# **Deben Soundings**

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Cover: Sluice at Waldringfield, Helene Burningham, 2022

## **Deben Soundings**

Simon Read and Helene Burningham

2022

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## The Team

#### Simon Read

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Simon, Principal Investigator for the project, is a visual artist with a strong interest in estuary systems. Beyond project delivery, his contribution has been to respond to aspects of the study as they arise and he has undertaken to reflect upon particular case studies explored within the project as a series of investigatory maps.

#### **Helene Burningham**

Helene is Co-Investigator on the project, and as a coastal scientist with deep knowledge of the behaviour of coastal sedimentary systems, she has documented and discussed the dynamic cycles of change in the shingle *Knolls* at the Deben entrance, and wider Suffolk coast. Her examination of coastal change has continued in this project with the acquisition and integration of new approaches to surveying.



#### **Deben Estuary Partnership**

The Deben Estuary Partnership (DEP) was formed in 2008 to provide a participatory network of stakeholders and the estuary community with a vision to create a plan to protect the future of the estuary. A key objective of the group then, as it is now, was:

"to safeguard the Deben estuary from degradation by creating management partnerships of all the interested parties, particularly local communities, working together so that future generations may continue to benefit"

The partnership brings together representation from key stakeholders such as Suffolk Coasts and Heaths AONB, the Environment Agency, Natural England, East Suffolk Council, in addition to local special interest groups (e.g. Waldringfield Wildlife Group, River Deben Association), residents and landowners.

The DEP published the first Deben Estuary Plan in April 2015, to primarily consider the issue of flood risk management, but to also provide an integrated approach to the management of the broader estuary valley and coastal zone.

River Wall, Margaret Wyllie, 2021

## Deben Soundings

At the end of 2019, we – Simon Read and Helene Burningham – were awarded an Arts and Humanities Research Council network grant for the project "*Imagining the Measure of Change: science, art and the estuary community*" under the Landscape Decisions Programme<sup>1</sup>. As the project got underway, the more user-friendly and memorable working title "*Deben Soundings*" was adopted!

Essential to the project was collaboration with a community partner – the **Deben Estuary Partnership** (DEP) in Suffolk – to align the development of networks, the engagement of new audiences, and the gathering of new perspectives on landscape management, with the upcoming review of the Deben Estuary Management Plan.

Our agreed project aim with the Deben Estuary Partnership was to raise public awareness of the estuary, its systems and management in the context of the revision of the current estuary management plan. Given the particularity of our community partnership, and the immediate need to reconsider what defines a stakeholder community for the sake of the policy consultation process, we have adopted an inclusive approach to community engagement in landscape decision making.

As an interdisciplinary academic partnership, substantive, data-based information is a baseline against which less quantifiable values such as emotional attachment and aesthetic response might find an equal voice. The inadequacy of conventional consultation processes that rely upon a linear, problem-solving approach and only secondarily reflect the wishes of the community, has persuaded our stakeholder community partner, Deben Estuary Partnership, that workable policy must reflect a more comprehensive strategy for public engagement.

## Our Brief

Our brief was to broaden participation in the discussion over securing the integrity of the Deben estuary into a future where response to both climate change and human intervention is a certainty. Although the existing estuary management plan already accommodates the identifiable interests of a wide stakeholder community, it remains a challenge to reach a wider society who value the estuary as a place to live in or visit but fits no identifiable category.

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### Application

Straitened by Covid-19 regulations that restricted levels of public contact, our practical application of our brief took a serendipitous and circuitous route. Constraints on public meetings throughout 2020 put paid to our carefully considered programme of participatory workshops, intended to share conversation and experience on key issues at different locations the length of the estuary. We were thus obliged to consider alternative means to achieve a high level of engagement and public participation.

<sup>&</sup>lt;sup>1</sup> The Landscape Decisions Programme is a UK Research & Innovation funded initiative set up to address the challenge of delivering better, evidence-based decisions within UK landscapes through research collaboration with policy, business and land management partners to deliver an interdisciplinary decision-making framework to inform how land is used.

## Deben Soundings Exhibition

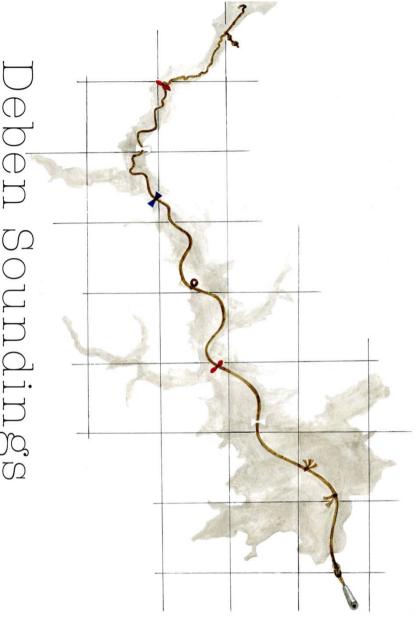
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Like many other interactions and activities, our first response was to move our operation online and we developed the <u>debensoundings.wordpress.com</u> website as a combined information resource and reporting tool.

As lockdown opened up during the summer of 2020, we were able to plan around the reduced government restrictions, and recognised that it was as permissible to go to a gallery as it was a shop. Following the regulations at the time, which enforced a limit on visitor numbers and a requirement for Covid-safety measures, we were able to host our first public event in an art gallery.

And so **Deben Soundings** happened – an exhibition that ran from 18th – 22nd September at ArtSpace in the Thoroughfare, Woodbridge. Over the long weekend, we attracted 225 visitors, of whom over 100 asked to be kept informed of the development of the project.





ArtSpace – Thoroughfare - Woodbridge 10am - 5pm daily - 18-22 September 2020 Our exhibition grew around our original conversations over what a complimentary relationship between a coastal scientist and an artist could be – what a worthwhile interface between data-gathering and the imagination should look like? It is arguable that data cannot be owned and acted upon unless it fires the imagination ... neither can the imagination hold traction in the world of policy, unless it is underpinned by an informed understanding of data. We have since understood that neither data-gathering nor imagination are the exclusive provenance of one disciplinary sector or the other.

Much of the material we assembled for the exhibition was information and data already in existence, but that required analysis, visualisation, and curation. Intersecting viewpoints of the estuary were represented, revealing a symmetry that encouraged the viewer to cross-reference and understand that a single location may have multiple identities: a delicate saltmarsh ecosystem may, to the casual visitor, be a perfect open, muddy, and wet place to run the dog!



### Inclusivity and the Sounding Change project

Our physical landscapes resonate to our cultural beliefs and desires, which are always in transition, driven by evolutionary processes as much as by our own cultural momentum. Change in the landscape can be incremental, just a part of day to day life and it can lull us into a sense of denial that anything is changing at all. Keeping a record, however, is the first step of the many needed in learning to live with change, and perhaps to adapt to it.

Through our project, we have aimed to encourage a broad, self-selecting community to observe and record the transient landscape and to contribute their own views of how the challenges that we face now and those we face in the future might be met by a community of thought informed by knowledge gained through experience.

The Deben Soundings exhibition gave us access to a community of interest that wished to participate in some material way and although we still couldn't hold public workshop events, perhaps we could set up a participatory project that would run itself and be coordinated online, which prompted us to contact our new mailing list with the suggestion for a project to be called *Sounding Change*.

