

## **Porcupine Marine Natural History Society**

A Society to promote interest in the ecology and distribution of marine fauna and flora of the N E Atlantic.

## **Annual Conference**

On-line conference 2<sup>nd</sup> April 2022

**Back to the Coast?** 

**Programme & Abstracts** 

HMS Porcupine platform constructed and hosted by Lucy and Peter of infohackit:



Delivered on the Gather Town platform:



### **PROGRAMME**

8:30	Gather Town open for Registration
9:30	Introduction and Welcome by Hon Chair Natalie Hirst
9:40	Session 1 Presentations chaired by Liz Morris-Webb
9:45	Assessing the mitigating effects of a telecommunication cable on a <i>Eunicella verrucosa</i> community - Jon Moore
10:00	Questions
10:05	Fantastic benthic beasts and where to find them - Hayden Close (CEFAS)
10:20	Questions
10:25	Tea / Coffee break and breakout
11:00	Navigating Nomenclature in the World of WoRMS (World Register of Marine Species) - Tammy Horton
11:15	Questions
11:20	Field trip update  - North Wales  - SW Scotland
12:00	PMNHS AGM All members welcome
12:40	
	Lunch break, posters, chat
13:15	Poster session – poster owners stand by their posters, if they wish
14:15	Session 2 Presentations chaired by Paul Brazier
14:20	Field trip update – continued
	– North Devon
1.5.00	- South Wales
15:00	Tea / Coffee break and breakout
15:30	Recording Intertidal Marine Isopods - Warren Maguire
15:45	Questions
15:50	Risks in one generation can influence the next: The role of parental and individual experience of risk on the attributes of prey - Simon Karythis
16:05	Questions
16:10	Coccoliths in the Clyde - David Kipling
16:25	Questions
16:30	Lundy Festival field trip announcement – Cat Joniver
16:45	Closing Remarks - Hon Chair Natalie Hirst
17:00	End of Conference
19:00	The great Porcupine on-line quiz – contact <u>conference@pmnhs.co.uk</u>

#### **Abstracts**

# Assessing the mitigating effects of a telecommunication cable on a *Eunicella verrucosa* community

#### Jon Moore

Google's *Grace Hopper* telecommunication cable made landfall in Bude, Cornwall, in September 2021. It crosses a 1.5 km stretch of rocky reef that is colonised by a well-developed benthic community that includes high densities of sea fans. The presentation summarises the results of a post-lay diving survey in October 2021, which described the impacts of the cable on some sea fans and ross corals and successfully translocated seven affected sea fan branches to new locations away from the cable.

# New benthos species records from the English Channel and Celtic Sea from routine fisheries

#### Hayden Close (CEFAS)

The Celtic Sea is a known biodiversity hotspot containing a boundary between temperate and cold-water species with new records being found regularly. Cefas conducts an annual beam trawl survey of the English Channel and Celtic Sea to support the UK fisheries data collection (previously EU DCF). Since 2013, one of the two 4 m beams has contained a 40 mm liner to facilitate the collection of the benthic assemblage. This put Cefas in the unique position to be able to routinely collect benthic organisms found in offshore habitats and in deep water that are not regularly sampled for benthos. This has allowed for previously unrecorded species to the UK be observed, collected and identified such as the starfish *Tethyaster subinermis*, nudibranchs identified as *Kaloplocamus ramosus* but undergoing DNA sequencing, an unknown Pleurobranchaea and the tropical West African parthenopid species *Distolambrus maltzami* of which we provide and updated distribution and taxonomic key for the species which have the potential to be encountered in the south-west.

# Navigating Nomenclature in the World of WoRMS (World Register of Marine Species)

#### Tammy Horton

Most of us have heard of WoRMS, (no, not the wriggly kind, the wonderful **World Register of Marine Species**), and some of you probably consult it to check on the current status of your favourite marine friends. But how does it all work? What do you know of the people behind the database? And what actually is an alternate representation, and why should you care? In this brief talk, I will give you an overview of the database, the people who keep it up to date, show you what it can (and can't) do, and hopefully give you a deeper more 'WoRMS-eye' view of the world of nomenclature.

#### **Recording Intertidal Marine Isopods**

#### Warren Maguire (British Myriapod & Isopod Group)

Around 70 species of isopod occur in the intertidal zone around Britain and Ireland. This is a diverse group of organisms, ranging in size from less than a millimetre up to 5 centimetres and occupying a wide variety of habitats in the intertidal zone. Although these species were included in the British Isopod Group's Isopod Recording Scheme, set up in 1968, this scheme

split in 1970 into the Marine Recording Scheme and the Non-Marine Recording Scheme. The Non-marine Isopod scheme has continued to this day, run by the British Isopod Group's successor organisation, the British Myriapod & Isopod Group (BMIG; www.bmig.org.uk), but the Marine Isopod scheme was discontinued due to few records being submitted and the difficulty of verifying records remotely. The demise of the Marine Isopod Recording Scheme was unfortunate as this fascinating group of organisms has remained under-recorded, despite ongoing collection of records by the scheme's original organisers and others over the years. In 2020, BMIG (re)launched a scheme for recording intertidal marine isopods, run by Warren Maguire. The scheme, which covers Britain and Ireland and their associated islands, is gathering and verifying records of intertidal marine isopods, especially via the iRecord website (irecord.org.uk). This presentation introduces the new BMIG Intertidal Marine Isopod recording scheme, highlights BMIG's online support materials, and briefly discusses finding and identifying marine isopods.

