



# COMMUNITY LEADERSHIP OVERVIEW AND SCRUTINY COMMITTEE

AGENDA

<b>DATE:</b>	<b>Tuesday, 28 January 2025</b>
<b>TIME:</b>	<b>7.30 pm</b>
<b>VENUE:</b>	<b>Town Hall, Station Road, Clacton-on-Sea, CO15 1SE</b>

**MEMBERSHIP:**

**Councillor Steady (Chairman)**  
**Councillor Barrett (Vice-Chairman)**  
**Councillor Davidson**  
**Councillor Doyle**

**Councillor Ferguson**  
**Councillor Griffiths**  
**Councillor Oxley**  
**Councillor Platt**

**Most Council meetings are open to the public and press. The space for the public and press will be made available on a first come first served basis. Agendas are available to view five working days prior to the meeting date and the Council aims to publish Minutes within five working days of the meeting. Meeting papers can be provided, on request, in large print, in Braille, or on disc, tape, or in other languages.**

**This meeting will be filmed by the Council for live and/or subsequent broadcast on the Council's website. The whole of the meeting will be filmed, except where there are confidential or exempt items, and the footage will be on the website for up to 24 months (the Council retains one full year of recordings and the relevant proportion of the current Municipal Year). The Council will seek to avoid/minimise footage of members of the public in attendance at, or participating in, the meeting. In addition, the Council is obliged by law to allow members of the public to take photographs, film, audio record and report on the proceedings at public meetings. The Council will only seek to prevent this should it be undertaken in a disruptive or otherwise inappropriate manner.**

**If you have any queries regarding webcasting or the recording of meetings by the public, please contact Keith Simmons Email: [democraticservices@tendringdc.gov.uk](mailto:democraticservices@tendringdc.gov.uk) or Telephone on 01255 686580**

DATE OF PUBLICATION: Monday, 20 January 2025

## AGENDA

### **6 Report of the Assistant Director of Housing and Environment - Water Quality in the Tendring District (Pages 5 - 12)**

As set out in the Committee's approved Work Programme, this Committee's meeting is to undertake (at this meeting) an enquiry into water quality. This report is intended to support this enquiry. In addition relevant invitees will be present to assist the Committee's enquiry.

### **Date of the Next Scheduled Meeting**

*The next scheduled meeting of the Community Leadership Overview and Scrutiny Committee is to be held in the Town Hall, Station Road, Clacton-on-Sea, CO15 1SE at 7.30 pm on Tuesday, 15 April 2025.*

## **Information for Visitors**

### **FIRE EVACUATION PROCEDURE**

There is no alarm test scheduled for this meeting. In the event of an alarm sounding, please calmly make your way out of any of the fire exits in the hall and follow the exit signs out of the building.

Please heed the instructions given by any member of staff and they will assist you in leaving the building and direct you to the assembly point.

Please do not re-enter the building until you are advised it is safe to do so by the relevant member of staff.

Your calmness and assistance is greatly appreciated.

# Managing the environmental impact of antifouling biocides in recreational marinas through stakeholder engagement

Nick Aldred and Jacob Cook  
School of Life Sciences, University of Essex

# Introductions

## Jacob Cook:

- Locally-based University of Essex BSc Marine Biology undergraduate.
- Relevant experience from final year undergraduate research project, supervised by Nick Aldred.
- Now registered for PhD studentship under the Leverhulme Trust Sustainable Transitions Program within the School of Life Sciences and Department of Government.



## Nick Aldred:

- Senior Lecturer in Marine Biotechnology, School of Life Sciences, University of Essex.
- 20 years of experience working in research and development of marine antifouling technologies
- Working with the marine paints industry (International Paint), governments (MOD, US Dept. Defense), charities and other stakeholders.



# Antifouling History

- Use of antifoulants spans more than 2000 years of history, initially with the use of lead and copper sheets.