Sounding Change was a direct response to the predicament posed by the Covid-19 lockdowns, and our need to pursue thematic activity during the year, that could be safe, follow a schedule determined by its participants, but still contribute to the central discourse of the project.

Ramsholt saltmarsh and beach, Helene Burningham, 2021

## Sounding Change

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We circulated an open invitation to the network we had grown through the exhibition – to select a location on the Deben that particularly resonated for them, and keep a record of it in the medium or method of their choice, be it photographic recording, diary entries, field observation, data gathering, specimen collecting, drawing, painting, film, sound recording, poetry or even music. The fundamental aim was to engage in a material conversation with a particular location, sustained over the course of a year, capturing it as conditions changed through the year, and as perceptions also changed according to mood, time, or weather.

Starting with around twenty potential participants, our Sounding Change collective became a core group of seven who have stayed with the project over the entire year, plus the two coordinators, Helene Burningham and Simon Read.

Over the duration of *Sounding Change*, we maintained contact with participants both individually and collectively according to need, offering regular feedback and support. To mark the completion of **Deben Soundings**, we are delivering an exhibition, drawing together material produced within *Sounding Change*, and following this, we will run an interactive workshop to explore the opportunities and benefits that this type of participatory activity might offer for environmental and landscape decision-making.



Semblance, Liam Frankland, 2020

## Sounding Change Participants

#### **Margaret Wyllie**

Over the years that Margaret has lived by the Deben Estuary she has developed a strong affinity for the coast and awareness of its fragility and vulnerability to change. Since graduating in 2000 from University College Suffolk with a degree in Art and Design, she has variously worked as an illustrator with her husband the author. Jim Wyllie. as a public artist to realise collaborative projects such as Rising Tide in Felixstowe in 2018 and solely for herself as a painter of her own immediate coastal landscape. All of Margaret's work is imbued with a concern for the natural environment and an urgent need to draw attention to the harm caused by our unthinking, throwaway culture. Her participation in the Sounding Change project has been a marvellous meditation upon random deposits along the tideline, the regrettable evidence of waste, often coupled with delightfully incongruous moments of discovery. Her project affords enough of an insight into a continuous cycle of change to keep a curious mind going indefinitely.

#### **Jennifer Hall**

Jennifer is an artist influenced by the Suffolk landscape where she lives and works. She has been involved in many communitybased projects including Touching the Tide, an HLF landscape partnership 2013-2016 for which she served on the board as a community representative. 2011-2014 she was a coordinator for Tidal Margins, a collaborative initiative for artists on the Suffolk Coast, which generated an exhibition for each year of its threevear duration: tidalmargins.wordpress.com. Achieving a Sainsbury Centre MA in 2009, she spent the following 8 years as curator of Orford Museum. More recently she has been working on a woodland residency at White House Farm as part of the Alde Valley Spring Festival. Her work at Sudbourne Printmakers studios and in her studio at Butley Mills, has enabled special insight into printmaking and bronze casting, as complementary disciplines, where dissimilarities can be dissolved, and slippage allowed between two and three dimensions. The Deben Soundings project at Bawdsey Saltmarsh caught her interest by affording two very different views of the same landscape - a flat surface at high tide and a sculptural relief at low tide.

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All Saints Church, Ramsholt, Helene Burningham, 2022



#### **Graham Kellaway**

Based in Woodbridge, Graham is an artist with a tendency to use objects as a basis for an enquiry into the nature of private and public place. Form and medium are often up for grabs. In this instance camera and notebook proved invaluable in making visual and written sense of his experience. He used his daily lockdown walk to frame political circumstance, mood, light, and incident to reflect upon just one short stretch of the river path between Sun Wharf and Melton Boatyard. Whether allowing incidental events to determine his daily actions: the red beacon at Melton for target practice or serendipitous recordings of conversations between canoeists on a still morning, there is a single thread of chronicling change that crosses many dimensions of experience, all reflected in witty, thoughtful, and somewhat gnomic poems, delivered on the month, each month throughout the year.

#### **Malcolm Hardy**

Following a 30-year career as a police officer, Malcolm returned to his Bachelor's degree subject of marine biology and began a second career in academia and education. Completion of an MSc in Freshwater and Coastal Sciences at UCL led him to co-author work on saltmarshes and coastal realignments. Malcolm's PhD in environmental science focussed on native oyster habitats in soft-sediment estuaries and supported the designation of the Essex estuaries marine conservation zone and further academic contributions. He now teaches biology and environmental science at college in London and researches oyster habitats and ecology, as an Honorary Research Fellow at the University of Essex.

#### **Ruth Richmond**

"A drawing is an autobiographical record of one's discovery of an event" John Berger

My main practise is drawing. I draw in 2D and 3D and am interested in the natural world, being in it, looking at it, watching the change in the seasons and how the flora changes its physicality throughout them. I admire how nature has a noncombative approach to its neighbour. My daily walks help me to think and be at peace with my environment and I often stop and draw which helps me to study and remember what I am seeing. I could not survive happily without the quiet and non-critical natural world.

#### **Janine Hall**

I start from a place of 'What if? I wonder? And a big don't know'. Things grow or unravel depending on the starting point and all of it is felt. What comes out onto the paper or canvas is a record of a moment, of time, both internal and external, and each touch of the pencil or brush echoes back and forth to form the whole. The things that are constant, sometimes without me realising it, are shadow and light often attached to fleeting moments and observations of the abstract in the world around me.

#### Liam Frankland

Liam is a Felixstowe-based photographer with an abiding fascination with the shingle *Knolls* at the entrance of the estuary. As a local artist, he visits the site in all weathers, stages of tide, and light conditions, and finds that it always offers up a new expression of diffused light, atmosphere and an abstract simplicity that binds slivers of landscape in single harmonious compositions that just bear enough detail to confirm that this is a place.



#### **Simon Read**

Simon is Associate Professor of Fine Art at Middlesex University. Over the last thirty years he has combined his vocation as an artist, with his position as an academic and his executive role within the Deben Estuary Partnership to seek a new paradigm for the relationship between culture and the natural environment to foster understanding of its changing condition, and promote a sense of individual empowerment, ownership, and responsibility for its future equilibrium. More than forty years' experience of the estuary has taught him that physical engagement with the landscape is the only way to gain insight into its workings.

#### Helene Burningham

Helene is a Professor of Physical Geography at University College London (UCL) and a coastal scientist interested in the geomorphology and dynamics of coastal systems. Her research investigates the behaviour of sedimentary coastal environments and their response to changes in climate and human intervention. She has been researching coastal change in Suffolk for over a decade, seeking to understand the spatial and temporal variability in shoreline position, and in particular, the drivers of change in *The Knolls* at the mouth of the Deben estuary.



Strandline shoes, Margaret Wyllie, 2021

## Margaret Wyllie

#### Deben Soundings: end of the project thoughts

Mine has been an emotional response to this project, to the natural elements of the estuary which contrast with the manmade interventions and to the discarded objects that have ended up along the shoreline.

I have spent a year walking the saltings between Bawdsey and Ramsholt, observing the weather, vegetation, and the evidence of wildlife at different states of the tide and in the changing seasons. I am also drawn to the stark contrast between the wild, untamed nature of the salt marsh and the view of modern-day industrial farming just over the river wall. This has been documented in my sketchbook. During the spring and summer, the marshes became a riot of plants which I also attempted to identify and draw.

