

Solent News

The newsletter of the Solent Forum

Issue 45: Winter 2018/19

Inside this issue...

- Latest news from the Solent Forum
- Litter campaigns
- Oil spill response training in Bembridge Harbour
- ABP Southampton Air Quality Strategy
- New fisheries landing obligation and catch recording requirements
- Marine autonomy and technology showcase
- Carbon monoxide alarms on boats
- Artecology feature on BBC's Countryfile
- Reducing coastal risks on the Isle of Wight
- Solent Protection Society submit evidence to the Landscape Review
- Ecological dive surveys in Chichester Harbour
- Secrets of the Solent call for marine champions
- Bird Aware Solent wins awards
- Managing the coast in a changing climate
- Royal naming for Wightlink's new flagship
- Coastal Revival funding awards
- Forgotten wrecks of WW1
- Rat Island prisoners

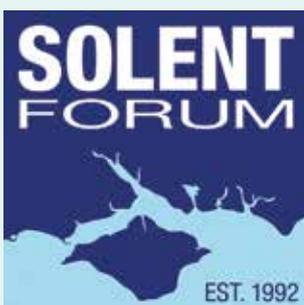


Image courtesy of ABPmer

BUDS Phase Two Awarded Funding

The Solent Forum is pleased to announce that phase two of the Beneficial Use of Dredge Sediment (BUDS) project will be carried out in early 2019. This has been made possible by funding from the Environment Agency and the continuing support received from a range of partners.

The BUDS project was initiated in 2017. There has long been a strong desire amongst Solent Forum members to find solutions to the many barriers which are preventing the effective use of dredged material augmenting Solent intertidal sites, and providing other secondary benefits, such as enhanced coastal protection.

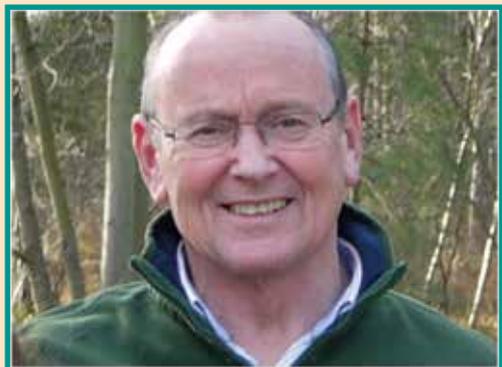
BUDS phase one involved a strategic review to identify sites that would gain most from a major 'beneficial use' campaign. This was completed in March 2018 and it concluded that the 'stand out' candidate site, where the greatest benefits could be realised, was the marshes fronting Lymington and Keyhaven. The phase one outputs are available to download at: www.solentforum.org/services/Current_Projects/buds/.

Phase two will involve investigating, in detail, the site-specific issues, methods and costs associated with a recharge initiative in the western Solent. Particular consideration will be given to examining the societal benefits; these need to be very clearly recognised and promoted if we are to realise, and fund, our ambitions for halting or reversing the decline of the Solent's valuable marshes.

The Solent Forum will manage the project and continue to lead on stakeholder engagement. ABPmer will be contracted to conduct the remainder of the work. Early this year, a range of meetings and workshops will be held to help deliver phase two and scope phase three. This last phase will see the implementation of an intertidal recharge scheme using dredged material from the Solent. If you would like to be involved with phase two of the project then please contact the Forum Office.

News from the Forum

Chairman's Column



Peter Barham

Although we still seem to be facing uncertainty about the future of Brexit, Government are going ahead with preparations for the EU Exit to happen. This includes Statutory Instruments, that will transfer the current obligations of the EU to the UK, in administering legislation such as the Habitats and Environmental Impact Assessment Directives. The Government has already made it clear that this will also require a new environment body to administer those functions that were previously undertaken by the EU, including referral to the European Court of Justice if needed, and that the new body will act independently of Government.

Many people have been concerned that, in carrying out all this activity, the Government may reduce the strong environmental protection EU Directives require. Having seen the draft Statutory Instruments and talked at length with Defra, I am very reassured that there will be no decrease in commitment to the environment post Brexit. This view is supported by the increasing references to the need for net environmental gain, when carrying out new activity in the coastal and marine environments. This is a principle that has been suggested for some time, but was a highlight of the '25 Year Environment Plan' Government launched earlier this year. It makes a commitment that we should not just protect the environment, but work towards improvement and restoration. As yet we do not know what net environmental gain would look like or how it would be legislated for, but the fact that all this is being looked at in depth is encouraging and it will be important to see how this develops as time goes by.

By definition, and through the quality and experience of the team here, the Solent Forum has a wide understanding of the Solent, of the environmental pressures it faces and an excellent knowledge of who is doing what. Consequently, the Forum could play a significant role in helping to

determine how the principle of net gain could be best applied in the Solent; we will be more than happy to work with others to help plan and deliver real environmental solutions as part of new development.

Finally, 2019 will be an important year for the Forum as we start work on new projects as well as carrying out all the existing core work that is so important to Solent stakeholders. At the same time, the MMO has launched its Marine Plan for the South. We will be working with them to assist in the delivery of the Plan and making it more available and accessible to people who would not normally be aware that such plans exist, but who should have a real involvement in how the Plans deliver for the future of the Solent.

Solent European Marine Sites

On behalf of the Solent European Marine Sites (SEMS) Management Group (MG), the Solent Forum carries out an annual online monitoring survey of the activities that take place within the SEMS. The survey for 2018 took place from 1 March to 13 April 2018. The results were analysed last summer and the findings were reported to the SEMS MG annual meeting in September. The resulting Annual Monitoring Report (AMR) 2018 was published in early November and can be viewed at www.solentems.org.uk.

The Natural Environment Group (NEG), for which the Solent Forum provides the secretariat, met in November 2018. This group takes forward actions identified in the SEMS annual monitoring and looks to assist and further other environmental work taking place around the Solent.

At the November meeting, the group received a presentation from Natural England discussing the Solent Maritime SAC Condition Assessment and the need to improve water quality in the Solent. A second talk heard about the latest work of Green Blue, a joint initiative run by the Royal Yachting Association and British Marine Federation. The group also received updates on NEG projects and meetings attended by Solent Forum staff.

NEG will shortly be holding a call for the next round of environmental projects to fund in Spring 2019. Find out more at: www.solentems.org.uk/natural_environment_group/NEG_Projects/. The group will next meet in spring 2019 where it will allocate funds for this financial year.

