team of more than 250 researchers and post-graduation students with diverse scientific backgrounds. Through the integration of different disciplines, the centre aims to contribute to the understanding of the biological, physical and chemical processes which occur in the ocean and the coastal zones, for the sustainable use of aquatic resources and the evaluation of the impact of human activities on ecosystems.

Environmental Chemistry and Toxicology

- Study the impact of natural and anthropogenic stressors in the environment, at all levels of biological organization.
- Unraveling the mechanisms of toxicity and detoxification of natural toxins and anthropogenic substances such as oils, HNS substances and emerging pollutants.
- Development of tools and ecologically relevant approaches for Ecological Risk Assessments of contaminated areas, including the standardization of new bioassays (from molecules to organisms) to efficiently detect contaminants and their effects.
- Provide information to be used by environmental and human health authorities in risk analysis and ecosystem management.

Ecology, Biodiversity and Management of Aquatic Ecosystems

- Biodiversity mapping; estuarine and marine ecosystem functioning; implementation of monitoring studies in aquatic ecosystems addressing the response of biological communities to different natural and anthropogenic stressors, including invasive species, and under current and predicted scenarios of global environmental changes.
- Application of multi-scale approaches from the genes to the communities and from the natural environment to the laboratory.
- Support the implementation of scientifically-based policies and participate in the implementation of European Directives (e.g. Water Framework Directive, European Marine Strategy)

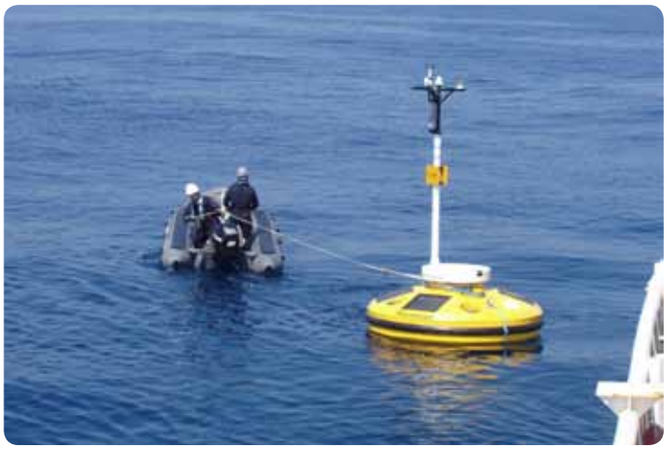
Biology and Marine Biotechnology

- Investigate the biology of aquatic species, from genome to phenotype, in order to better manage these resources and predict their potential uses in biotechnology.
- Screening and identification of new compounds of marine origin with environmental (antifouling, anti-parasitical) and human health (antimicrobial, anticancerigenous) biotechnological applications.

Aquaculture

- Promote the generation of high quality scientific knowledge through fundamental and applied research to tackle some of the sustainability challenges facing the aquaculture industry.
- Cultivation potential of emergent species in aquaculture through the optimization of controlled reproduction, of the nutritional requirements and by the development of sustainable and efficient feeds.
- Development of immunostimulation strategies to enhance stress resistance and welfare of farmed fish.

Ocean and Coastal Dynamics



- Multidisciplinary and multi-scale understanding of oceanic and coastal dynamics through the study of waves, current and tides and their impacts on the physical, chemical and biological processes.
- Implementation of monitoring programs using mobile mapping, and remote sensing for the study of coastal processes (e.g. production of vulnerability maps and assessment of risk of coastal erosion in support of Integrated Coastal Zone Management); development of ocean and coastal circulation models and regional tidal models for sea level analysis.
- Provide information obtained by the use of an array of techniques (Laser systems, buoys, tide gauges, remote sensing), to support ocean and coastal resources management and decision making.

SCIENCE & SOCIETY

The translation of the scientific research into tangible benefits for society is an important objective which is pursued through the implementation of several transversal programmes with emphasis on promotion of public awareness and understanding of science, promotion of innovation, technology transfer and entrepreneurship, and support to public policies. CIIMAR has become increasingly committed to outreach activities to foster the dialogue between scientists and all sectors of society, to improve the public knowledge and perception of science and to increase the interest of the young students towards scientific careers. At the regional level are of particular significance the Cooperation protocols with the City Councils of Vila do Conde and Matosinhos for the scientific and technological management of their respective Environmental Monitoring and Interpretation Centres (CMIAs). Recently CIIMAR has launched "CIIMAR in schools" an outreach project designed for students and teachers from elementary to secondary education that seeks to stimulate the interest of the youngest on Marine and Environmental Sciences.

TRAINING

CIIMAR is also a renowned centre for advanced training of researchers in Marine Sciences due to its interdisciplinary nature. It supports several Master courses from the University of Porto (MSc in Marine Sciences – Marine Resources, MSc in Toxicology and Environmental Contamination, MSc in Biological Aquatic Resources) and the national Doctoral Program in Environmental and Marine Sciences.
At the European level, CIIMAR is an associated partner of the Erasmus Mundus MSc of Science in Marine Biodiversity and Conservation and of the Doctoral Programme on Marine Ecosystem Health and Conservation.

