

Conference Abstracts & Biographies

6E – Conservation and Engagement V

Chair: Adriana Ford, University of Greenwich

Social photography and use of the sea

David Tudor, The Crown Estate

Abstract:

Many documentary photographers have made their life's work examining and capturing human behaviours. Often these same photographers have extended their reach beyond the urban and rural environments out to the coastal hinterland. Photographers such as Simon Roberts, Elliot Erwitt, Martin Parr and Tony Ray Jones have all taken to the beach to create a social catalogue of the UK at the coast. These photographers recorded the scene in front of them but often with a focus on a specific element, as if to accentuate and emphasise a point of view with a style which focussed on their own personal experiences of the beach and the marine environment, whilst still recording the times in which they were living.

Alongside this, photography has been used across the globe to capture and convey images of human impact on our marine environment. This has ranged from oil spills to marine plastic pollution and human trafficking.

For many, the coast and the open sea are places of nurture; a place for reflection; an environment that creates a deep connection. Some anthropomorphise the ocean: referring to the beach as a friend that possesses a soul. There is no doubt that people's connection with the sea goes beyond the functional; through the ages people have found the beach a cathartic and emotional help. Photographers have attempted 'intentionally or by accident' to capture this feeling and recreate the place where people feel the serenity of the coast.

So what is the impact of social photography? The question of whether these images have influenced the management and use of the seas and oceans is explored. Examples of where it has gained mass appeal 'where it has created real change, such as environmental disaster imagery' and how people have connected to an image.

Philosophical Ethical and Religious imperatives

Jeremy Peter Hellier, The Mission to Seafarers UK

Abstract:

This paper will look at the question of how we value the world we live in. Various philosophical and ethical systems will be examined, and the insights and possible relevance to our attitudes will be evaluated. For example, should we adopt the approach of Utilitarianism and simply use what we have to bring about the greatest good for the greatest number of people. Perhaps the insights of 'natural law' have something to offer, or the principles of Aristotle and his ideas on virtue ethics. Religious people think that God has given them 'dominion' over the earth, but what precisely does that mean? Some groups of people think that conservation is not relevant as the world will come to an end anyway, others take very seriously the idea of responsibility to generations yet to come. What is the right attitude? Another idea to be explored is the idea of 'stewardship', the principle of caring for something on behalf of someone else. This brings with it ideas of managing the sea, working with nature, and using the marine environment in a sustainable way for our survival. A number of conferences have been held in recent years on these kinds of issues and the conclusions and insights of those will be visited. In particular the outcomes of the Assisi Conference of 1986, and the 1995 conference in Ohito between religious

leaders and environmental scientists will be explored as well as subsequent thinking. A clear statement from the Assis conference said 'Every act of irresponsibility towards creatures is a disgrace'. What motivates and drives this kind of thinking, and where does a consistent approach to the world come from? This paper will explore how philosophical, ethical and religious imperatives might support a coherent and practical approach to society's use of the sea.

Biography:

Priest for 41 years in the Church of England. Army Chaplain. Rector of Dartmoor. Yachtmaster Offshore. Head of Philosophy and Theology at Wellington School, Somerset for 21 years. Philosophy and ethics teacher and A level examiner. Chaplain with Mission to Seafarers. Currently Port Chaplain at Royal Portbury and Avonmouth Docks, Bristol.

Project Emc2 - Exploring white crowberry coastal habitats - *Corema album* (L.) D. Don - an environmental coastal education project at Science and Society interface

M. Alexandra Abreu Lima, MARE NOVA and INIAV, I.P and
Lia Vasconcelos, MARE NOVA and FCTUNL, Portugal

Abstracts:

Plants are at the center of two salient environmental issues of our time - global climate change and biodiversity loss. Within this context, environmental education projects about endemic coastal plants are of actual relevance due to increasing coastal development and changing coastal dynamics worldwide. We developed an outdoor education project held at Portuguese North, Centre and South sand dune systems, with 8-10 years aged pupils, from 6 schools, during 2016-17 (Funded by MARE-FCT UID/MAR/4292/2013). The project aims to explore not only *Corema album* (L.) D. Don, as an Iberian endemism (known as 'White crowberry', due to their white edible fruits); but also the worldwide invasive plant *Carpobrotus edulis* L. (known as 'Hottentot fig'). Outdoor visit methodology is centered on a playful, multi-sensory approach, allowing learners to re-engage with the world as they actually experience it. Students observe different plants and gather plant specimens for their 'mini-herbaria'. The project interdisciplinary methodology combine dune visits with science and arts activities (e.g. poetry; drawings based upon *C. album* herbaria specimens pictures- some dating back from 19th century collectors at each school zone). Outputs include project participant fulfilled survey and worksheet analysis. Results from all schools surveys revealed not only increased student knowledge acquisition about white crowberry (previously unknown for the majority) but also a rich mobilization of the six main 'pathways to learning: - to see, hear, taste, touch, smell and do'. Outcomes include partnership establishment, at (inter)national/local level(s), for cultural events (e.g.- Exhibits of student's drawings) and conservation initiatives (e.g.- Invasive species removal) at dune habitats. From Emc² project results it is concluded that coastal outdoor learning projects provide support for other curriculum areas beyond science; can be an opportunity to build bridges -between schools and communities, young people and their futures - enriching the cultural landscape and promoting nature conservation.