MMO Enhancing Stakeholder Engagement Project

As part of the Marine Management Organisation (MMO) Enhancing Stakeholder Engagement Project (ESEP), which the Solent Forum is currently undertaking, in October the Forum ran a joint workshop with the MMO. The workshop was well attended with a wide range of stakeholders from different coastal sectors.

Workshop task one focused on what people know about marine planning to date and where their information has come from. Task two focused on how the MMO can engage stakeholders in marine plan implementation and monitoring.

The ESEP will be ongoing throughout 2019, and we will be looking to work with people around the Solent to help explore and deliver some of the workshop findings. Follow progress at: http://www.solentforum.org/services/Current_Projects/MMO_ESE/.

News from the Forum

Opportunity Mapping in Southampton Water

Southampton Water is a heavily modified water body (HMWB); such water bodies are unlikely to reach good ecological status due to socio-economic uses. To help maximise the ecological potential of Southampton Water, the Environment Agency (EA) developed an Opportunity Mapping project. This began with the establishment of a database, sourced from aerial photography, that maps coastal structures, such as seawalls and jetties, throughout Southampton Water where mitigation (removal, restoration, or ecological enhancement) measures could be considered.

All the structures identified from the photography were mapped in GIS and an aerial image of each has been drawn. The maps and images can be viewed at: www.solentforum.org/services/Current_Projects/oppmap/Consultation/. The structures have been broken down into the three river catchments covered by Southampton Water: Test and Itchen, New Forest and East Hampshire.

The Solent Forum has been contracted by the Environment Agency to consult on the structures identified, this consultation will run until March 2019. It is being undertaken in three phases:

1. We will contact and ask those with potential local knowledge of the structures whether they are still in use, if they know whether they have any historical or ecological value and if they can identify the landowner.
2. Work with archaeological bodies to establish the best mechanisms to determine how people can identify if structures have historic value, for example, what to look for and where to go for more information.
3. Work with nature conservation bodies and those with experience of ecological enhancement to look at the different types of structures, for example, slipways, for the different habitat types mapped in Southampton Water, for example, saltmarsh. Agree general principles on whether it is better to leave structures in situ, remove them, remove and undertake remedial work or identify opportunities for ecological enhancement.

To view the consultation please visit: www.solentforum.org/services/Current_Projects/oppmap/Consultation/. If you have any information on the structures identified please follow the instructions on this page, we would welcome your comments.

Once this consultation has taken place, a revised list will be made available, in the future this can be used as a basis for ground-truthing and consultation with landowners. Eventually it is hoped that this list will be released to developers, local authorities, port and harbour authorities and the EA's Flood and Coastal Erosion Risk Management who need to undertake mitigation measures for Water Framework Directive Assessments as part of proposed works or development.

Information Hub for Blue Green Coastal Infrastructure

The Solent Forum has been liaising with Forum member, Artecology, to look at the possibility of establishing an information hub on blue-green infrastructure and net environmental gain in the Solent as a service for its members.

The Solent has all the key issues that need to be considered in developing ecologically sound coastal infrastructure, and would provide a useful pilot for the rest of the country. It has major infrastructure such as roads, rail, airports, ports, water treatment works and energy provision alongside dense centres of population that further increase through the summer tourist season. This is backed by a tight urban boundary with intensive and extensive agriculture, significant competing economic interests, multi-designated sites of environmental protection, and a strong set of academic institutions.

It has to contend with the host of urban coast issues such as flood defence, water and air quality, developable space, coastal squeeze, loss of biodiversity, economic disparity and fragility and transitions in coastal land use and land management.

Ideas that the hub could provide information on include ecological design for new infrastructure, the construction and design of habitats and natural systems to recover, repair or sustain flood defences, boosting biodiversity, growing fisheries, and improving air and water quality. It could also help to drive research and innovation and field test new ideas for deployment.

The Forum has already begun to deliver on this topic by working with the Environment Agency to publicise existing work on ecological enhancement of the coast, see: www.solentforum.org/solent/managing_our_coast/coastal_defence/Ecological_Enhancement/.

Forum members that would be interested in helping to further this idea or join a project group, please email the Solent Forum Office at info@solentforum.org with your details.

Plastics & Litter

Keep it, Bin it: Anti-littering Campaign

The new Keep it, Bin it campaign is calling for an end to rubbish excuses for littering and encourages people to responsibly dispose of their litter. It is one of the largest government-led anti-littering campaigns to date. Government has joined forces with environmental charity Keep Britain Tidy, to partner with leading brands across a range of sectors to run the campaign. Tackling litter is a Government priority, set out in its Litter Strategy for England and the 25 Year Environment Plan.



As well as the environmental cost, littering also brings with it a huge financial cost. Keeping the country's streets clean cost local government almost £700 million last year in England, much of this spent cleaning up avoidable litter. Millions of pieces of litter are dropped every day in England. Eighty percent of the plastics found in the marine environment come directly from the land.

The Government wants to make littering culturally unacceptable within a generation, with the initial focus on 16 to 24 year olds. Evidence suggests this age group is more likely to drop litter. The Government also recently launched a consultation on banning the sale of plastic straws, plastic-stemmed cotton buds and stirrers, and will consult on introducing a deposit return scheme for single use drink containers soon.

The Government are keen to hear from commercial and charitable organisations that are interested in joining this campaign, email the partnerships team at: Litter@defra.gov.uk to express an interest. Find out more about the campaign at: <https://www.facebook.com/DefraGovUK/videos/580427345716213/>.

Recycled Plastic Boat Goes 'plastic fishing'

Nearly a year on from the launch of the world's first boat made from Plaswood, an one hundred percent recycled plastic product manufactured by 'RPC bpi Recycled Products', a second boat has been commissioned and launched, the start of a fleet of litter-collecting punts across the UK.

Named 'Poly-Mer' and 'PET Project' the two 12-seater punts were the idea of environmental charity, Hubbub, and built by Mark Edwards MBE, who built HM The Queen's barge, 'Gloriana'. Hubbub's aim was to find a creative way to raise awareness of the growing levels of plastic pollution in the UK's waterways.

Today Poly-Mer and PET Project run regular 'plastic fishing' trips in the waters around London's Docklands, not just for pupils, but for the wider public and businesses interested in taking part in tackling the issue; all the recyclable material collected is used to build more polymer boats.