CONTACT US

This information was organized by S. Moreira, J. Saiote and S. Costa-Dias. *For further details on the full range of services offered by CIIMAR, please contact:*

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Photo: J-P Ducrotoy

Shanghai, China

ELSEVIER

ECSA

Submit abstracts by April 2013

See you at

ECSA 53

International Symposium for Estuarine and Coastal Sciences

Managing Estuaries and Coastal Areas in Times of Intense Change

14-18 October, 2013, Shanghai, China (provisional date)

Themes:

- *Environment challenges: water quality, sea level rise, reduced sedimentation input from the catchment, etc.*
- *Dynamic geomorphology and sedimentation*
- *Estuarine Wetlands*
- *Biogeochemical cycles of bio-relevant materials from land and sea*
- *Eutrophication, oxygen depletion, and harmful algal blooms*
- *Advanced techniques for monitoring estuarine and coastal change*
- *Economic growth and Ecological risks*
- *Strategies of estuarine management*

Organizing Committee

Yunxuan Zhou, *SKLEC-ECNU, Shanghai (Chair)*
Xiuzhen Li, *East China Normal University, Shanghai (Secretary)*
Victor N. de Jonge, *ECSA (Scientific Programme Manager)*
Yan Sun, *Elsevier, Beijing (Publisher, Aquatic Sciences)*
Elsevier *(Registration and Logistics)*

For full details and to submit abstracts go to

www.estuarinecoastalconference.com

Research & management of transitional waters

ECSA 51th International Symposium
Klaipeda, Lithuania, September 23–27, 2012

The 51th ECSA international symposium “Research and management of transitional waters” was held in Klaipeda, Lithuania on September 23-27, 2012. The conference venue was a newly build AULA MAGNA complex of the Klaipeda University. Being much smaller even than 50th ECSA symposium held in Venice earlier this year, this meeting had a special focus on coastal lagoons, especially one on the Baltic. It is not surprising as Klaipėda is situated on the banks of largest European coastal lagoon. The conference was also co-organized by the BALLOON (Baltic Lagoons Research Network) and Euro-Mediterranean Lagoon Federation (EUROMEDLAG). Symposium was also supported by the SBP ARTWEI project dealing with cross-border management of Baltic lagoons. Despite comparatively small size the geographical coverage of the symposium was pretty wide. Symposium was attended by 109 delegates from 13 countries (Russia 30, Lithuania - 44, Germany- 9, Poland - 6, Italy - 5, UK 4, Greece – 3, Sweden-2, Latvia - 2, Spain-1, Turkey- 1, France -1, Estonia - 1 and USA - 1). Symposium had no parallel sessions allowing participant to listen to all oral presentations. There was also 3 additional scientific events linked to the symposium – ARTWEI and HERRING projects partner meetings and BMB (Baltic Marine Biologists) committee meeting.

The conference was opened by the Klaipeda City Major Algimantas Grubliauskas, who noticed the honour to host such an important symposium in Klaipėda in-between such cities as Venice and Shanghai. The opening speech of the Major was followed by the Vice Rector of the Klaipeda University, prof. Inga Dailidiene, oceanographer herself. The keynote speakers included Tiziana Luisetti (UK) (“The value of European marine and coastal ecosystem services: some British case studies”), Markus Huettel (USA) (“Benthic-pelagic coupling in shallow waters”) and Carl L. Amos (UK) (“Sea surface temperature trends in transitional waters”). The 24 oral talks were presented during 5 sessions. There were also 4 workshops: “Ecological classification and indication of lagoon ecosystems: new perspectives and challenges”, “Management of fisheries in coastal lagoons”, “Cross-border management of lagoons and transitional waters” and “Invasive bivalves in ecosystem remediation: from theoretical concerns to practical challenges”. During the 2 poster sessions 48 posters were presented. The social programme of the symposium included icebreaker event, mid-symposium excursion to the Nemunas Delta and social dinner.

Participants were invited to submit their presentation to 3 international journals “Estuarine coastal & Shelf Science”, “Ocean & Coastal Management” and “Transitional Water Bulletin”

According to impression heard from the participants of the symposium, the event, despite its comparatively small size was a success presenting much focused, perhaps also geographically, scientific event under the ECSA umbrella.

Keynote speaker Markus Huettel (Department of Earth, Ocean and Atmospheric Science, Florida State University, Florida, USA) is presenting his lecture “Benthic-pelagic coupling in shallow waters”;

Members of symposium scientific committee Alberto Basset (University of Salento, Italy (on the left) and Artūras Razinkovas-Baziukas (Coastal Research and Planning Institute, Klaipeda University, Lithuania);

Discussions on poster session

Discussion on expert panel/workshop “Cross-border management of lagoons and transitional waters: ARTWEI project”. Convener Gerald Schernewski, IOW, Germany (is standing).

The 13th International Scientific Wadden Sea Symposium / ECSA52

The Symposium, entitled 'An integrated approach to emerging challenges in a World Heritage Site', was organized by the Wadden Academy in cooperation with:

- **the Common Wadden Sea Secretariat (CWSS);**
- **the Ministry of Economic Affairs, Agriculture and Innovation;**
- **the Delta Program Wadden Area;**
- **Knowledge for Climate;**
- **Netherlands National Commision for UNESCO;**
- **Estuarine and Coastal Sciences Association (ECSA).**

This meeting was held 21-23 November in Leeuwarden, The Netherlands, bringing together over 200 scientists, policy-makers, managers and other stakeholders from the entire international Wadden Sea region, Korea (Getbol) and Australia (Great Barrier Reef).
The scientific Wadden Sea symposia are hosted every three years by one of the countries of the trilateral Wadden Sea Cooperation being The Netherlands, Germany and Denmark. These symposia provide important scientific input to the socalled 'Wadden Sea Ministerial Conferences', the next of which will take place in Denmark in February 2014.