# Risks in one generation can influence the next: The role of parental and individual experience of risk on the attributes of prey

#### Simon Karythis

The impacts predators have on prey and the ecological systems they inhabit are indisputable, and as such are one of the corner stones of ecological research. The effects of predators are not restricted to simply consuming prey, with the threat of being eaten providing enough of a selective pressure to indirectly influence them. Once a predator is detected, prey may alter their behaviour to reduce the chance of being detected, force them to use lower quality areas to feed or cause a stress response (fight or flight) with substantial impacts on how they utilise their energy. These indirect effects on the behaviour and physiology of prey can have profound implications on the growth and fitness of prey. Due to this considerable influence on an organism's fitness, most prey are not passive in their interaction with predators, instead able to adapt various behavioural and physiological attributes to minimise potential negative impacts. These antipredator responses can be further complicated by the ability of some parents to influence these antipredator responses of subsequent generations via parental effects. In cases where the risk environment is similar between parents and their offspring, there is an adaptive benefit for parents to inform their offspring to be best prepared for the likely risks they may encounter. I will be presenting aspects of my PhD thesis (in press) which look at the importance of parental and individual experience of risk in the responses of prey. Using a snail-crab-mussel system, I will talk about how each generation's experience of risk helps shape the growth and energetics of prey in this system. I will argue that the role played by parental and individual experience of risk follow a hierarchy of threat and that the role played by each depends on the threat they face.

### Coccoliths in the Clyde

#### David Kipling

The summer of 2021 saw the Firth of Clyde, to the west of Glasgow turn turquoise. This was a result of a dramatic bloom of the coccolithophore *Emiliania huxleyi*. As luck would have it, a group of Seasearch divers had arranged to dive around the Isle of Arran over the same period and were able to witness first-hand the impact of the bloom on the marine life. This talk will give a brief background to coccolithophores, including the history of their discovery and the role of HMS Porcupine in that, before bringing you up to date with our field observations of diving on an inshore rocky reef during a coccolithophore bloom.

### **Posters**

#### **Biological reference collections in Spain**

Dr Elena Guerrero Guerrero (Marine Science Institute (ICM), Spanish National Research Council (CSIC)

#### Wembury Marine Centre and Devon Wildlife Trust video (Video)

Paul Naylor (marinephoto)

#### Natur am Byth

Bridget Orchard (MCS)

#### **Shoresearch north Wales**

Dawn Thomas (NWWT)

#### What can the UK learn from Sussex's inshore bottom trawling ban? (Video)

Melissa Moore

#### Controlling an invasive species with the participation of the local community

Periklis Kleitou (Univ of Plymouth)

#### **Lundy Marine Festival**

Robert Irving

#### Rocky shore of West Runton, Norfolk

Elizabeth Beston

#### **Sandeels**

**Becky Hitchin** 

#### **Great British Marine Animals – book available**

Paul Naylor (marinephoto)

### Porcupine Marine Natural History Society 45<sup>th</sup> Annual General Meeting AGENDA

#### Saturday 2<sup>nd</sup> April 2022 – held online via Zoom

- 1. Apologies for absence.
- 2. Matters arising from, and agreement of, the Minutes of the 44th Annual General Meeting held online, as published in the PMNHS Bulletin, Autumn 2021 Number 16.
- 3. Officers' Reports:

The Hon. Treasurer's Report

The Hon. Membership Secretary's Report

The Hon. Editor's Report

The Hon. Website Officer's Report

The Hon Records Convenor's Report

The Hon. Chair's Report

4. Announcement of winners of Porcupine grants:

Roger Bamber Research Grant

Frank Evans Writing Award

5. Election of Officers and Council.

The CURRENT Council for 2021-22 is as follows:

Office Bearers: Ordinary Members of Council:

Hon. Chair Natalie Hirst Paul Brazier

Hon. Secretary Sarah Bowen Teresa Darbyshire

Hon. Treasurer Fiona Ware

Hon. Editor Vicki Howe

Hon. Membership Secretary Roni Robbins

Hon. Records Convenor Julia Nunn

Iain Dixon

Winter Dotto

Matt Green

Jon Moore

Hon. Website Officer Tammy Horton Cat Joniver

#### PROPOSALS for election/re-election to Council and office bearers:

Natalie Hirst (Hon. Chair) is standing down and is NOT available for re-election.

Tammy Horton (Hon. Website Officer) is standing down and is NOT available for re-election to this post but wishes to stand as an Ordinary Member.

Roni Robbins (Hon. Membership Secretary) is standing down and is NOT available for reelection to this post but wishes to stand as an Ordinary Member.

Teresa Darbyshire and Matt Green are standing down by rotation and both are available for reelection.

#### New nominations received:

Hon. Chair: Paul Brazier

Hon. Membership Secretary: Jon Moore Hon. Website Officer: Cat Joniver

#### **Ordinary Members:**

Laura Hanley

Liz Morris-Webb

Becky McDonald Lofts

**Tammy Horton** 

Roni Robbins

6. AOB