The boats are built using modern and ancient materials. The main component is the state of the art material Plaswood, a high performance lumber made from 100% recycled plastic that is impervious to the influence of water and therefore will not rot, splinter, crack or degrade with age. Unlike conventional wood, traditionally used in boat building, Plaswood requires no annual maintenance, staining or painting. The Plaswood lumber is held together with copper nails, invented by the Vikings and used in the building of Long Ships over 2,000 years ago. Find out more at: https://www.youtube.com/watch?v=qxzwB9z_Wcs.

25th Great British Beach Clean

The Marine Conservation Society have reported that their Great British Beach Clean, run in partnership with Waitrose, was the biggest mass participation beach clean and survey event in the UK. The charity says the event, held over four days in September, involved just short of 15,000 volunteers, double the number in 2017.

A total of 8,550 kilogrammes of litter was picked up across the whole of the UK. Volunteer cleaners picked up an average of 600 items of litter for every 100 metres of beach surveyed. But although the volunteer number and events rose, the amount of litter collected actually dropped. On average, for every 100 metres of the UK coastline cleaned, there were:

- 189 plastic or polystyrene pieces
- 38 plastic caps and lids
- 21 cotton bud sticks
- 16 drinks bottles and cans
- 12 wet wipes
- 5 plastic bags
- 3 plastic or polystyrene cups

Find out more at: <https://www.mcsuk.org/beachwatch/greatbritishbeachclean>.

Environmental Quality

Oil Spill Response Training in Bembridge Harbour

The Maritime & Coastguard Agency (MCA) held a Beach Supervisors Training Course in Bembridge Harbour on 14 and 15 November. Hosted by the Isle of Wight Council in conjunction with Bembridge Harbour Authority (BHA), operational and technical support came from Braemar Response Ltd, who provided specialist personnel and equipment.

Representatives from the Environment Agency, Natural England, the National Trust, BHA, local sailing clubs and parish councils, the RNLI, Island Roads, Amey, local authorities and other organisations from Hampshire attended the course at Bembridge Sailing Club.

Classroom sessions on day one featured maritime oil spill contingency planning and methods of response, such as booming, inshore recovery, shoreline clean up, the management of oily waste and health and safety.



Photo courtesy of Bembridge Harbour Authority

Day two's practical exercise involved the deployment of two orange inflatable booms, 330m and 150m long, effectively closing off the Entrance Channel, thereby protecting the inner harbour from incoming oil and deflecting it to nominated collection areas.

Bembridge Harbour is of great significance for nature conservation. It is classified as a Site of Special Scientific Interest, is part the Solent Maritime Special Area of Conservation and Solent and Southampton Water Special Protection Area.

The Harbour Authority recognises its responsibility to help protect and manage this unique and sensitive area. Its oil and chemical spill contingency planning seeks to ensure a timely, measured and effective response to pollution incidents. This is the first time a training exercise of this kind has taken place in the Harbour. Operations and Safety Manager, Gordon Wight, was delighted to confirm that as a result, the Harbour's Oil Spill Contingency Plan was validated as being effective and valuable knowledge was gained over the two days that will further inform and develop its contingency planning.

ABP Southampton Air Quality Strategy

Last June, ABP Southampton launched its new Air Quality Strategy which sets out a package of proposals to accelerate improvements in air quality around the port. The Strategy aims to accelerate progress to deliver clean air in the city working with Southampton City Council and the Government. The proposals set out plans to continue the trend of reducing emissions in the city without the need for a city-wide charging regime. Based on its monitoring results, the City Council has developed a Clean Air Strategy for 2016-2025 to work with residents and businesses to clean up the city's air. In addition, the Government has asked all ports to produce air quality plans by spring 2019.

The port has made significant investments to enhance air quality in and around the port introducing electric vehicles, free to use charging points and cycle lanes together with improvements to the rail and road networks. It has reduced its energy consumption by twenty five percent over the past ten years, against a significant increase in port activity, and it generates about twenty percent of its energy through solar power.

Future proposals include introducing a green tariff for cleaner ships, trialling hybrid patrol vessels and seeking to be the first UK port to have shoreside power for cruise ships.

In 2019, ABP will be publishing a port sustainability report for the Port of Southampton, where you will be able to hear more about its long-term plans and targets.

Read the Air Quality Strategy at: http://www.southamptonvts.co.uk/Port_Information/Sustainability/.

Fisheries

Discarding and the Landing Obligation

The reform of the Common Fisheries Policy (CFP) in 2013, aimed to gradually eliminate the practice of discarding fish through the introduction of a landing obligation. Discarding is the practice of returning unwanted catches to the sea, either dead or alive, because they are undersized, due to a lack of market demand, or the fisherman has no quota to land the catch.

The final phase of the landing obligation, also known as the 'discard ban', came into force on 1 January 2019. Under the full discard ban, fishermen must retain and land all quota species; non-quota species can continue to be discarded as can any fish that may represent a health hazard.

This is the final phase of the discard ban which will bring an end to the practice of throwing dead fish back into the sea. The landing obligation was initially introduced in January 2015 for certain pelagic fisheries.

There are also a number of specific gear technical requirements being introduced in 2019. These are mandatory for some Irish Sea fisheries from 1 January 2019 and for Celtic Sea fisheries from 1 July 2019. In addition, other optional technical gears can be used if fishermen want to meet exemptions which allow fish to be discarded.

Find out more at: https://ec.europa.eu/fisheries/cfp/fishing_rules/discards_en.

New Catch-Recording Requirements

The MMO is preparing to consult on introducing a requirement for under ten metre vessels (the majority of the fishing fleet) to record their catch, both quota and non-quota, to give it a much clearer picture of how much fish are being taken from our seas.

With the help of individual fishermen at ports across the UK, the MMO has developed an app that can be used on a smartphone, tablet or computer to record their catches.

Combined with data from inshore vessel monitoring, the catch-recording information can be used to trial new ways of managing fishing opportunities. This should:

- Lead to fairer more efficient fisheries management;
- Protect the rights of fishermen;
- Allow skippers to demonstrate their track record more easily; and
- Prove that the UK is taking appropriate steps to fish more sustainably, which is key to positive marketing for commercial fishing.

Rules of Origin Resource

Seafish has released a new resource to support the seafood production industry in preparing for trade issues around Brexit. The Rules of Origin and EU/UK Free Trade Agreements information note summarises a report prepared by Global Counsel, which proposes how Rules of Origin could work in a Free Trade Agreement (FTA) between the UK and the EU.