This three-day symposium focused on the role of science in the management of the UNESCO Wadden Sea World Heritage Site. This was the first symposium held after the Wadden Sea was inscribed on the World Heritage list, the highest international recognition achievable.
"This symposium provided us with a very good overview of the challenges that we have to meet, to maintain the outstanding universal value of this magnificent area", said Jens Enemark, secretary of the Common Wadden Sea Secretariat in Wilhelmshaven (Germany).
It was acknowledged that, generally, there is not one science-based solution to a certain problem but that several options are possible. A plea was made for allowing more pluralism in the discussion on Wadden Sea protection and human use. This was underlined several times.Amongst others also by the urgent call for a dialogue between climate researchers and stakeholders from the Wadden Sea region to discuss possible options for adapting to sea level rise. Large-scale sand nourishment is one of these options. Because sand moves from the North Sea coastal zone into and within the Wadden Sea tidal basins, a cross-boundary approach was recommended. Some participants warned that the long-term impacts on the system are unclear.
The importance of biodiversity for the ecosystem was assessed. Several speakers said that there is some increasing scientific evidence that a higher biodiversity may mean that a more diverse Wadden Sea ecosystem may be more flexible and more resilient to changes. It was suggested that mussel beds, especially large beds, are very important for Wadden Sea biodiversity because they may positively influence large parts of the tidal flats.
Apart from all the invited speakers (see program on the web site), three special guests had been invited to the symposium:
Prof. Karsten Reise from the Alfred Wegener Institute, Wadden Sea Station Sylt was honored for his life-long efforts to understand the Wadden Sea ecosystem and for his central role in the preparation of the Wadden Sea world heritage nomination.
Prof. Chul-hwan Koh from the Seoul National University introduced the Korean tidal flat systems called 'Getbol' and constituting 2500 km2 of the coastal area adjacent to the Yellow Sea. He emphasized the importance of the cooperation between Korea and the Wadden Sea authorities for the protection of Korean tidal flats which are under high pressure.
Dr. Fergus Molloy from the Great Barrier Reef Marine Park Authority (Australia), provided valuable insight in the management of the Great Barrier Reef, the world's largest nature heritage site with a length of about 2500 km. Especially, the method to prioritize the research agenda in relation to policy questions is worthwhile exploring for the Wadden Sea region.
Chairman of the Waddenacademie, prof. Jouke van Dijk: ' This symposium is a very good starting point for the upcoming trilateral ministers conference early 2014 in Denmark. The next coming months we will prioritize all scientific recommendations made during the symposium. of course, we will do this in close collaboration with the scientific community in Denmark, Germany and the Netherlands.
All the presentations of the Symposium available for download at the Wadden Academy website **(http://www.waddenacademie.nl/).**
The meeting was organized by Waddenacademie (main organizer),

Part of the audience at ECSA 52

Jens Enemark Secretary of the Common Wadden Sea Secretariat, Wilhelmshaven, Germany

Prof Dr Karsten Reise who significantly contributed to the realisation of the UNESCO World Heritage Site Wadden Sea

Student Report

Heidi Burdett, School of Geographical and Earth Sciences, University of Glasgow

IV International Rhodolith Workshop, 17th – 21st September 2012, Granada, Spain

The International Rhodolith Workshops, held every 3 – 4 years, bring together researchers and consultants from around the world, all of whom have a common interest in free-living red coralline algae (known as maerl or rhodoliths). This highly specialised conference attracted around 50 attendees from Europe, North and South America and New Zealand. Despite the small size of the conference, we were treated to a wealth of oral and poster presentations, ranging from taxonomy, ecology, geology and biogeochemistry. I was lucky enough to have the opportunity to present a number of aspects of my PhD research through two oral presentations and a poster, focussing on the role of rhodoliths in the biogeochemical cycling of sulphur in coastal marine environments. The knowledge and expertise of the audience led to a number of interesting and constructive discussions afterwards.

There were a number of networking opportunities, such as a 'Tapas party', a conference dinner and two fieldtrips to visit modern and fossil rhodolith beds. The benefit of a small conference is particularly evident when networking - there is time to speak to every attendee! This has led to a number of new possible avenues for my research, so was particularly useful.

I would like to thank the Estuarine and Coastal Sciences Association for their generous financial support, without which I would not have been able to attend this highly productive meeting.

Photo: J-P Ducrotoy

Firth of Forth, Scotland

Chairing Sessions of Scientific Meetings, Symposia & Congresses

At scientific meetings, symposia and congresses, you will all have noticed the role of the chairmen/chairwomen/chairs of sessions. Have you wondered how these get chosen? Often it is because of their experience and/or the organisers knowing that they can do it and have done it before.