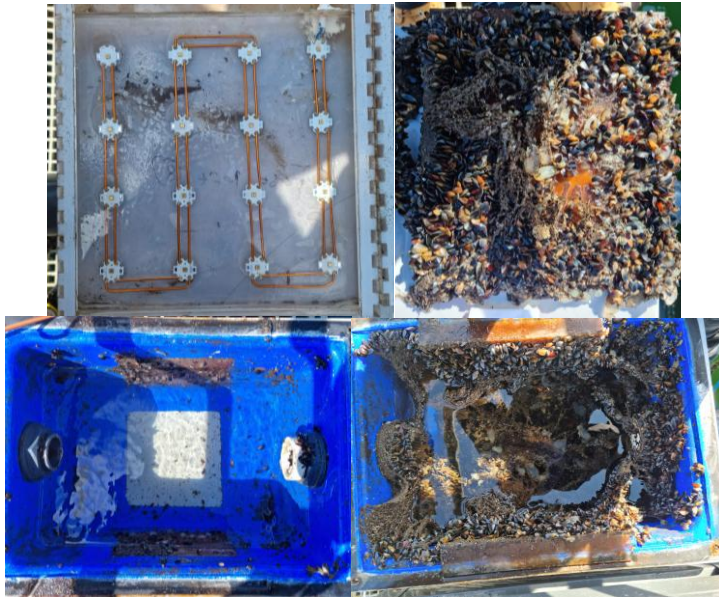


**Genesis 6:14:** “...make yourself an ark of gopher wood...and cover it inside and outside with pitch.”

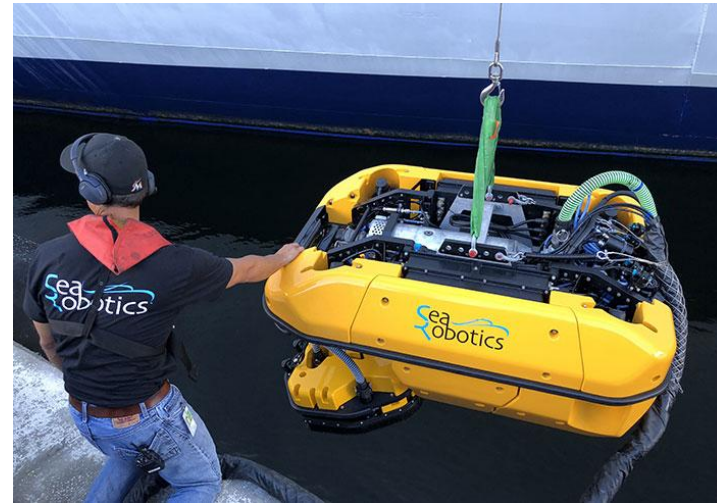
- The antifouling coating market is worth around \$4B USD per year.
- 42 million litres of paint in 2014.
- Shipping accounts for around 3% of GHG emissions.
- The 15 largest cargo ships emit more GHGs than all of the cars in the world combined.

Timeline	Major events
1500–300 BC	Use of lead and copper sheets on wooden vessels
1800–1900s	Heavy metals (copper, arsenic, mercury) incorporated into coatings
1800s–present	Continued use of copper in AF coatings
1960s	Development of TBT conventional coatings
1974	Oyster farmers report abnormal shell growth
1977	First foul release AF patent
1980s	Development of TBT SPC coatings allowed control of biocide release rates
1980s	TBT linked to shell abnormalities in oysters ( <i>Crassostrea gigas</i> ) and imposex in dogwhelks ( <i>Nucella lapillus</i> )
1987–90	TBT coatings prohibited on vessels <25 m in France, UK, USA, Canada, Australia, EU, NZ and Japan
1990s–present	Copper release rate restrictions introduced in Denmark and considered elsewhere e.g. California, USA
2000s	Research into environmentally friendly AF alternatives increases
2001	International Maritime Organisation (IMO) adopts “AFS Convention” to eliminate TBT from AF coatings from vessels through:
	2003 – prohibition of further application of TBT
	2008 – prohibition of active TBT presence
2008	IMO “AFS Convention” entered-into-force

## Modern Alternatives (but not for everyone!)



UV-C emitting LEDs



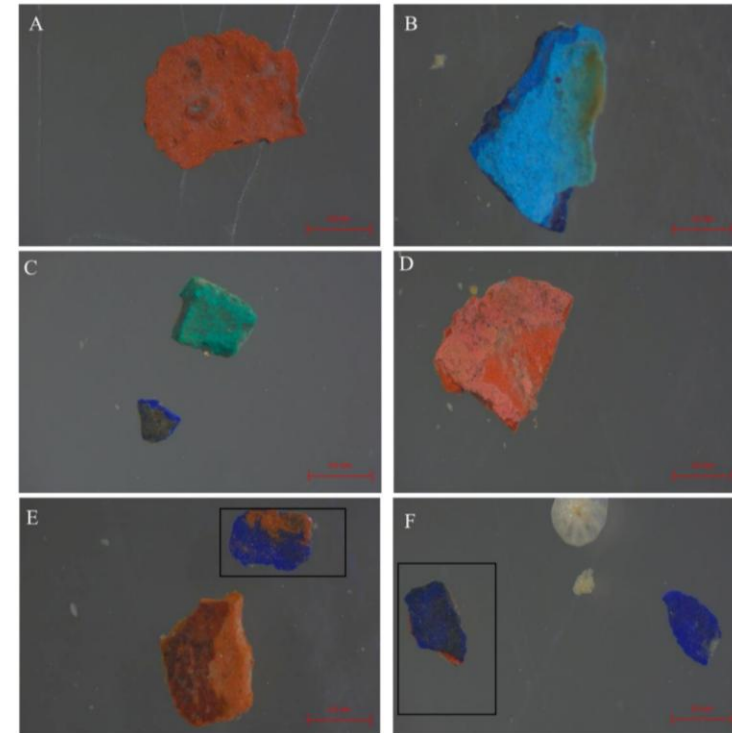
Hull grooming robots





## Environmental Concerns

- Antifouling coatings are toxic (mostly).
- Biocides released from coatings enter the environment during normal boating activity:
  - Less problematic with newer / more expensive formulations.
  - You get what you pay for in terms of (reduced) environmental impact.
- Paint particles (containing biocide) enter the environment during cleaning:
  - More persistent in particulate form.
  - May contain legacy coatings, unavailable today.
- Immediate effects may be local, but sediment moves.
- There is evidence that marine communities are affected.
- Paint particles are among the largest inputs of plastics into the ocean, and the only plastic designed to be toxic.







**Boat moored to the posts**

## Study Design



- 3-Year project (immediate results unlikely....)
- **General aims:**
  - Identify the best / most effective products and best practice to improve outcomes for boat owners and also protect environmental health.
  - Build a scientific knowledge base about local impacts of antifouling practices from recreational boat use.
- **Approach:**
  - Collect samples from boat hulls and cleaning waste, from vessels with different operational cycles, maintenance practices and needs.
  - Environmental sampling in the local area. What is the current status?
  - Laboratory and field studies of paint effects. Should we be concerned?
  - Gather data from boat owners on opinions, priorities, costs and usage.
  - Engaging with boat owners to learn about challenges, opportunities and acceptable changes to routine practice.
- **First steps:**
  - We need your help!