The information note provides an overview of how Rules of Origin could impact on the seafood industry; specifically it:

- Discusses how fish caught in UK waters will likely be treated and the trade implications for seafood products manufactured in the UK;
- Explains how Rules of Origin could work under a UK/EU FTA and their potential implications for UK production and trade; and
- Discusses how these potential issues could be managed.

The draft protocol is currently being considered by central government. Subject to agreement, Seafish expects government to consult with the wider group of UK food and drink trade associations and their EU counterparts on the proposal.

View the Note at: <https://seafishapi.fantata.co/index.php/file/4945>.

New Fisheries Funding Scheme

The Government has committed to put in place new, domestic, long-term arrangements to support the UK's fishing industry from 2021, through the creation of four new schemes comparable to the European Maritime Fisheries Fund (EMFF).

The new schemes will be introduced after EMFF has closed in 2020. More details will be set out in the 2019 Spending Review. In England, the scheme will:

- Support innovation in technologies to enhance economic growth, reduce environmental impact and improve fishing safety;
- Improve port infrastructure, so more fish can be landed in UK ports, and help the sector take advantage of new export opportunities after exit;
- Boost coastal communities by providing benefits to areas that depend on a vibrant and profitable industry; and
- Help the sector adjust to new arrangements on access and fishing opportunities by improving capacity and capability to exploit new export opportunities and markets.

Marine Industries

Marine Autonomy and Technology Showcase

In November, the National Oceanography Centre (NOC) hosted the Marine Autonomy and Technology Showcase 2018 (MATS-2018). It welcomed hundreds of delegates from across industry, academia, government, defence and beyond to the Southampton waterfront site.

MATS-2018 was the fourth annual event focusing on the present and future of marine autonomous technology. Attendees came from a wide range of sectors and organisations, including research centres, universities, multi-national corporations, SMEs, and government departments and agencies. It enabled technology manufacturers and developers to meet with scientists, researchers and other end-users.



ecoSUBm25 (Small-AUV)

Photo courtesy of National Oceanography Centre

MATS-2018 opened with a keynote speech from Major General Robert Magowan CB, CBE, RN, who highlighted the Royal Navy's growing interest in marine autonomous systems across a range of operational disciplines. The NOC's Head of Marine Autonomous Systems Development, Dr Alex Phillips, delivered a presentation on the Oceanids programme. Funded by the Government's Industrial Strategy Challenge Fund, it is enabling the development of pioneering marine autonomous platforms that will allow scientists to explore further and deeper into our oceans, tackling the biggest environmental challenges facing the planet.

Autonomous vehicles can be deployed and remain at sea for several months, recording data and then transmitting it back to shore when they surface. With so many questions about the physical, chemical and biological processes in our oceans, autonomous vehicles can provide valuable answers.

New and innovative autonomous vehicles being developed at the NOC are pushing the limits on how it can explore our oceans, with capabilities allowing scientists to reach new depths, travel under ice, take readings in remote areas and collect data during high sea states.

Carbon Monoxide Alarms on Boats

Following the public consultation in Autumn 2018 on proposed changes to the Boat Safety Scheme, (BSS) the BSS Management Committee has decided that new BSS Requirements for carbon monoxide (CO) alarms on boats will be introduced from April 2019.

All boats with accommodation spaces subject to the BSS will see mandatory checks introduced for suitable CO alarms in good condition and in appropriate locations. The requirements are designed to keep people on and around boats safe.

As well as protection from neighbouring boats, the CO alarms are also expected to prevent death or injury to boat owners from their own boat engines or appliances. The alarms will warn people in the area about immediately dangerous levels of CO. They can also alert craft occupants to moderate levels of CO, which can be a long-term threat to health if left undetected.

The BSS will be publishing the new checks in detail shortly on its website at: [https://www.boatsafetyscheme.org/stay-safe/carbon-monoxide-\(co\)](https://www.boatsafetyscheme.org/stay-safe/carbon-monoxide-(co)).

Fifth Annual Marine Aggregates Report

The Crown Estate has published its fifth annual Marine Aggregates Capability & Portfolio report, providing an annual summary of current aggregate extraction activity offshore, as well as future resource from the seabed around England, Northern Ireland and Wales.

Key highlights from the report, which covers the calendar year 2017, are shown below:

- Aggregate exports to mainland Europe increased by 11% over the year, from 2.8 million tonnes to 3.1 million tonnes;
- Total extraction volume in 2017 was 19.0 million tonnes, a slight increase from 18.8 million tonnes the previous year, with 72% of total demand met from extraction in the southeast of England; and
- The industry currently has statutory planning permission to extract a total of 38.5 million tonnes per year and permitted national reserves total 343Mt, providing a 21 year life at ten year average extraction rates.

Read the report at: <https://www.thecrownestate.co.uk/media/2753/2018-the-crown-estate-marine-aggregates-report.pdf>.

Coastal Management

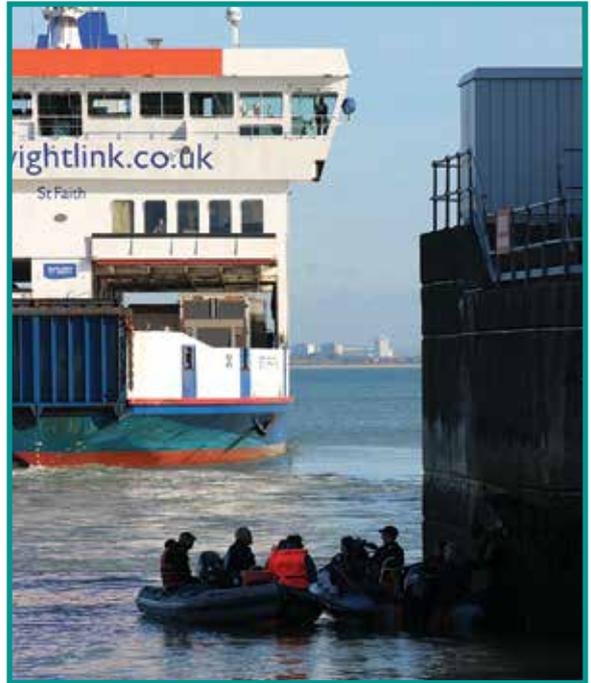
Artecology Feature in BBC Countryfile's Coastalfile

Artecology, based on the Isle of Wight, were featured on BBC's Countryfile on 9th December. With presenter Margherita Taylor at the helm, BBC Countryfile joined the Artecology team to find out more about the coastal side of its biodiversity portfolio, looking at its work in the Solent and its Science Beach in Sandown Bay.