At the recent ECSA50 symposium in Venice, we decided to take the innovative approach of asking not only the older, established figures (who may be referred to as the grey-beards or silver-backs (or even the 'crusty old researchers'!) to chair sessions but also to ask younger researchers including postgraduates. We received an enthusiastic agreement from everyone for this approach although we did get many comments such as 'yes, I'm happy to do it and many thanks for the opportunity but what do I do, have you any hints to help me?'

Because of this, we decided to produce the following (personal) hints to help anyone who asked for the hints.

Chairing a session is not a difficult task and you can easily be prepared by taking a few steps:

- If possible, contact the speakers by e-mail prior to the meeting and inform them about how you will chair (see below).
- In previous sessions, watch the Chairman/Chairwoman/Chair and note good (and bad) points from them.
- As with giving a presentation, the secret is in knowing the room and the programme.
- Get to the room early and have a look at the layout of the room, decide where will you sit, and find out where are the light switches and how the projection system works although there will be someone in each room to do those.
- The talks should be pre-loaded onto the computers so just have a quick look to make sure that they are there. (If a speaker has not preloaded their talk then the time it takes to load it should come out of their allocated time!)
- You might be the one to turn down the lights at the start - we don't know the exact layout of the rooms.
- Have the list of the speakers and introduce yourself to them - make sure you get their first name and especially make sure you know which of the authors is giving the presentation. (If their names are difficult to pronounce then either ask the speaker how to do it or just have a go - most people in an international audience do not mind if their name is pronounced wrongly!)
- At the start of the session, introduce yourself, and say where you are from and that you are delighted to be chair the session! You could also say the name of the session
- Tell the speakers you will give them a sign when they have 2 minutes left - this should be to the end of the 15 minutes to allow for questions. This can be done by holding up a sign or making a sign with a number of fingers (but beware that this could be potentially rude!) – if there is a timer then you should use this
- Have a couple of sentences ready to introduce the speakers and their talk and mention where they are from (this will be in the Abstracts)
- If you want you can read out all the names on the paper but mostly it is just necessary to say that of the speaker/first author 'and co-workers'
- Similarly you could read out the whole title or just make an abbreviated version, e.g. 'Joe Bloggs and his co-workers from the University of Anywhere in Anyland talking about blurble-blurble in estuaries'
- Make a note of the time they start and make sure they keep to time - this is the most important part. Indicate to the speaker when the time to talk has finished and it is time for the discussion which is 5 min before the next speaker
- If the speaker is not speaking loudly enough then don't feel guilty about asking them to speak up - remember those at the back of the room
- If the speaker keeps going on over the 15 minutes then that is their problem - they will not have any time for questions but if they get to the end of the 20 minute slot then tell them they must finish now even if they haven't got to the end - some will then just put up the conclusions slide
- At the end of the talk, you can start the applause (this also reminds the audience the speaker has finished!)
- At the end of the talk, if there is time, then you only have to ask the audience for questions and get that organized - make sure you look all around the room and try not to let anyone have more than 1 question
- If there are no questions then it is good to have one yourself but do not feel that you have to do this - we know that some chairpersons are not in sessions for their own field. (But the reason we put down a name is that we think those people will be confident about speaking in the sessions!)
- If there are some people who want to ask questions but there is no time then say 'I am sorry but we will have to stop the discussion now and move on but perhaps you can talk in the coffee break'
- Don't feel guilty about telling the speaker to stop - it is not you that is being rude but the speaker as they are in danger of messing things up for the rest of the session (this also shows poor preparation by them)
- There is a bit of time allowed for catching up time at the end of sessions - for example, if a speaker has technical problems that are not their fault then you will have to allow extra time
- You can get the next speaker to the front during the questions for the previous speaker so everything is prepared
- At the end of the session you should thank all the speakers of the session and you can then lead another applause
- Despite all of this, we are sure you will enjoy the experience (and you will see what the chairman of your session has to put up with!)

These are personal views, albeit created by a couple of grey-beards, and we would be delighted to hear from readers with suggestion/additions or improvements.

Mike Elliott and Victor N. de Jonge
Institute of Estuarine & Coastal Studies, University of Hull, UK and the Netherlands

From The Membership Treasurer

New subscription rates for 2013

Membership subscriptions: Membership fees are necessary to cover the production and mailing costs of Bulletins, supporting travel to meetings and workshops for young members, and supporting ECSA Council in its work. Payment will be due, as ever, on the 1st April. For 2013 Council has agreed that an increase in the subscription rate is necessary to maintain the health of the Association and allow it to continue its good work. All rises are regrettable but we hope members will appreciate that this is necessary. Please note that we have introduced a new three-year rate for students, which represents very good value. The new rates are:

Category of Membership	Yearly payment by Banker's (Standing) Order only	Yearly payment by all other means
Member	£35	£36
Student member (annual)	£14	£15
Student member (3 years)	£30	£30
Institutional member	£100	£100
Sponsoring member	£250	£250

Payment methods are:

i) **Standing/Banker's order**: Please adjust your payment in time for the renewal of membership on 1st April 2013.

ii) **Cheque or credit card**: Payment may be submitted to the Membership Treasurer or other ECSA Council members.

iii) **Paypal**: Payment can be made online via Paypal. For new members, please ensure that you also send a completed application form to the Membership Treasurer.

iv) **Cash**: This may be paid direct to Council members at meetings

Receipts are available on request for any member who needs one. Please contact me for a receipt or for an invoice if this is required.