I became fascinated by the illustrated history that is the flotsam washed up along the high tide line. Huge timber pilings have floated in from the defence works nearly a mile along the coast. Amongst the clutter of objects lost from boats I have collected seventy shoes, from tiny children's sandals to school shoes and high-end trainers, no pairs. Each one offers a story to the viewer.

I intended to draw these where they were but as the spring advanced, they began to disappear under the soft mounds of the salt tolerant plants, so I brought them home. Once given another context such as a display case in a gallery, they acquire the significance of a precious relic, or an archaeological discovery frozen in time. It is difficult to reconcile the varied requirements of people's leisure pursuits with the existing landscape. The river wall between Bawdsey and Ramsholt is massive, and it would make a good footpath if suitably cleared and surfaced. There are obvious concerns about dogs and nesting birds, which would have to be resolved. The final stretch under Ramsholt cliff is private land with no permitted path and unlike the lower saltings, is impassable along the river edge. I love the wildness of this stretch and selfishly, would be sad to see it tamed. Maybe some stretches should be left wilder and only accessible to the intrepid.

During Covid restrictions I was able to continue my visits since it is a short distance from where I live. During that time, many more people came to enjoy the wildness and peace.

It is my intention to continue my visits to the saltings, picking up the rubbish and leaving it where it could be collected by the council. Maybe other people will join me?



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## Jennifer Hall

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#### **Bawdsey Saltmarsh; unfazed**

It was another first for me, as I had not been to this part of the site, whereas Miggie is very familiar with it. I was really shocked to see the state of the high tide line, and completely awed by the beauty of the piece of land we were standing on and all around us. One extreme to another. It wasn't so featureless after all! As a sculptor, I was thoroughly enjoying the physicality of the landscape as well as the grey wintery light. (Diary record - Monday, 1 February 2021).

6 February 2022. A year has passed, bringing to an end the exploratory forays Miggie and I have been making together, regular wanderings across Bawdsey Saltmarsh from January 2021 to December 2021 to become familiar with the marsh. It's been a challenging year with Covid always in the background and the arrival of a very demanding Border Collie puppy in March 2021. Nothing has quite worked out the way I'd originally planned and I've been grateful for the discipline that a monthly visit to this magic place has given. There's no doubt that being out in the landscape is good for one especially in the company of an artist friend!

The saltmarsh's location in the estuary of the River Deben renders it vulnerable to flooding and extreme weather conditions. Its daily cycle of high and low tides (including the Spring and Neap tides) means it experiences continuing change. This landscape seems to be in a state of constant flux.



Debris along the high tide line by the River wall, Jennifer Hall, 2021



The stunning physicality of the saltmarsh at low tide is dramatic. Reddish brown muscular mud flats are exposed with their little sheer cliffs and tiny meandering rivers. Miniature 'Grand Canyons' of undulating mud divide the high plateaus covered with leafy vegetation two worlds with different lives and habitats alongside one another.

Unseen wildlife is here leaving strange wiggly furrows as clues across the mud flats to an onward-going plateau trail – maybe otters – and mark-making birds leave lines of footprints as evidence. An unwanted human presence is here too. Plastic crates are sunk, half-engulfed by the thick mud. And a shocking high tide line of plastic bottles, rusting containers, shoes, fishing net is almost covered over by the unstoppable green force of nature. This energy to return on nature's part is (to me) a reminder of how things would be if we were no longer here.

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Myriad tiny plants bring breath-taking colour change as one season gives way to the next. A carpet of flowers peek out from amongst the many different types of grasses, specially adapted plants from the water's edge to the high points of the marsh; all extraordinarily resilient to sudden saltwater inundation, as indeed it was on 21st October 2021, when the saltmarsh disappeared under water right up to the river wall.

A visit the next day saw the reappearance of the marsh unfazed, looking freshly washed with a high tide line scattered with old leaves and seeds, a line which had stopped just short of the top.

Debris along the high tide line by the River wall, Jennifer Hall, 2021

## Graham Kellaway

#### When not writing poems

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At a certain point where the Deben bends, a natural bay on the path is formed. Here the river wall stands at an ideal height to offer a ledge, enabling the many activities that take place at this location. For many it's a site to take pause, a natural observation area for watching wading birds gather to feed at low tide, secure in the knowledge an effective barrier lies between bird and human. For birders it offers support for all types of optical equipment. For anglers it can be a great perch, for young children the thrill of a precarious walk along the top (if the parents in question are happy with the risk involved). Signed and dated in many places it becomes a repository of public declarations in the form of small-scale graffiti and often referenced as a meeting place or destination with a red painted beacon acting as landmark.

The beacon is a warning of course, a red alert for navigational purposes. For those on the water it makes perfect sense as part of a system of signals to be read along the watercourse. From the path it intrigues, appearing stranded, orphaned somehow or off duty, for beacons of its type are usually seen at distance marking a coastal defence. Effectively it is a tall metal lampshade fixed on a pole placed level with passersby but set just out of reach at a distance of approximately one and half metres.

My own musings on the beacon and its inclusion have often formed around signaling a now absent hazard. Or had it been one of many, linking up with a network that once lined the river at regular intervals of which this one is the sole survivor?



The reality is far more prosaic. Principally the beacon's job is to alert those on the water with larger boats to a sewage pipe running out from underneath the river wall. Though the beacon and its placement intrigues - offering a reminder this is offshore and inshore mixing, where the water turns brackish, losing its salinity - it would possibly not have offered interest enough for the basis of a year long study if not for the stones that have collected within it, the result of impromptu throwing contests by passersby. Unknowingly collecting data over many years - on the ability to accurately throw a stone - this beacon has it seems been repurposed for recreational activity one that adds another level of functionality to its practical use.

The beacon and path are somehow in league for with each stone hitting the target so rings out a notification, an audible alert. What if a rigorous method of recording was applied to such an activity, a leisure pursuit or game of this type?

April 3rd, Sat 3pm, '21



- (1) **rebounder** hits right middle strut high with loud clang into river
- (2) dislodging lander enters via middle right vent dislodging one settled stone into river (minus one)
- (3) lander enters via middle right vent
- (4) **rebounder** hits right middle strut high into river
- (5) rebounder hits right middle strut low with high pitch clang into river

#### When not throwing stones

Alongside 'Project Beacon' my participation in Deben Soundings involved documenting changes in the form of monthly poems constructed from notes gathered along the stretch of the river regularly walked that would be part inventory, part record and part chronicle. Tracking the changing focus and fortunes of 'a furloughed man' and the emergence of 'the pandemic naturalist' set against the changing landscape that is walked. Less systematic and time based than 'Project Beacon' the poems were nevertheless formed around the monthly calendar, structured by the river path and on-off Governmental pandemic guidelines.

The intention was not to record the pandemic condition directly but filtered through the use of numbers, having been so much a constant of the previous year through the daily consultation of pandemic data and the use of a fitness tracker to reach the desired daily total of 10,000 steps. In time numbers were replaced by other constants, with botany, bird life and the path dictating, for in this second year of the pandemic, riverside flora flourished with the suspension of regular verge cutting.

In the past I've turned to poetry to reflect on societal changes, environmental concerns and other issues that generate despair. It's a good way to draw out complicated and conflicting points of view whilst keeping a measure of diplomacy.