The camera crew headed out with Artecology's Ian Boyd to see how its artificial rockpools (Vertipools) at the Wightlink ferry port are bringing marine wildlife to blank walls. They also explored how artists Nigel and Hannah George employ paper-folding, material expertise and hands-on sculptural making techniques to transform concrete into a beautiful and bio-receptive habitat.

Working with UK universities, Artecology is creating systems for bioactive building and development, including new construction and landscaping materials and designs that deliver enriched environments for wildlife and people alike. It collaborates with leading researchers and industry to develop policy and practice in green-grey infrastructure and asset resilience, bringing forward successful solutions for built environments. Find out more at: <http://www.artecology.space/>.

View the Countryfile programme at:
<https://www.bbc.co.uk/programmes/b0bvgw3r>.



*Filming for Countryfile
Photo courtesy of Artecology*

Offshore Overfalls Survey

At the start of the year, officers from JNCC and Cefas joined the RV Cefas Endeavour and set sail to survey the seabed of Offshore Overfalls Marine Conservation Zone (MCZ), located in the eastern English Channel, approximately 18 kilometres southeast of the Isle of Wight. The seabed is predominantly coarse sediment with areas of sand, mixed sediments and exposed bedrock.

The survey sought to produce a more detailed map of what the seabed looks like at this site. To do this a Multibeam Echo Sounder was used. Multibeam uses sonar to tell the depth and hardness of the seabed. This is worked out by measuring how long it takes for sound to travel from the ship to the seabed and back again (i.e. the longer it takes, the deeper the water), and by measuring the strength of the returning sound signal (i.e. harder seabed like rock will reflect more sound energy than softer seabed like mud).

The data collected for the site will be used to update the existing map of seabed habitats at Offshore Overfalls MCZ. It will also help the survey team decide where to collect grab samples and drop-frame camera images.

For further updates follow the survey hashtag #CEND0119 on Twitter, or visit Facebook at: <https://www.facebook.com/JNCCUK/>.

Reducing Coastal Risks on Isle of Wight

Work is underway on the Isle of Wight to reduce future coastal and flood risks to the community. This includes the construction of the new £5 million Monktonmead Flood Alleviation scheme in Ryde.

The Monktonmead Scheme is led by the Environment Agency, with contributions from the Isle of Wight Council and the Southern Regional Flood and Coastal Committee. Construction commenced on Ryde seafront in Spring 2018 and included continual community engagement as the work progressed. The scheme should mean over 300 properties will be better protected from flooding this winter.

Elsewhere on the Isle of Wight, work is progressing to understand the future coastal erosion and coastal flood defence needs of Sandown Bay and Ventnor. The aims of these studies, led by the Isle of Wight Council, is to identify the cost of replacement or alternative coastal defences, consider when future coastal defence schemes are needed and to seek potential partnership funding sources for priority schemes.

Also in Sandown Bay, Southern Water has been working to improve water quality at Shanklin, in partnership with the local authority, as part of its multi-million pound investment in the Bathing Water Enhancement Programme. In addition to work at Shanklin, the programme will also consider the locations of Cowes, Whitecliff Bay and Yaverland.

Conservation

Solent Protection Society (SPS) Submits Evidence to the Landscape Review

In November 2018, the Government called for evidence to be submitted to the independent review of England's National Parks (NPs) and Areas of Outstanding Natural Beauty (AONBs). Below is a brief summary of some of the key points submitted by SPS. The full submission can be found at: <https://solentprotection.org/>.

- SPS is primarily concerned with the shoreline and the view from the sea as it affects the National Parks, AONBs and the tidal river estuaries that make up the Solent from the Needles to Selsey Bill. They are concerned with the economic, social, leisure and environmental well-being of the Solent, not just its appearance. The New Forest National Park and the AONBs on the north shore of the Isle of Wight and in Chichester Harbour, play a crucial role in safeguarding this special place and seascape;
- The AONBs, however, hold less clout in the planning system than the National Park and in the SPS view need strengthening to offset the pressure from development, particularly housing targets. The view from the sea is often not appreciated as much as it should be, particularly when this may be the only view that is easily gained of a densely wooded AONB, such as the north east shore of the Isle of Wight;
- They have a concern that incremental enlargement of small scale houses and chalets or new builds may cumulatively start to change the landscape and that this is not sufficiently appreciated or controlled by local planning authorities. The effect on the AONB should have a greater priority in considering such applications;
- They would like to see the introduction of smaller area AONBs associated with river valleys when viewed from the river or the opposite bank before such areas of important natural landscape are lost such as on the Hamble or the western shore of Southampton Water; and
- Finally, Marine Plans have a number of policies that have to be taken into account when considering changes to the landscape. The difficulty is deciding what weight to give to each policy in a particular circumstance. SPS considers that where NPs and AONBs are concerned, the protection of the landscape and seascape should be of a higher weighting and this needs to be endorsed by land based planning authorities and the Marine Management Organisation.

Ecological Dive Surveys - Treloar Hole, Chichester Harbour

Carcinus Limited was commissioned by Emsworth Yacht Harbour to deliver a series of marine ecology surveys in 2017 and 2018, in support of a planned maintenance dredge within the marina basin. The resulting spoil was to be disposed in Treloar Hole, a licenced sediment disposal area located within the entrance to Chichester Harbour. The objective of the surveys was to assess the faunal and substrate composition of the seabed within Treloar Hole before and after sediment disposal.

The first survey assessed the baseline ecological conditions of the seabed habitats ahead of the disposal of dredge spoil. This was successfully completed in October 2017 in-line with the dredging license protocols set out by Chichester Harbour Conservancy. Following this, in September 2018, a post-disposal survey was undertaken to assess any potential impact and check for signs of recovery.



Image courtesy of Carcinus Ltd

Data was collected by Health and Safety Executive certified and scientifically experienced scuba divers from our partners at MSDS Marine Limited and the Carcinus ecology team on board the survey vessel Wessex Explorer. Quantitative recording of the substrate composition and faunal community was made using quadrats with the sediment composition and fauna recorded directly on to underwater slates. In addition, digital images were taken of each quadrat and a continuous video of the site was also recorded for contextual purposes. Digital image data was assessed by the Carcinus ecology team to quality assure field recordings and to provide additional analysis.