PLEASE ensure that you complete a form legibly with all the appropriate information at the time of joining, otherwise you will not be able to receive the Bulletin and newsletters.

Welcome to new members

This has been a busy year for ECSA, with successful meetings, such as those at Venice and Oban, leading to many new members. We welcome all our new members, and hope they will be with us as long as many of our long-standing members, whose continuing support is greatly appreciated.

ECSA has members in over 30 nations spread across the globe, so is truly an international society. This is reflected in the spread of meetings, workshops and symposia in which ECSA plays a role.

Your contact details: It is vital that we have up to date contact details for you. You are missing out on the e-newsletter if we don't have your current email address. There are quite a few members for whom I have no email address, so do please get in touch if you have one. If you are not sure if we have the correct mailing address for the ECSA Bulletin for you, please contact me at clare.scanlan@sepa.org.uk to check. Please also remember to update any mailing address details.

Why not recruit some friends or colleagues? We know the Association does valuable work, but it needs you to ensure it happens.

Membership Treasurer:
Dr. Clare Scanlan
c/o SEPA, Inverdee House, Baxter Street, Torry, Aberdeen AB11 9QA, Scotland, U.K.
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The Pak Pa-Nang River-Estuary, Southern Thailand

Geoff Millward[1] and Mike Foulkes[2]

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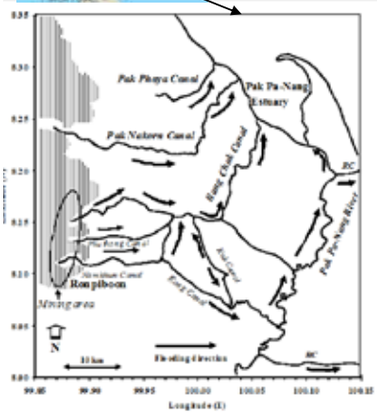
Background:

Coastal zones in Thailand are under considerable pressure due to the concentrationof population, the unregulated utilization of living resources and the growth of industry, all which have affected their freshwater and marine ecosystems (Hungspreugs et al., 2000). The Pak Pa-Nang river basin and its estuary are fertile aquatic systems in southern Thailand and together they cover an area of 1500 km^2.



The coastal region supports a population of about 600,000 people, including rice farmers (paddy fields covering approximately 25% of the catchment), orchard and rubber tree growers, fishermen and shrimp farmers. The province was prosperous in the 1970s because soil fertility and rice exports contributed significantly to the local economy. Subsequently, the region has become one of the poorest communities in southern Thailand due to population growth, devastation of the natural forest in the upper catchment and failures in farming practice.

Climate:

The climate is tropical monsoon with an annual average precipitation of about 2000 mm, which is highly episodic since 50% of the rainfall occurs in less than three months. This gives rise to seasonally variable river flows between the dry (March to September) and wet (November to January) seasons. During the latter period, river spates can develop causing massive flooding covering a wide area of the region, often requiring human evacuation. The flux of fluvial sediments to the Bay has been estimated to be 1.2 x 106 t a-1, with approximately 70% being delivered during the monsoon period. The annual deposition of sediment within the Bay is about 106 tonnes. The tides are semi-diurnal with a maximum range of 1 m and the water circulation in the Bay is generally anticlockwise. The control of flooding during the NE monsoon is a crucial issue for local and national governments. Given the level of poverty in southern Thailand, there is public pressure to maintain the availability of fresh water for rice growers, while simultaneously preventing the encroachment of freshwater into the highly lucrative shrimp farming areas. To alleviate these issues a barrage was constructed, in 1999, at the mouth of the Pak Pa-Nang to restrict the incursion of seawater. Recently, a complex water management system has been implemented, including newly dug or re-routed canals and the development of flood relief channels re-directing excess water to the Gulf of Thailand. The arrows in the map, above, indicate the general directions of the water flow in the rivers and canals and flood relief channels (RC). However, water managers can vary the flow, using manually or automatically operated gates, to redirect the water as required, during severe flood events and for farming purposes.

Water Quality:

Water quality is often poor, mainly because of high biological oxygen demand, the effects of which have been detected offshore in the Gulf of Thailand (Cheevaporn and Menasveta, 2003). However, the degradation of the Pak Pa-Nang river basin has been seriously affected because its catchment is mineralized as part of the SE Asian Tin Belt (Mandal and Suzuki, 2002). Consequently, the substantial deposits of tin have been mined in the area of Ronpiboon (circled in the map), mainly by international conglomerates, over many years. However, the tin ores are associated with arsenopyrite which has a residual load in the catchment estimated at 5100 tonnes. Arsenic-contaminated water within the Pak Pa-Nang river basin has caused, and will continue to cause, detrimental effects on the environment and on human health (Williams et al., 1998), as a national newspaper highlighted in 2001. Attempts to reduce the impact of the arsenic mobilisation have been unsuccessful, so far, to prevent weathering processes, and the water management system, transporting dissolved and particulate arsenic throughout the catchment and into the biologically productive Pak Pa-Nang Bay.