These poems differ in their length set by the number of days in the month, their openness to change and inflection of rhyme, with a rhythm often generated by the act of walking. Conscious of writing within an English landscape tradition and nature poetry, a third of the way in I was lucky to find a copy of the nature poet John Clare's *Selected Works* in the charity bookshop and surprised and reassured on discovering his *Shepherd's Calendar*, a set of poems similarly structured around the calendar year and titled in months, (curiously the month of August is absent).

Like Clare I made use of the calendar month in which they were written but to label rather than title, alluding to a scientific practice and subsequently categorised like the three separate areas of a Venn diagram into RIVER, COVID/RIVER and COVID.

'Are you left or right when at the houses?' The scrunch then puffing, another is running, expelling warm air to the pleasing hum, of an off grid generator dampened from the shower, at twenty twenty-six the siren mix, from alert to reminder of the train that's passing to the wind that's hoarse, the scraping coarse, at a mooring, with halyard rapping,

from May (RIVER), Graham Kellaway, 2021

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## Malcolm Hardy

It is striking how many contrasts there can be in the water column as little as six weeks apart, which is something you might never suspect from the land. This was one of my first thoughts as I began the second of two sampling cruises in the Deben, in summer 2021. My Sounding Change aim was to use scientific techniques at three points: Waldringfield, Ramsholt and Bawdsey, I had loaded our boat Penny of Mylor at Brightlingsea with two plankton nets, plenty of bottles, preservative and assistants, and set sail. Another difference between being at sea and on land is that at sea the tidal flow brings the estuary to you, whereas, when walking, you experience where your feet go. Working on a comfortable boat whilst at anchor is a useful way to sample an estuary's water, as tidal currents deposit tiny planktonic organisms, as they flow through the net.

With little or no capacity for propulsion,

photosynthesising algae – *phytoplankton* – are drifters or wanderers on the oceans' currents and tides. These tiny organisms use photosynthesis to remove around half of the carbon dioxide in the world's atmosphere, replacing it with oxygen. In doing so, phytoplankton make their own organic molecules, including the green pigment, chlorophyll. On my second sampling cruise in July, the water was less clear than it had been during the first, in early June. There was plenty of phytoplankton in the Deben estuary during both visits but, in July, the additional weeks of daylight and warm water would have been driving photosynthesis and consequently clouding the water with chlorophyll and exudates. In July, I was struck by dense masses of twisting green filamentous algae, blanketing patches of mudflat and saltmarsh along the estuary. Higher levels of algal growth are stimulated by sunlight and warm weather, often in association with high levels of nutrients. Perhaps limited tidal flushing through the narrow, shallow, estuary mouth concentrates algal growth factors in the Deben.

Phytoplankton sampling, Malcolm Hardy, 2021



The tiny animals that comprise the zooplankton feed directly on their phytoplankton counterparts. The zooplankton comprise permanent and temporary members, such as the larvae of shellfish. Mussel and oyster larvae drift, feed and grow in the tidal flows, undergoing several changes in form before sinking to the bottom.

The juvenile Mollusc extends a foot in search of a suitable surface on which to cement permanently. As adults, oysters, mussels and other shellfish filter many litres of seawater per day, clarifying the water, removing pathogens, cycling nutrients and creating habitats for other organisms.

Amongst the zooplankton were numerous *Pleurobrachia*, (aka combjelly or Sea Gooseberry) (top, right). These large drifters emit light as *bioluminescence*, often seen at night in breaking water. Mussel larvae (bottom left) recruit to the Deben's adult population, becoming increasingly abundant towards the estuary mouth. Phytoplankton include *Dinoflagellates* and *Diatoms*, examples from the Deben are shown (bottom left and far right), amongst particles of exudates.

I did not find the native oyster larvae I particularly sought in the Deben, but these two voyages of discovery have raised for me many questions about the ecological functioning of the Deben estuary.

Phytoplankton, Malcolm Hardy, 2021



## Ruth Richmond

#### Walking a line from the mouth of the River Deben to its source: from Felixstowe Ferry to Debenham 3/21-3/22

My response to the brief for the Sounding Change project has been to walk, in stages and on both sides, the length of The Deben Estuary to see how the landscape alters and to understand and create a rapport with its unique environment. I have been observing how human intervention has either benefitted or been detrimental to its terrain, flora, fauna, wetland habitats and business or recreational interests. I have been listening to discussions and arguments between human maintenance and natural evolution of the estuary at the mercy of weather and tides. Through much discourse and wandering it appears that both happen in equal measure: areas of intervention such as creating sea walls to prevent flooding of homes and businesses are set against allowing the salt marsh to find its own evolution, notwithstanding the demands of recreational usage such as boating, walking access and summer pastimes.

The fundamental constituency of the estuary, the reclaimed flood plain and the riverbed, is silt. A consistent part of my practice is to collect soil from my site of interest, make it into paint and use it in my work. For this project I decided to survey the soil types found on the tideline. For each walk I would scoop up several spoons of 'mud', collecting approximately 3 types of soil sample, visually as diverse as possible, along the route for that day. All the samples were collected within 0.5 m from the tideline.

I now have a collection of soils which I grind, mix to form glair paint to apply to a coloured background to form paintings, that resemble scientific 'slides' showing the range of earth colours and textures of sediment collected from the estuary.

My second interest is working on coppiced hazel poles on which I draw and paint, sometimes using paint collected from the same site. The small sticks that I have collected for Sounding Change are taken from the flotsam on the Bawdsey beach, where the sea meets the river mouth.





These have been washed up onto the shingle by substantial wave movement. Their original physical textures have been smoothed and worn by wave action, rolling them around on the shingle until they land far enough away from the waves to lie randomly in an alien landscape, separated from their place of origin, their original identity and genus is hard to distinguish. I have used them as a 'canvas' and imposed my thoughts and ideas onto them in the form of drawings. I have then made these sticks into bundles reminding me of the polder defences used in areas along the river such as upstream from Waldringfield. As seen from the public footpath on top of the sea wall.

My constant companion is a small sketchbook in which I have made simple line drawings in ink. These jottings aid my observation and focus when surrounded by such a wealth of energy and interest. 23



Walking the Deben series (Ufford Bridge) Graphite on paper, 35 x 42 cm Janine Hall, 2022

## Janine Hall

## Walking a line from the mouth of the River Deben to its source: from Felixstowe Ferry to Debenham

It was the first lockdown, brought about by Covid, that initiated a monthly walk in the company of Ruth Richmond along the banks of the River Deben, Suffolk. The idea was to walk its length, both sides of the river along the public footpaths from its source to its mouth: Debenham to Felixstowe. It was a vehicle to engage in conversation, companionship, be outside to experience nature and draw/sketch with the instant benefit of putting aside the concerns of Covid for the day.

It wasn't long before we were introduced to the Deben Sounding research project studying the effects of evolutionary processes on the river over time. Evolutionary changes that have come about because of both the actions of man and the forces of nature. On an invitation to join their research project we continued our walks bearing in mind the concept of 'Change in the landscape'.

Putting 'Change' at the back of my head I have been Walking the Deben with the aim of getting to know the river better. I have been discovering her/his (?) personality, changing voice and mood and the atmosphere this generates across different stretches of water.

As such, I have begun a series of drawings that demonstrate some of these changing moods from an incoming tide with bobbing sparkles of light at Waldringfield to the babbling brook at Ufford Bridge. Here I include a drawing that reflects those still, calm days where the blue sky and clouds are echoed in the mirrored flatness of the Deben's water.