Results show that in general, a higher abundance and biodiversity of marine fauna was present post-dredge in comparison to the pre-dredge assessment. In addition, the proportion of sand was found to have marginally increased.

Conservation

Secrets of the Solent - Marine Champions Needed

Are you passionate about marine wildlife? Do you want to learn more about the Solent's underwater wonders? The Hampshire and Isle of Wight Wildlife's Trust's (HIWWT) exciting new lottery funded project, Secrets of the Solent, needs passionate people to help bring a vibrant hidden world to life on land.

The Solent is a special place, with endless surprises hidden just beneath its surface. Over four years, Secrets of the Solent will shine a spotlight on the people and wildlife that share our waters. It will be joining forces with those who live, work, and play in the area to celebrate our marine environment, protect vulnerable species and habitats, and champion our sustainable fishing industry.

Becoming a Marine Champion or Marine Ambassador is a great way to get involved in the project. You will receive full training and support, allowing you to gain new skills and increase your wildlife knowledge. You will also join a welcoming community of volunteers who share your love for the Solent. HIWWT are currently seeking people for the following roles:

- Ferry Safaris Marine Champions - take to the water and highlight the incredible wildlife both above and below the waves.
- Inspiring People Marine Champions - spread the word about our amazing marine wildlife and inspire others to take action.
- Intertidal Surveys Leader Marine Champions - discover our diverse marine species and lead surveys of our shorelines.
- Marine Ambassadors - champion marine wildlife and create positive change within your club, group or organisation.

You can learn more about Secrets of the Solent on the HIWWT website, or by following #SecretsoftheSolent on Twitter, Instagram, and Facebook.



Image courtesy of Paul Gonella

Isle of Wight UNESCO Biosphere Application

Working with partner organisations across the Island, the Isle of Wight Area of Outstanding Natural Beauty (AONB) team are working towards achieving UNESCO Biosphere Reserve status for the Isle of Wight. UNESCO Biosphere reserves are internationally recognised, nominated by national governments and remain under sovereign jurisdiction of the states where they are located.

The reserves have three components:

- A conservation function (preserve landscapes, ecosystems, species, and genetic variation).
- A development function (foster sustainable economic and human development).
- A logistic function (support demonstration projects, environmental education and training, and research and monitoring related to local, national, and global issues of conservation and sustainable development).

Biosphere reserves contain one or more core areas, which are securely protected sites, a clearly identified buffer zone and a flexible transition area.

Contact the Isle of Wight AONB Office to find out more at: <https://www.wightaonb.org.uk/>.

Bird Aware Solent Wins Award

Bird Aware Solent was presented with two awards at the respected Royal Town Planning Institute (RTPI) South East annual awards ceremony held at the Brighton Pavilion.

The first award was presented in the category of Excellence in Planning for the Natural Environment. The Award recognised its work to protect iconic bird species such as the curlew and the Brent goose.

The partnership, made up of 15 local authorities and four conservation groups, also picked up the prestigious award of overall regional winner. This was awarded for the strong collaboration work between the partners, which helped to ensure that challenges have been overcome and that important environmental messages were conveyed.

Bird Aware is an initiative that raises awareness of birds that spend the winter on the Solent coast, so people can continue to enjoy the internationally protected area without disturbing the wildfowl and waders. Information is predominantly voiced by a team of rangers that tour the Solent engaging with walkers and other users of the coast about the plight of the birds and their migration journeys.

Coastal Change

Managing the Coast in a Changing Climate

A report published in October by the Committee on Climate Change's (CCC) Adaptation Committee has investigated the long-term challenges of managing England's coastline against the backdrop of a changing climate.

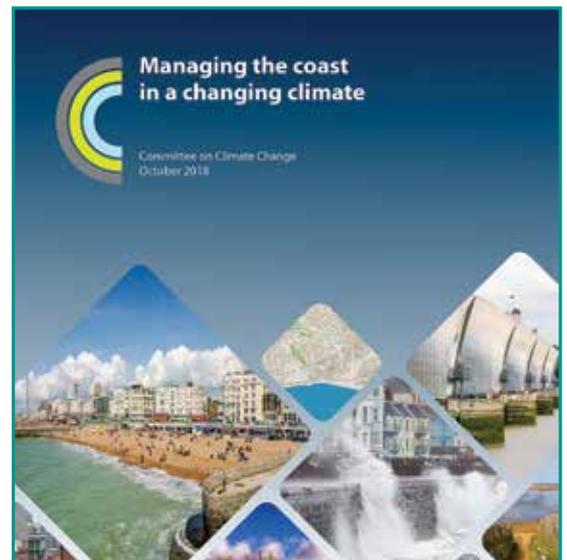
Overall, it concluded that climate change will exacerbate the already significant exposure of the English coast to flooding and erosion. The current approach to coastal management in England is unsustainable in the face of such change.

The key findings are:

- Coastal communities, infrastructure and landscapes already face threats from flooding and coastal erosion. These threats will increase in the future.
- In the future, some coastal communities and infrastructure are likely to be unviable in their current form. This problem is not being confronted with the required urgency or openness.
- Sustainable coastal adaptation is possible and could deliver multiple benefits. However, it requires a long term commitment and proactive steps to inform and facilitate change in social attitudes.

Recommendations include that the scale and implications of future coastal change should be acknowledged by those with responsibility for the coast and communicated to people who live there. Also, that local government and the Environment Agency need to be enabled by national Government to deliver a long-term and appropriately resourced approach to engaging affected communities and stakeholders.

Read the report at: <https://www.theccc.org.uk/wp-content/uploads/2018/10/Managing-the-coast-in-a-changing-climate-October-2018.pdf>.