Bangkok Post

Arsenic cases on the rise in the South

Soil, water found to be contaminated

Expeditions to the Pak Pa-Nang

The aim of the project was to detect and evaluate the spread of arsenic within the Pak Pa-Nang river-basin, thereby understanding its transport from “catchment to coast”. This required a multi-disciplinary consortium in order to obtain significant and coherent datasets over three separate expeditions. Thus, the project involved partners who each contributed their expertise and resources, for example the expedition base was at Walailak University, in Nakhon Si Thammarat, which had a well-found biological laboratory where all sample types could be processed. Sampling and sample preservation was conducted with the support of staff andstudents from Walailak University, the Thai Pollution Control

Department and the Plymouth University which has expertise in the analysis of arsenic species in faunal and sediment samples (Foulkes et al., 2007),

An important requirement was to conduct each days fieldwork under the same climatic conditions because during the NE monsoon rainfall could be exceptional and conditions in the rivers and the Bay could change rapidly. Thus, one team targeted the fluvial systems while another sampled saline waters contemporaneously.

The main problem we faced was access to the various sites, sometimes restricted by impenetrable jungle and the requirement to cover a large area of the Bay. In order to retain the sample integrity of the faunal and sediments were freezedried and vacuum packed, immediately after collection.

Sampling of waters and sediments in some of the canals in the upper catchment were by hand. For example, samples were taken in the Namkhun Canal which drained the tin mining zone (see the picture to the left). Here local inhabitants use this water for their daily requirements and several had signs of arsenic poisoning. At sites further downstream, where the rivers were wider and deeper, a water sample bottle was used and sediments were obtained using a gravity corer. Water samples were returned to the laboratory at Walailak, filtered through a 0.45 µm poresize filters and the filtrate stabilized with acid.

Water and sediment sampling in the Bay was implemented using a traditional "long-tailed speedboat" commanded by a great Thai skipper,"Captain Jen". The vessel enabled a wide coverage of the Bay within a 12 hour day and it also accommodated sufficient team members to facilitate monitoring of water quality parameters and sample collection. Sediments were collected by gravity corer and faunal samples were collected by net or purchased from local fishermen. Faunal and sediment samples were returned to the laboratory in Walailak University where they were washed, freeze-dried and vacuum packed. The samples were returned to the UK for analysis.

Analysis of samples:

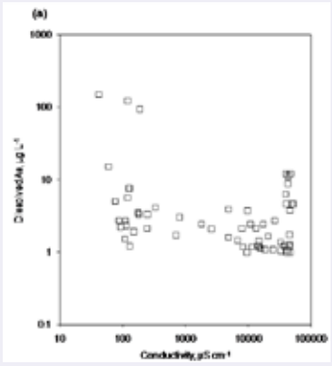
Total dissolved arsenic was analysed, in Bangkok, within a few days of collection using hydride generation atomic absorption spectroscopy. Total arsenic in sediments and fauna were determined, in Plymouth, by Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) following microwave digestion with concentrated nitric acid and hydrogen peroxide in a sealed Teflon reactor.

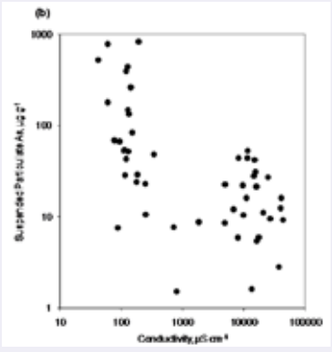
Fish and crustacean samples were analysed for arsenic species, namely arsenobetaine (AsB), dimethyl arsenic (DMA) and monomethyl arsenic (MMA) and inorganic arsenic As(III) and As(V). The freeze-dried biological samples were extracted using a Trypsin enzymatic procedure and sediments were extracted using a dilute solution of phosphoric acid. Both methods extract all arsenic species and retain their integrity. The extracts were determined by a coupled High–Performance Liquid Chromatography (HPLC-ICP-MS) system calibrated with matrix-matched standards and analyses were quality controlled using certified reference materials (Rattanachongkiat et al., 2004).

Concentrations of arsenic

Total dissolved and suspended particulate arsenic: The results of the analysis of dissolved and suspended particulate arsenic are shown in figures (a) and (b), respectively as a function of conductivity. Thus, the highest concentrations of dissolved and particulate arsenic were found in the freshwaters draining the mining areas around Ronpiboon. The waters of the Namkhun Canal had concentrations of dissolved arsenic in excess of 100 µg L^{-1} and suspended particulate matter up to 1000 µg g^{-1}. The concentrations generally decline as conductivity increases (note that conductivities of 10,000 and 27,000 µS cm^{-1} gave salinities of approximately 6 and 16.6, respectively), although there was evidence of inputs from sediment porewaters. The OSPAR upper limit for long-term biological effects of dissolved and particulate arsenic are 10 µg L^{-1} and 10 µg g^{-1} which suggests that there is a likely impact on growth and reproduction of organisms.

Arsenic species in marine fauna and sediments: Fish and crustaceans samples had a range of total arsenic concentrations up to 17 µg g^{-1}. And the major form in all fauna samples was AsB with smaller quantities of DMA and inorganic As. Total concentrations of As in sediments covered the range in the river 7-269 µg g^{-1} and the estuary 4-20 µg g^{-1} and As (V) was the most prominent species with smaller quantities of As(III). The presence of the more toxic forms of As in sediments and fauna has implications for human health because they are readily available (Rattanachongkiat et al., 2004).