Walking the Deben series (Waldringfield, incoming tide) Graphite on paper, 35 x 42 cm Janine Hall, 2021

## Liam Frankland

With some allowance for his diffidence over expressing an emotional connection to place, Liam's statement encapsulates a quality that cannot enter policy decision making but is conspicuous in its absence. This is a numinous response to a familiar landscape made evanescent and ungraspable through momentary transformations of light and atmosphere:

I've tried to explain the area, where I see change and what draws me there. It is all quite more than words for me though. Without overreacting, the Knolls hold something special, there is a deep sense of something there for me. They continue to inspire, amaze me on large scales but also on macro levels. I feel a pull and a draw to that area, and I am not sure I can really explain that in words.

Starting at the mouth of the Deben estuary, from Martello U, past the second Martello tower, T that sits abandoned on Felixstowe's golf course and roughly coming to an end at the Cliff Road car park. You'll find a stretch of Suffolk coastline which is home to the Knolls which plays out fascinating elements of change.

This change can be observed over varying time scales. Subtle changes can be observed in minutes due to the flow of the tide. Often land appears or disappears. Networks of water linking up to fragment small pockets of land. Over a larger timeframe, islands are formed, long stretching shingle banks and even large hill like structures build up. These natural formations are only temporary and along with this nature of change it has become a main driving force towards my personal pursuit of exploring a place visually with reduction and simplified compositions.

Another element of change to consider is the most obvious from a visual sense, the weather. Here at the mouth of the estuary the weather plays out in what feels like moods. Over time I have witnessed this like a stage show, from intense sunrises to extremely subtle moments of sea smoke evaporating off the calm waters surface.

After an educational Zoom meet up with Simon and Helene I came away with a better understanding of the processes in this area and the history of *The Knolls* and the surrounding area. We then collaborated with date and time metadata from my photographs, which could be referenced to the flow of the tide and its height. We discussed how this area is sometimes irrelevant to people but for some it is a playground. Canoeists and paddle boarders are often seen exploring the landscape at low tide in the warmer months. These stretches and islands of shingle provide a haven for birds and the occasional seal.

*The Knolls* have become a source of creative inspiration, a sanctuary, and a place to explore visually. Where space, colour and time become lyrically metaphysical.

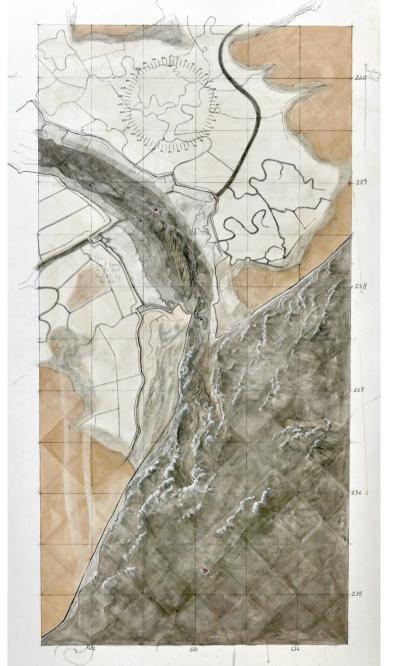


## Simon Read

#### Change in a time beyond recall

One of the pleasures of coordinating our Deben Soundings project is the other points of view of the estuary that make us realise that the Deben Estuary we think we know is no more definitive than the range of perceptions that surround it allow. I am intrigued by how selective our understanding is and how difficult it is to penetrate beyond familiar narratives. I was led astray by my curiosity into the longer view of change in the collaboration between local historian. Peter Wain. Professor Mark Bayliss of the University of East Anglia and geomorphologist David Sear of University of Southampton<sup>2</sup>, to sift threads of documentary evidence from the medieval records of the villages of Bawdsey, Alderton and Hollesley, combine them with known data of historical climatic events. and contemporaneous coastal transformation, to present a compelling evidence for the forgotten port of Goseford. Open to incursion of the sea at Hollesley Bay and easily accessible via the entrance of the estuary. Gosford thrived through the 13<sup>th</sup> and 14<sup>th</sup> centuries until the continuing evolution of the coastal system closed it down, and the lives and livelihoods it supported evaporated. Although the level of the land behind the wall at Bawdsey might testify to a deep-water haven just inside the entrance, there is such an absence of material evidence of a landscape so utterly different to what we know today, it may just as well never have happened.

Evolution of Woodbridge Haven 1, Simon Read, 2021



<sup>&</sup>lt;sup>2</sup> Bailey M, Wain P, Sear D. 2021. The Transformation of the Suffolk Coast 1200-1600: from Orfordness to Goseford. *Proceedings of the Suffolk Institute of Archaeology & History*. Volume 45.

As an artist it is second nature to gain insight into a complex issue by committing it to drawing in the belief that getting it down on a sheet of paper is a means to conjure it up. In making a drawing I can render an idea in my own terms and feel close enough to a discussion to participate in it with a degree of insight. This is a kind of alchemy through which I can become an idea by rehearsing it in a tangible form. Taking the propositions for the evolution and decline of the medieval port, I wondered how they might appear if augmented by other documentary evidence and topographical data: backed up by Helene's specialist knowledge of coastal sedimentary systems, I felt able to embark upon a series of speculative maps of the estuary by combining what we know and what we might surmise to commit the unknowable to an effort of the imagination.

Given the profound alteration in weather patterns that occurred during the late medieval period coincident with such dramatic coastal upheaval as the loss of Dunwich, the extension of the shingle spit at Orfordness, the closure of Hollesley Bay by a raised shingle beach and silting of the harbour of Goseford, a comparison with our own circumstances is inevitable. Aside from the effort to bring our sea defences up to a consistent standard, the land, and property they protect are at the same level and just as vulnerable as they always were.

However rigorous a research process may be, the interpretation and combination of data for implementation is an imaginative exercise. To me, making a drawing is an imaginative encounter with possibility, it may not provide a definitive answer, but it can be a point of access to a discussion that may otherwise be impenetrable.



## Helene Burningham

The Suffolk coast has long intrigued me – over its 74km of open coast, it comprises a range of sediment types and landforms. There are places where the rates of erosion are amongst the highest in the UK, and elsewhere the shoreline has advanced leaving seawalls buried and abandoned. The range of coastal behaviour evident over the last 200 years illustrates one of the most significant coastal management issues we face – sediment availability and supply.

The infilling of Goseford harbour and the contemporaneous decline of Orford port to the north, occurred as sand and shingle beach barriers extended along the open coast, reducing the energy in the landward valleys and allowing the estuary margins to infill with sediment, supplied by the muddy soup of the North Sea. But the accumulating sands and shingles on the open coast that sealed the fate of the inland ports are now experiencing the opposite problem.

Felixstowe Ferry and Bawdsey Quay lie on sand-shingle beach forelands that almost enclosed the mouth of the Deben valley a few centuries ago. The natural dynamics of these beaches involve episodes of advance and retreat as sediment is moved in response to waves and tides. But humans have long found change to be awkward, particularly once land is claimed and buildings are constructed. Groynes and seawalls were introduced along the Bawdsey - Felixstowe frontage in the late 1800s to hold sediment and the shoreline in place, and ever since, agencies and authorities have been reacting to the ongoing consequences of these actions, and successive actions.

Although the beaches have narrowed and in places disappeared, what has remained is *The Knolls*, the suite of sand-shingle banks located at the mouth of the estuary, connecting the Bawdsey and Felixstowe Ferry forelands. Sediment gradually moves predominately from north to south across the estuary mouth through these **ebb-tidal delta** banks, and their morphology represents the interplay between tide and wave processes.