UK Climate Projections 2018

Building on the success of UK Climate Projections 2009, the UK Climate Projections 2018 (UKCP18) delivers a major upgrade to the range of UK climate projection tools, designed to help decision-makers assess their risk exposure to climate. One aspect of UKCP18, is to provide new projections of time mean sea-level rise and extreme water levels for the UK coastline. Key findings for the coast include:

- Global sea level has risen over the 20th century and will continue to rise over the coming centuries.
- UK tide gauge records show substantial year-to-year changes in coastal water levels (typically several centimetres).
- The UKCP18 sea level projections are consistently greater than in the previous set of UK climate projections, UKCP09 for similar emissions scenarios. However, UKCP18 also includes a lower emissions scenario that assumes more mitigation.
- The amount of sea level rise depends on the location around the UK and increases with higher emissions scenarios.
- Based on exploratory results to 2300, sea levels continue to increase beyond 2100 even with large reductions in greenhouse gas emissions.
- There is no evidence for significant changes in future storm surges.
- Sea level rise over the coming centuries may affect tidal characteristics substantially (including tidal range). However, the atmospheric contribution to storm surges is unlikely to change.
- Extreme sea levels will increase due to the rise in mean sea level. However, the best estimate suggests no additional change due to the atmospheric contribution to extreme sea level.

For more information on the Marine Projections please see: <https://www.metoffice.gov.uk/pub/data/weather/uk/ukcp18/science-reports/UKCP18-Marine-report.pdf>.

Harbours & Business

Royal Naming for Wightlink's New Flagship

Wightlink's new flagship, Victoria of Wight, was officially named in September by HRH The Countess of Wessex. The new £30 million hybrid energy car ferry received a blessing by The Right Reverent Christopher Foster at Wightlink's port of Fishbourne before the Countess of Wessex broke a bottle of Champagne over the ship's bow, in the long-established maritime tradition.

Wightlink was keen to make sure the Island's community was at the heart of the ceremony, with local school children and Island-based suppliers at the ceremony.

Powered by hybrid energy, Victoria of Wight uses a combination of battery power and conventional engines to minimise emissions. Its eco-friendly features also include a lift that can generate electricity through kinetic energy, onboard water heated by warmth generated by the engine and motion sensor LED lighting in lesser-used areas of the ship.



Image courtesy of Wightlink

After the ceremony Her Royal Highness spent time with guests who designed the new ferry, as well as the crew members who will be onboard the new ship as she is gradually phased into service this Autumn.

The arrival of Victoria of Wight heralds the completion of Wightlink's £45million investment to improve the speed and efficiency of the route between Fishbourne and Portsmouth.

Honfleur is on the Horizon

Honfleur represents the next step in fleet renewal for Brittany Ferries and she promises to be a class leading ship when she arrives in June 2019.

The Liquefied natural gas (LNG) powered 42,400 gross-tonnes ship is being constructed at the FSG shipyard in Flensburg, Germany. LNG is a cleaner burning fuel than diesel. Ships that feature LNG-electric propulsion systems are also quieter, more efficient and are less prone to vibration. This means a smoother, more comfortable ride for passengers.



Image courtesy of Brittany Ferries

On 20 December, she grew by five decks in just two days. With some smart shipbuilding, and the help of another extraordinary vessel, in the course of the two day-long operations almost her entire superstructure was added to the hull in two vast prefabricated blocks.

When complete, Honfleur will carry up to 1,680 passengers and come with 261 cabins, two cinemas, restaurants, boutique shopping and expansive passenger lounges. Wi-Fi will come as standard in all areas of the ship, including cabins and access from the car decks to passenger areas will be made as easy as possible for all passengers.

The new ship will take just over a year to complete, before making her debut on the Portsmouth to Caen route in June 2019.

Follow her progress at: <https://www.destinationhonfleur.com/en>.

Heritage

Facing Magwitch: The Rat Island Prisoners

The tidal island of Burrow Island, colloquially known as 'Rat Island', between Portsmouth and Gosport has a wonderful strategic location overlooking Portsmouth Naval Base. In the 18th and 19th centuries this vista was altogether more macabre with the moored rotting hulks of ships which held some of the most unfortunate members of society. This was the location of many of the prison hulks, made even more notorious for being the home for the convict Abel Magwitch in 'Great Expectations'. Some of the prison ships were specifically tasked to confine prisoners captured in the many wars fought by Britain in this age of Empire.

Local legend has it that those that died on the hulks were not afforded the dignity of a burial in a churchyard, but instead were disposed of in the muds of Rat Island. In the storms of 2014, the skeletal remains of a number of individuals were exposed and recovered by an MoD sanctioned team. In May 2017, Operation Nightingale

was set up to access the island to look for further remains. As the graves were cleared it became noticeable that far from being random depositions in the mud, these burials had been afforded a degree of care in their placement. They were aligned east to west in classic Christian fashion and had been placed into the ground in elm coffins.

By the end of the excavation, the team had found the skeletons of four men. Although there was nothing that could provide a precise date for these burials, the history and stratigraphy of the island suggests they must have been placed there in the late 18th or early 19th centuries, consistent with the clay pipes present along the foreshore and the evidence of clay pipe smoking exhibited in the teeth of the skulls of several of the men excavated. Find out more in the Defence Infrastructure Organisation's magazine, *Sanctuary*, at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757743/Sanctuary_magazine_2018_issue.pdf.



Image courtesy of Harvey Mills Photography

Restored Chapel at Royal Victoria Country Park

An exciting £3.5 million Hampshire County Council and Heritage Lottery Fund project has seen the restoration of the chapel at Royal Victoria Country Park. Work included restoring the original Victorian interiors, creating a new exhibition, visitor facilities and outdoor information points. The chapel tower has been opened and offers views across the surrounding coast and countryside. Visitors can also see the newly painted ceiling and conserved stained windows from the chapel balcony.

The 19th century chapel is the last remaining part of what was once the world's largest military hospital, a personal project for Queen Victoria who laid its foundation stone. Built between 1856 to 1863, it could care for up to 1,000 troops from across the British Empire. After the Second World War the hospital fell into decline. It was demolished after a major fire in 1963 destroyed large parts of the building. The site was later bought by the County Council and re-opened in 1980 as Royal Victoria Country Park.

The new exhibition, in the main body of the Chapel, tells the story of the former hospital, from its beginnings in the 1850s, through the Boer War, and both World Wars to its current status as a local country park. It includes exhibits of important medical advancements made at the site, such as the discovery of the vaccine for typhoid.