Space perceptions to the development of an environmental communitarian education movement

Sílvia Helena Correia Franco, MARE Centre, New Lisbon University, Portugal

Abstract:

The present article arises from a critical ethnographic proposal (Thomas, 1993), which aims to contribute to the educational offer through interdisciplinary training activities for coastal

environmental actors and is based on the premise that it is in the educational process, which environmental awareness awakens.

This paper is based on a systemic pyramidal basis that encompasses (1) a theoretical dialogical structure between the Sciences of Education and Environmental Sciences; (2) emancipatory educational techniques that communicate the local environmental context through the communion of traditional, local, technical, and scientific knowledge; (3) the integrative, critical, and collaborative involvement of the local citizen in environmental actions through participatory bottom-up methodologies. The actions implemented promote the dialogue between different forms of knowledge in an interdisciplinary educational movement based on the sustainable interaction of natural and intellectual capital of a coastal zone. Local agents will be involved in network collaborative planning practices (Castells, 2009) imbued by diversity, interdependence, and emancipatory dialogue (Booher & Innes, 2002).

Supported by the transdisciplinary educational dimension, D'Ambrosio (2002) studies the individual-society-nature relationship, which characterizes as 'triangle of life' and conceptualizes as inseparable facts. This relationship is recontextualized by Mesquita et al. (2011), in three relational spaces: CorpSpace, which represents the connection of the individual with himself, internally and externally; OtherSpace, the social relationships in which it is involved; and EcoSpace, representing its relationship with the environment, as a universal space. The praxis associated with these concepts reveal transformative societal movements, being more than ways of knowing the world.

In this context, the importance of the development of praxis, in which individual / society, with their transforming and value-creating potential - intellectual capital (Dumay, 2016), can make available human knowledge and experience in favor of sustainable management of natural capital as limited and irreplaceable (Ekins et al., 2003).

Keywords: Community Environmental Education; Emancipatory Educational Processes; Environment and Sustainability; Collaborative Governance; Dialogue

Biography:

Sílvia Helena Correia Franco has a master's in Science Education, with specialization in Intercultural Education. As a researcher in the Project Urban Boundaries: The dynamics of cultural encounters in communitarian education. (PTDC / CPE-CED / 119695/2010) - supported by the Foundation for Science and Technology, played an active role in Critical Literacy processes and integrated emancipatory education movements. Integrates, since 2010, the GEPEm Pt: Group of Studies and Research in Ethnomathematics of Portugal, connected directly with the GEPEm matrix, headquartered in the Department of Education of the University of São Paulo / Brazil. Member of the Brazilian Urban Boundaries research group at Federal Fluminense University. A long course in education as a teacher and educator in formal, informal and non-formal pedagogical activities brought her closer to the Almada Archaeological Center in the development of activities to promote cultural and natural heritage for the understanding of history and landscape. In the quest for a sustainable environment, saw in the possibility of to be part of the Ocean Literacy Observatory (OLO) - an integrated work group at the Center of Marine and Environmental Sciences (MARE), a possibility for an interdisciplinary work - Education and Environment - for the promotion of inclusive, equitable and sustainable communities.

Participatory mapping and deliberation for the management of marine protected areas

Daryl Burdon, University of Hull, UK

Abstract:

Coastal waters, and the diverse habitats and species they sustain, provide society with food to eat, regulate the climate we live in, breakdown the waste we produce and protect us from coastal erosion and flooding. They provide an inspirational seascape that allows us to play, contemplate and create and are essential for our individual and social well-being. The delivery of these services however is under increasing pressure as a result of both human activities and climate change. International scientific efforts, such as the Millennium Ecosystem Assessment, have focused on understanding the diversity and quality of ecosystem services from the marine environment and how ecosystem services can benefit society. Despite this, there is an evidence gap of how services are identified at the local scale, where benefits are provided and to whom, trade-offs in development decisions and how benefits support well-being. Often the benefits of conservation are poorly understood at the local scale, are not integrated into policy frameworks and are rarely included in public discourse. This paper addresses this disjuncture and responds to the demand for improving dialogue, understanding and access to ecosystem services and linking services to the well-being agenda. This paper supports a shift from testing and development of such approaches to application to real case studies of local and national policy relevance. The results from four stakeholder workshops along the UK North Sea coast (East Caithness, Aberdeen Bay, Humber Estuary and The Wash) will be presented which promote knowledge exchange with local coastal partnerships, community interests, local industries and policy makers, and provide a vehicle to inform marine planning, conservation management and coastal development strategy.

Keywords: ecosystem services; societal benefits; participatory mapping; marine protected areas; coastal developments

Biography:

Initially specialising in estuarine and marine ecology, Daryl has broadened his expertise into the fields of ecological economics, marine governance and management. His research is highly interdisciplinary, linking natural and social sciences, with a particular focus on the development and application of ecosystem service approaches to the estuarine, coastal and marine environment.