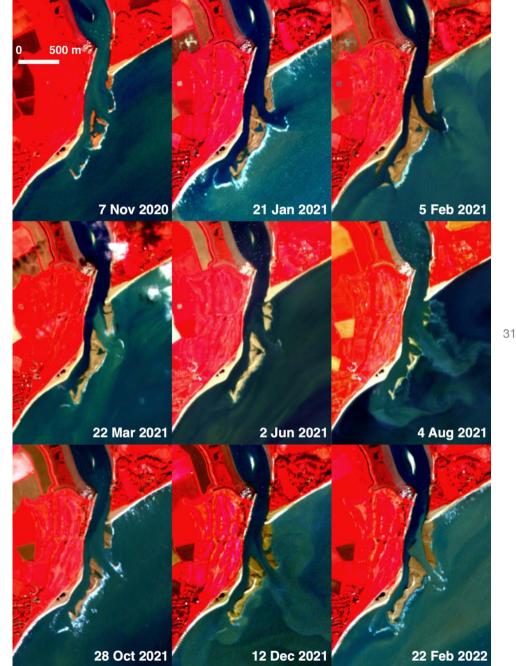


I monitor the position, morphology and movement of *The Knolls* using a range of data – I supplement field observations with aerial, Lidar, hydrographic, and satellite data collected by national and international agencies. Most national surveys are undertaken every 1-2 years, but satellite data is particularly helpful in capturing the sub-annual dynamics. The European Space Agency satellite Sentinel-2 obtains data once or twice a week, and although clouds get in the way much of the time, there are plenty of clear images over the months.

The selection shown here use the near infrared part of the light spectrum to emphasise the contrast between land and water (using images obtained at low tide). The range of blues representing the water reflect the relative presence of sediment – lighter indicates sediment-laden water, whilst darker implies less sediment is held in the water column.

*The Knolls* are currently in a formation that has historically led to a shift in the main channel position – from the elongated south route to a shorter east route. This has been the case for a few years, but each winter, the east channel has become sufficiently blocked for the south channel to retain its dominance. As the south knoll grows, waves drive it westward pushing the south channel into Felixstowe foreland. This *Knoll Watch* preoccupies me as I seek to determine the combination of conditions that mark the breach point in the cycle of change, when a new northerly positioned channel carries the primary tidal flow through the mouth.

Knoll Watch from the Sentinel-2 satellite, Helene Burningham, 2022



## Meetings in the estuary landscape

By September 2021, Covid-19 restrictions on group events had eased sufficiently for us to reprise the interactive workshop series that was core to our original plan for community engagement. Believing that discussion of landscape works best in the landscape, we identified key locations in the Deben estuary that represented susceptibility to the pressures of human demand and natural change.

For each site meeting we invited a diverse but small group of participants, knowing that effectiveness and engagement in group activities decreases as numbers grow. Our participants, who have changed as the geography of the landscape focus has changed, represented a broad range of interests and understanding. Each location was identified as an opportunity to explore a particular aspect of the estuary landscape – what is special about it – how it, and the demands on it, might change in the future – and what decisions and mechanisms need to be put in place to manage that change for a sustainable future.

At each event, we took a walk along the estuary shoreline, directly experiencing and engaging with the physical characteristics of the landscape at that location, seeing firsthand the vulnerability of the low-lying former floodplain protected by flood defence embankments, the juxtaposed fragility and resilience of saltmarsh on the seaward side, and the wide range of societal and cultural interests and endeavours that require consideration within an estuary management plan. We took the opportunity to discuss these challenges, and the continuing evolution and concerns, informed by the specialist knowledge of experts invited to accompany us.

Saltmarsh and embankment between Cragpit and Lodge plantations, 2021



The field meetings to date have engaged with a range of environments, issues and challenges around the Deben, and full reports from these are available for consultation on the Deben Soundings website. The key themes so far have been:

#### The tail that wags the dog

Our first outing, to the Bawdsey foreland, focused on the estuary inlet, mouth and sediment system connecting Bawdsey Quay and Felixstowe Ferry which is the most dynamic part of the Deben, where erosion pressures have necessitated reactive and responsive interventions.

#### **Big skies and intimate landscapes**

Taking the footpath between Ramsholt and Shottisham Creek, our second meeting contemplated the role of estuary flood defences, the assets that they protect, the communities that they benefit, the value placed on our coastal and estuary margins, and the future sustainability of management decisions and engineering interventions.

#### Interests in conflict and harmony

Our third meeting, a visit to Waldringfield, considered the challenges around the 'honey-pot' phenomenon of a high concentration of human demand and impact within a very small area, but also saw first-hand the benefit of collaborative community action in estuary shoreline decision making and the implementation of flood management schemes.

At the time of writing, we have two further events planned before project conclusion:

**Woodbridge to Melton:** to explore the upper reaches and tidal limit of the estuary and discuss the needs to achieve a balance between the estuary as a flood threat to be managed and an amenity to be valued.

Bawdsey and Alderton: to examine the low-lying former estuary floodplain for evidence of how historical change in the estuarine landscape precipitated by climatic upheaval may give insight into how modern coastal systems might respond to future climate change.



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Our Sounding Change team have captured many elements and aspects of the changing character of the Deben in both space and time. In particular, Margaret's paintings and Graham's poems weave a colourful and reflective view of the estuary shoreline. Here, we show a selection of these visual and textual observations that themselves deliver an abstraction of the estuary landscape.



January, Margaret Wyllie, 2021

Seventy three thousand, five hundred and twelve, that's one way to start the new year. More than that will learn of bad news,

more than that will still live in fear... From the fifth of the first, with lockdowns at three... to thoughts of registration that preoccupy me. From an emerging landscape terra forming, to this perfectly flat and level morning... A passing train, empty still... 'I had a little telescope, set up in the summer house, just by the sill...'

Clocking up as vaccined daily, three hundred, eleven thousand and sixty. Amongst the sum, dad and mum. 'Happy Vaccination Day!' Sorry I can't come... The sum is down from last week, minus thirty thousand, one hundred and three...

A shortfall, orders can't be met, problems with the sixth dose, and worse yet... A break in protocol, invoking a hard border, fault lines now visible, becoming wider? Testing times, winds prevailing, raw to hands (but I'm not complaining) and under foot, not shifting bands of gravel stand

but mud, mud, glorious mud nothing quite like it for easing the thud! As January ends on a new high, that's really a low, figures persist and continue to grow. One hundred and six thousand, one hundred and fifty-eight... FEBRUARY (COVID/RIVER)

Of his admission learnt and feared the worst, then from my son late evening I heard it first. For the hundredth one, no hundred and one, and too soon after now you're done. Covid has taken Captain Tom, one more for the total, one more to add on. He was a glimmer, he was a grand chap.

At 6pm he is clapped. Can you hear us Captain Tom? Can you hear us Captain Tom? The river now ebbs with a strong winter breeze, how gently snow shakes from skeletal trees... Much nearer still and like wannabe vultures, five inky birds perch in a 'culture'?

'Its cold, we should go, I can't feel my toes.' Out for the count amongst the falling snows... On the ninth one thousand and fifty-two daily, a number still incredibly high. 'If you must go out, for a play in the snow, stay in small groupings... keep to those who you know...' For fresh snowflakes people do mob.