Conclusions

Even though the impact of arsenic on human health has been studied in the Pak Pa-Nang catchment, little account has been taken of the impact that the changes in water management practice may have had on the transport of arsenic within the river basin and its impact on the fertile coastal waters. Currently, it is not known how much of the arsenic load has been transported from the source region nor is there any prediction as to the potential release of arsenic in the long-term from the inherent arsenic load and spoil tips. Thus, more information is required to assess the potential impact of arsenic mobilisation, its storage in sediments of the upper reaches of the river basin and the importance of toxic arsenic species.

Acknowledgements

The authors wish to thank Dr Chuthamat Rattikansukha and Dr Saravuth Rattanachongkiat from the Pollution Control Department, Ministry of Natural Resources and Environment, Bangkok, Thailand for their assistance with the project.

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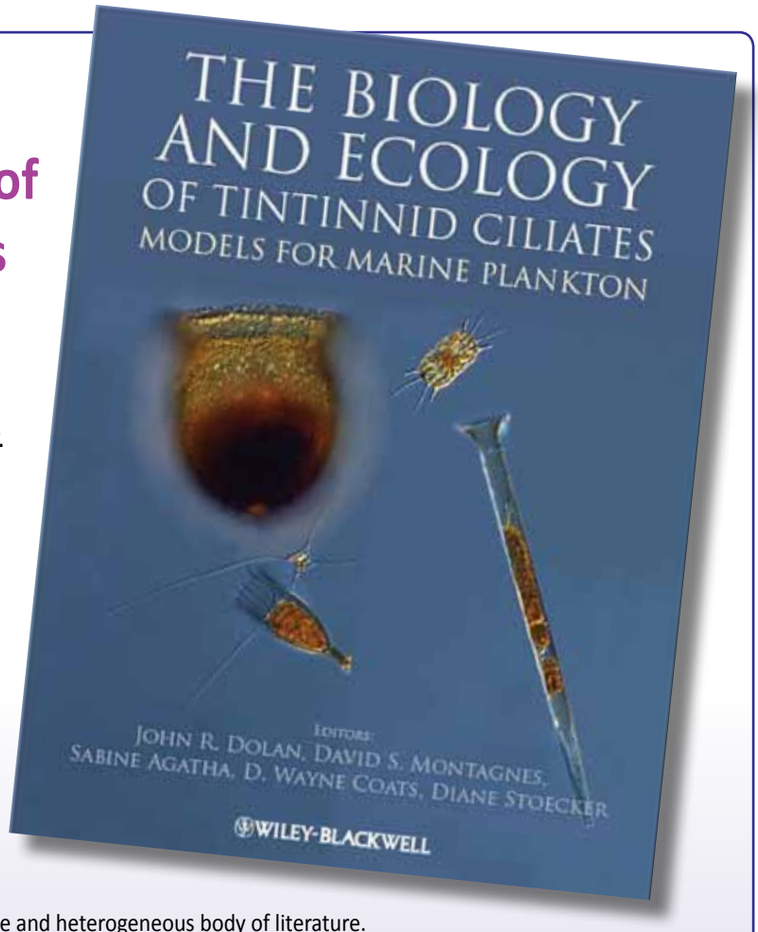
The Biology and Ecology of Tintinnid Ciliates: Models for Marine Plankton



Edited by John R. Dolan, David J. S. Montagnes, Sabine Agatha, D. Wayne Coats & Diane K. Stoecker.

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304 pp.
£75, €90.30, $150

In estuaries and coastal sea, as in the open ocean, microzooplankton are the major consumers of primary production. Among the very diverse group of organisms in the microzooplankton are tintinnid ciliates. These relatively conspicuous 'shelled ciliates' have been studied, primarily in estuarine and coastal waters, for a surprisingly long time (late 18th century) and from a wide variety of perspectives. This volume is an attempt to provide a synthesis of a very large and heterogeneous body of literature. Tintinnid ciliates are presented as a model group of organisms for studies of marine plankton. The book begins with a wide-ranging general introduction to tintinnid ciliates. The introductory chapter one is freely available for downloading on the publisher's webpage for the title (http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0470671513.html). The introduction is followed by nine chapters focusing on quite different topics each authored by experts in the particular domain.

The nature and formation of the shell or lorica, the feature which sets this group apart from other planktonic ciliates, is the subject of Chapter 2 by S. Agatha, M. Laval-Peuto & P. Simon. This is followed by a treatment of the systematics and evolution of tintinnids in the third chapter by S. Agatha & M. Strüder-Kypke. Turning to ecology, the fourth chapter by D.J.S. Montagnes focuses on ecophysiology and behavior. The exploitation of tintinnids by other organisms, predation, is covered in chapter five by D. K. Stoecker. Tintinnids, like most organisms, are subject to parasitism. The particular and often under-appreciated role of parasites, as well as their development and systematics, is the subject of chapter five by D.W. Coats & T. Bachvaroff. Cyst formation is known in tintinnids, as in many different estuarine and coastal taxa; chapter seven is the comparative biology of tintinnid cysts by T. Kamiyama. Microzooplankton communities, in general, and the role of tintinnids in these communities in particular, is the subject of chapter eight by G.B. McManus and L. Santoferrrara. The final chapter by J.R. Dolan and R.W. Pierce treats the subjects of biogeography and patterns of diversity, both temporal and spatial. The volume includes a central color plate section and separate indexes for species and terms.