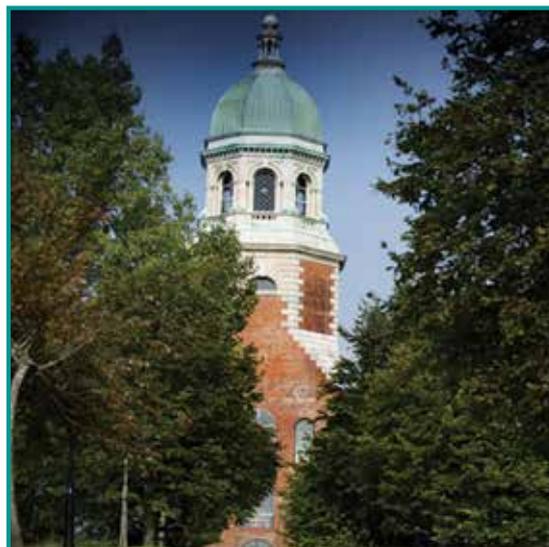


Photo courtesy of Hampshire County Council

New displays highlighting the fascinating history of the site are also located throughout the park, including ones to mark the four corners of the former hospital which show the scale of the once vast building.

News & Snippets

Biodiversity Net Gain Consultation

Defra has released consultation proposals that could require developers to deliver 'biodiversity net gain'. This means that habitats for wildlife must be enhanced and left in a measurably better state than they were pre-development.

The proposed new rules require developers to assess the type of habitat and its condition before submitting an application. Developers would then be required to demonstrate how they are improving biodiversity, such as through the creation of green corridors, planting more trees, or forming local nature spaces. Enhancement on site would be encouraged, but in circumstances where this is not possible, the consultation proposes to charge developers a levy to pay for habitat creation or improvement elsewhere.

Some developers have already been following a biodiversity net gain approach voluntarily, the proposed standardised, mandatory approach should give them more clarity and certainty. The consultation will also consider whether any sites, such as small and industrial sites, should be exempt from the rules.

Find out more at: <https://www.gov.uk/government/news/gove-sets-out-proposals-for-greener-developments>.

Integrated Catchment Management

The Environment Agency and Natural England held a joint 'Integrated Catchment Management in the Greater Solent' event on 8 November. Over forty people shared their enthusiasm, interests, knowledge, good ideas and commitment to tackle the complex and challenging issues impacting the Solent, such as poor water quality and saltmarsh loss.

It was encouraging and inspiring to learn about and share information on work being done. The event provided a useful forum to consider the links between the land-based activities and their impacts on the marine environment, and discover how people can use evidence and information, good practice and innovation to direct and target resources to deliver improvements.

It also provided a great networking opportunity across different organisations, teams, and areas, and special partners. Hopefully the event will strengthen relationships and connections and this will help everyone in the future.

Attendees had panoramic views over the Hamble Estuary and Southampton Water from a local pub, a great setting and place to visibly see the issues on the ground.

Snippets

- On 7 November, the Solent Forum hosted a workshop for its members to look at coastal funding streams and how to bid for them. We will keep our members posted about funding streams through our news service. See: http://www.solentforum.org/services/Member_Services/Coastal_Funding_Streams/.
- The RYA has ordered the first of its fully biodegradable and eco-friendly membership cards, which are eighty percent chalk based.
- The Environment Agency's national salmon and sea trout byelaws, applicable in England, have been confirmed by Defra. The byelaws became law and came into force on 1 January 2019.
- Defra has published its Marine Protected Areas Network Report 2012 - 2018. Read at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765418/mcaa-mpa-report-2012-2018a.pdf.
- The draft Environment (Principles and Governance) Bill sets out how government will maintain environmental standards as we leave the EU and build on the vision of the 25 Year Environment Plan. Published on 19 December, it can be viewed at: <https://www.gov.uk/government/publications/draft-environment-principles-and-governance-bill-2018>.
- DP World won Port Operator of the Year at the Lloyds Listing Global Freight Awards. The accolade, voted for by port users, recognised the trade enabling port operator's UK business units, at London Gateway and Southampton, which have enjoyed another year of high productivity and growth.
- Significant weather events, such as heavy rain, flooding and extreme temperatures can disrupt water and wastewater services, causing a huge disruption to people's lives and livelihoods. Southern Water have launched a new awareness campaign, called Weather Eye, to help its customers to prepare for extreme weather and explain how it can help in the event of an emergency. See: www.southernwater.co.uk/weathereye.
- In January, over 400 volunteers braved the cold to remove 163 kilogrammes of rubbish from Eastney and Southsea beaches. Finds included a suitcase, dentures, plastic food wrappers, fishing lines and weights, fireworks, nails, packaging, straws, syringes, glass, a sock, straws and coffee cups. See: https://twitter.com/Southsea_Beach.

Solent News

Citizen Science Findings

Scientists from the University of Portsmouth and local volunteers, have taken part in the UK's largest ever citizen science project to understand how our coastline is changing in the face of climate change and species invasion.

Running over three years 'Capturing our Coast' recruited 2,500 volunteers to survey 1,800 sites around the country's coastline and hundreds more took part in additional data collection. Key findings include:

- One hundred and sixty two records of invasive species confirmed on the UK's coast including the Japanese Wireweed, Portuguese and Pacific oysters, the Australian barnacle, the orange-tipped sea squirt and Wakame seaweed.
- Several seaweed and mollusc species are already showing changes in abundance, or are moving to different areas around the UK to escape extreme conditions.

The project was a national partnership, led by Newcastle University, with the Scottish Association for Marine Science, Bangor University, Marine Conservation Society, Marine Biological Association Plymouth, University of Portsmouth, Hull University, and national support from Earthwatch. Additional support was provided by Heritage Coast Partnership and Cefas. It was Heritage Lottery funded.

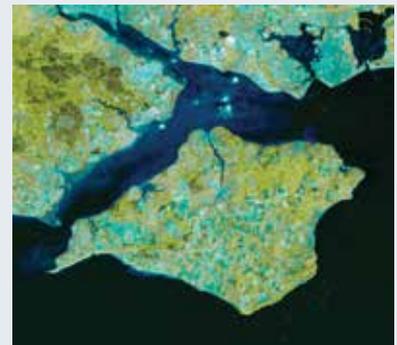
The Solent Forum

Since 1992, the Solent Forum has provided a platform to deliver Integrated Coastal Zone Management in the Solent sub-region of the southeast. It operates at a strategic coastal management level, providing a network for closer working relationships, information dissemination and discussion of topical coastal issues. The Solent Forum members meet twice a year and will next meet on 20 March 2019.

Solent News is prepared and edited by the Solent Forum Officers. It is a biannual publication and issue 46 will be produced in summer 2019. To find out more about the publication, how to submit articles or be included on the mailing list, please visit www.solentforum.org/publications/solent_news/.

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