And thirty minutes after the swab, 'Must you go out to play in the snow?' It's coming up negative on the lateral flow. February ends as it began, with news of the fundraising military man. His funeral live streamed, on the last Saturday, red ribbons marking the processional way.

#### MARCH (COVID/RIVER)

On the twenty-third, in this month of thirty-one when an end to wintering comes easier for some, it's been life interruptus for exactly a year. And for another day in keeping inertia at bay during another week of limbo and inaction... in the year long staycation with stretches of furlough, for the river path I'm thankful.

Those who join it will know the path along the river has its currents too. And if you let it, it will take hold... The flood, the extra volume was to be expected, in this year-long staycation with stretches of furlough. There's added punctuation for a start, in the form sometimes of an awkward pass.

These stand offs are well meant and necessary, accepted with good grace and much courtesy. Yet for each footfall a word, another step closer, for each pause a line break, or at worst a rhyme break. No, at times and in places the path hasn't flowed. But the path narrows in places to such a degree, these awkward passes have always been necessary?

For the boat community came an initial fear, registered in a notice made clear... 'For us, it's not quieter since the stay at home order, for us in fact, it's even busier!' At eight in the evening we are encouraged outside, not to stand, with pots and pans or anything to hand, nor to clap or make an exuberant din. Instead light a candle to place on the doorstep

#### for the time specified.

Marking the passing of all those who have died, during a year long staycation... with stretches of furlough...

Anill6the Sum With Shiks 1 CAL 1-1 ~ 11 214 . Ju annu 36 how tide must reflects the blue sky April, Margaret Wyllie, 2021

#### **APRIL (COVID/RIVER)**

Leaving aside the dregs of March, this is the first month moving light from dark. Leaving aside the daylight saving, the first month for newly observing.

Daffodil yellow to that of dandelion and cowslip. The peachy summer plumage of a black-tailed-godwit to the whisked egg white of the little egret. Frost on the grass of the shaded bank. Bracken and hedgerow yet to be cut back. What the dredger extracts, with umbilical paraphernalia. Prickly green, deep yellow, gorse, but what's that other?

Guided by arrows when looking for flowers the library has recently restored opening hours. After tracing protocols, help from Dewey and an assistant, it's off through the newly arranged one-way system to five hundred and eighty-two decimal thirteen, where a book is shelved for identifying.

Red dead-nettle and lesser periwinkle to dandelion, cowslip, daffodil, and primrose, and of hawkweed varieties, mouse-ear, few-leaved, of the beard and leafy, smooth to rough, naturally... Slow-down, slow-down, the guide says it's too early, for each of those relatives.

While the frost's ambition continues to cover, 'Thirteen days now, a new record for April,' on the bank's shaded side, cowslip still clusters, (well it did arrive later) but for the trumpets of daffodils this month is over.

#### MAY (COVID/RIVER)

Downriver the colour of the sky is of the yellow orange used to signify

the increasing level of conservation concern and surprising to learn, shading most of the birds currently seen, what many consider to be the most common; shelduck, mallard, oystercatcher, swan, the black-headed gull, the house martin. All coloured by caution, all cause for concern.

'Good evening. It used to mean get ready, now it means don't go, what effect will it have on the aeronautical flow?' Hearing the theme, within the titles a plane, arriving or departing? Clearly departing for Emily who's talking yet to 'stop' it's as close in hue. The concept depends on your point of view.

'Good evening. Do you associate it with freedoms, the chance to resume or preparing to stop? John can I start with you?' 'Red is a no-no, red is a no-go... and those of the cautionary colour are still very stringent.' 'I would beg to differ... for putting extra flights on suggests the opposite...'

The morning after when out by the boatyard crossing the tracks, newly installed a traffic light system of simplified form, provides a clear warning for the manual crossing with the colour left out that's currently causing so much confusion, using only two, universally known as...

stop and go.

#### JUNE (COVID/RIVER)

Goat's-beard flowers on schedule, a dandelion variant, tall and yellow, solitary and suitably stubbly closing-up around midday. And of the clock it forms gargantuan when in comparison (to the dandelion).

Downriver with the tide outgoing travelling at the pace of flotsam and jetsam minus the sail in reduction, a windsurfer with only a paddle to steady, stoking slowly, part punting, water-loitering? For conversation it's clearly enabling, (for jetsam, compare with flotsam).

Checks at first proved inconclusive ruling out feverfew, scentless mayweed, this widespread daisy variant must be oxeye.

A yellow iris fringed with petals, the white of conjunctiva. First seen in Oxford? Favoured by oxen? When learning of a variant there are things to consider...

Over flowers stemming white and small cabbage white, not red admiral, nor fritillary, peacock, common blue. The one that mimics the eyes of an owl, sounding regal, but a lot less suspect. And with those few only knowing, are you deleting, not adding to the bio-diversity?

Now a short haired ginger, thin and wiry motorcycle helmet in one hand energy drink in the other... When naming a new variant there are things to consider...



August, Margaret Wyllie, 2021

#### JULY (COVID/RIVER)

Tiny black bugs busily infest flora of all kinds. On the river wall a left behind article of clothing...

Tiny black bugs scuttle busily, over the inner parts of all varieties, the most notable, in contrast large white fluted heads of bindweed. On the river wall still the lost and found, in earthen colours matching, now flattened neatly along fold lines, arms conducting semaphore...

At two a heavy drenching stopped by four. Now logged, now heavy pressed to the river wall the left behind article in plain view, following quarantine rules, and in part, the washing guidelines of 100% wool. Reshape whilst damp to air dry, keep flat to store.

The unofficial litter picker crouches plastic bag in hand, dressed in shorts and shorter sleeves. No need for a jumper anyway. The air oven ready, heating three cans of more than 4% tossed dented all, each one scrunched, and the remains of yesterdays take-away.

Pollen beetles no longer busily infest flora of all kinds as they make way for wing tips grey and black ink spots, to fuss selectively over inner florets. Not all varieties will lose their deposits, as a puffed up shaggy ink cap closes so too the problem lost property poses.

#### AUGUST (COVID/RIVER)

Fixing a breakfast of variety pack cereal

a left over ritual from the festival. Tray on the floor left outside by the door, coming so soon after all manner of revelry. Ending on the day of the closing ceremony or three days earlier but including the fifth? 'Do you need another paracetamol?' 'Do you need another paracetamol?'

White bands on a dark wing two godwits flying in adding to the high number all doing the same thing, when feeding at the waterline. White bands on a dark wing two godwits flying in...

He went into a chrysalis when pinged, then instructed tracked then traced, ending on the day of the long road race adding to the high number all doing the same thing. He went into a chrysalis when pinged, then instructed...

Ending on the day when told that was tansy the curious button like flower, of marigold of daisy, but omitting the petals with a pleasing spherical symmetry when seen at insect level.

Ending on the day when told that was tansy or three days earlier but including the fifth.

#### SEPTEMBER (COVID/RIVER)

'Of things to be cut rather than grass, municipal mowing was among the first, due in part to staff off sick or isolating, horticultural services were scaled back or went missing...'

Around the doggie bin there's quite a stir of flies and tut-tutting from passersby. Again the bin full to overflowing has not been emptied of what's collected, deposited by dog then dog walker piling up in colourful bags of plastic, each tied in a knot to keep the flies out.