The book should be of use and interest to all those working on plankton or pelagic food webs as well those specialists concerned with particularities of these 'infusoria'.

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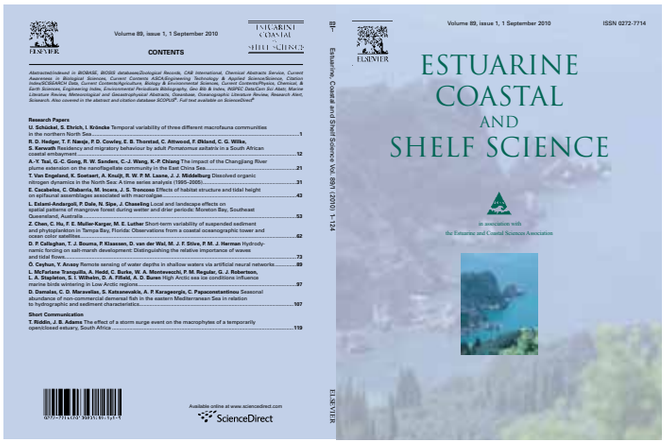

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Short Communication

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Photo: J-P Ducrotoy

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ECSA Annual General Meeting 2012

The 42nd ECSA Annual General Meeting will be held during the UK local meeting (8-11 April 2013, Swansea University, Wales, UK). Details of the date, time and venue will be announced early in 2013.

All enquiries to be forwarded to the ECSA Secretary:

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Research and Management for the conservation of coastal lagoon ecosystems

Biological compartments, potential use as ecosystem state indicators

Assessing ecosystem processes and impact of perturbation

Ecosystem trajectories including the impacts of restoration

Regular Papers

Photo: J-P Ducrotoy

Cayeux-sur-Mer, France

XV COLACMAR Latin American Congress of Marine Sciences

"Connecting marine sciences in Latin America"

ALICMAR (Latin American Association of Marine Researchers and the Faculty of Sciences (UdelaR, Uruguay) announces the official launch of the XV COLACMAR (www.colacmar2013.com), to be held in Punta del Este (Uruguay) from 27th to 31st October 2013.

The year 2013 marks 35 years since the birth of the Marine Sciences/Oceanography in Uruguay and 30 years of the first Marine Sciences Regional Meeting, which enhanced the COLACMAR in the following years. The XV COLACMAR will be an excellent opportunityfor the latin american community of marine sciences to share knowledge and experience with international reputed researchers in this field. The conference will focus on several ecological and economic aspects of marine sciences, all of interest to ECSA members. It will be divided in four scientific-technical activities: plenary lectures, thematic symposia, short-courses and roundtables.

Early bird registration is now available at the webpage: www.colacmar2013.com.

Stay connected ECSA e-news

ECSA electronic newsletter (e-news) is a service dedicated to ECSA members. It is an easy and rapid way to spread information to the ECSA community, advertising for any events, courses, fellowships/job positions, etc. in the field of estuarine and coastal sciences.
ECSA e-news is fostered by the contribution of all members and can be also a good way to spread ideas to the ECSA community. Members are warmly invited to submit news by sending an email to the e-news editor, Anita Franco, **A.Franco@hull.ac.uk**. The subject of the e-mail will be used as title of the announcement in the e-news, hence members are invited to keep it short and explicative. No attachments are allowed.
ECSA e-news is e-mailed to members three times yearly. If you are an ECSA member and you never received the e-news, you should make sure that we have your correct e-mail address by contacting our Membership Treasurer, Clare Scanlan, **clare.scanlan@sepa.org.uk.**

Photo: J-P Ducrotoy

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Martin Wilkinson, ECSA Treasurer

ECSA Bulletin

The ECSA Bulletin is produced twice a year. Material for the Bulletin must be submitted to the Editors by December 1 or June 1, for issues appearing in January and July respectively. We would be pleased to receive short articles and notices of publications and meetings. Information on change of address, and applications for membership should be sent to the Membership Treasurer and not the Editors, correspondents or publishers.

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Estuarine and Coastal Sciences Association (ECSA)

The Estuarine and Coastal Sciences Association (ECSA) is a direct continuation of the Estuarine and Brackish Water Sciences Association (EBSA). The association was founded in 1971, and is the major European focus for the communication of research and scholarship in estuarine science. Membership is open to all who are interested in estuarine and coastal marine science, whether in Europe or further afield. The association holds local meetings, where work relevant to one specific estuary or coastal site is presented, and international symposia, where work applicable to a chosen theme of estuarine and coastal science is presented. Many of the symposia have been published. The association has caused to be published Handbooks of Methodology for estuarine studies, and Synopses of the British and European fauna, which are available to members at reduced rates. The association has an associated journal, *Estuarine and Coastal Shelf Science*, which is available at greatly reduced rates to members.

The *ECSA Bulletin* is distributed to all members, free of charge, twice a year; this is supplemented by newsletters and association information and links are updated regularly on the ECSA website. The association has a small grants scheme for younger scientists.

Further details and memberships forms from:

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or from the ECSA website:

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