Flower to flower growing tired and brittle leaves that appear to have been eaten away or does the pattern suggest internal decay? At the waterline ragwort still high in number, so too groundsel so too lilacs with yellow centres, flowering ten or more on one stem only leaves spiralling upwards, upwards,

yet local, to the more widespread ragwort at the waterline. Scratchy dried teasel, mingling thistle reached the seed stage of their cycle. Each plant this term has met its target spared the cutter, the usual short circuit. The evening sky turns pink and beaming.

Far better to delay the early cutting to around the time of harvest and September, allowing the plants a year to remember, after all have flowered all have seeded.



November, Margaret Wyllie, 2021

#### **OCTOBER (COVID/RIVER)**

Until the tides twice daily washing, tracks in mud reveal much meandering, mostly from the avian kind.

Mottled brown, distinguished by its curled down overgrown fingernail a curlew, digging deep to catch a morsel. With its bill declined the adaption was welcome, ensuring niche feeding, freeing itself from competition. When it comes to birds most are tooled for a specialist trade.

The curlews bill was likely once straighter. Unless at the level of cellular or veins on leaves or within rock strata, few straight lines appear within nature. It's us who impose them as a rule, edges made straight to aid the cartographer. North, South, West, Easterly.

Tracks in mud reveal much meandering. And yet again the tide is turning, a river becoming sea once more regrettably. Now second only to our special relation. 'Pah! A mere ripple,' comes the flippant answer. 'Lapping at the edge of undulating, its... its... close to plain sailing.'

'How to flatten the wave into a line?' 'Have you tried looking up how to flatten?' From line to line meandering this poem is linear. If read from the page or spoken out loud it unfolds over time. Top to bottom, left to right, for the curlews bill didn't happen overnight.

#### **NOVEMBER (COVID/RIVER)**

'And what kind of mileage is the walk?' 'We are where we are... and... then go from there.' 'Then it will become more like autumn.' 'From midnight tonight?' 'I said just go home, you don't look well, glad I wore my mask at the time...'

'Hard to be clearer than that isn't it?' 'Wear a mask when you enter the hospital.' 'You've left it on the back shelf of the car?' 'Don't make excuses for him.' 'You would to.' 'Well I shall tell Daphne I've seen you.' 'How long has it been?'

'Are you alright, if you've had enough we can go back.' 'And I forgot to get the broccoli tenderstem...' 'It curls round, near where we just came from.' 'Interesting weather... is it rain trying to be mist or mist trying to be rain?' 'One guy slipped on his knees and had to go off.'

'Oh that was when I did my run... so...'

'Is it going out or coming in?'
'That was two years ago before...'
'Its come in quite a lot in the last hour.'
'Yes, yes it has.'
'I think Monday is the day of emptying.'
'I just want to know what is happening for Christmas...'
'Well some questions first, so we can find your booking.'

'Look, you don't have to tear off the plastic bits now.' 'Well it's been a lovely day and we will do it again.'

#### **DECEMBER (COVID/RIVER)**

See how the moss grows varying from red to green on the bitumen invested following the bond of brick not blocks of concrete.

Where is this? Between the slabs, measuring thirty-two by thirty-two four equal sides, edges bevelled still crisp, laid deep and even, wedged in tight, but not enough to avoid dislodging.

See how the moss grows, grafting not to what was laid, but poured a viscous mixture of hydrocarbons a natural by-product of petroleum set in flow motion and preferred, to the square slabs of concrete. Where is this happening?

The incline of the river defence. Don't trust its footing, some are broken or dislodged, but not by those that set them. Their offspring, maybe... You will feel the tension that comes with the danger of slipping. See how the moss grows

from its spread, there is much to learn from patterns of behaviour made unaware. Filling the gap of five centimetres left filling the gap of human endeavour, revealing in this pattern its liking for bitumen. 41

## Reflections

As we approach completion of this network project, we can take a step back to reflect upon what we initiated, what we have discovered, and what we have accomplished.

As might be imagined, not everything went quite as originally planned, but we were able to explore and implement methods of community engagement that under normal circumstances would not be considered. We overcame the physical challenge of generating a community network and fostering lively participation by moving the conduct of the project almost completely online – and we were pleasantly surprised by the result.

Although this facilitated our intention to promote a good level of engagement within the programme and a fruitful exchange of views, the restrictions and constraints brought by the Covid-19 pandemic led to delays in the development process for the Deben Estuary Management Plan, around which our project was intended to align. This has not undermined the value of the outcomes, research and materials generated in our project as they will deliver important contributions to the preparation of the plan.

Constant themes running through this Landscape Decisions network project are the use of **interdisciplinary** partnership strategies to enhance public engagement, the contribution that this has made to local **decision making** on the ground, the **transferability** of methodology to other equivalent or parallel projects.



A breach, Simon Read, 2021

# Interdisciplinary collaboration

Interdisciplinary collaboration has become a mantra within the academic community where it is assumed that when colleagues from different disciplines work together with an understanding of each other's field of expertise, opportunities are created that may not have been discovered if the collaboration had not taken place.

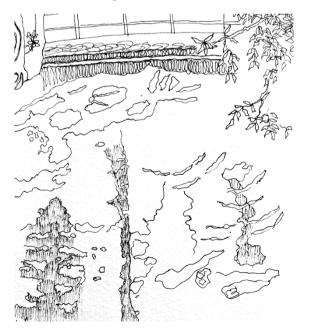
In an interdisciplinary team, successful results are achieved through the complementary application of diverse skills, but this relies upon the prior identification of an agreed and understood common goal. Without this, specific skillsets can become an impediment to knowledge-sharing, creating parallel pathways with little expectation of convergence. The result is a predictable disparity, exacerbated by divergent disciplinary expertise within the research team. This is not to say that either the convergent or divergent model is more desirable, but to acknowledge that research projects can either unite towards integrated and applicable knowledge, or accept that the outcomes reflect a deliberate constellation of skills, that may lead to unpredictable insights that can only arise from a rich heterodoxy.

Our point of departure in this project has been that knowledge created within an interdisciplinary partnership is complementary. For an artist to benefit from working directly with a scientist, and vice versa, an understanding of and interest in respective expertise and the light each might shed upon a subject is essential. For example, it is strictly unacceptable for a scientist to speculate without underpinning evidence, but for an artist the burden of proof does not lie quite so heavily and freedom to speculate often reveals unconsidered landscapes. Conversely, understanding how natural systems work is invaluable grounding for an artists' speculative journey.



#### Bawdsey beach, Helene Burningham, 2021

The working title of our Deben Soundings project Imagining the Measure of Change: art, science and the estuary community signified a dynamic relationship between two ways of knowing measuring and imagining - where our shared aim was to promote insight into estuary systems through subjecting evidence to an open, discursive process. Our initial proposal had intended to use a large-scale map as an arena for participants to actively intervene in a discussion that set ideas of policy decision-making in the context of known metrics and parameters. Each event (location) would then consider a particular characteristic of the estuary for which there may be differences of opinion, contradictory evidence, or changes in the criteria for management.



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Although this model could not be acted upon because of Covid-19, it nevertheless represents a strategy for collaboration, working to our best strengths. The need to create an equivalent solution via an online platform gave rise to the **Sounding Change** initiative that provided the framework for a year-long observation, within which participants could develop their own iterative process, with the promise of regular discussion and inclusion in an exhibition. This exhibition enables us to deliver access to a community of opinion upon the estuary, its landscape and management, that more orthodox methods of consultation cannot accomplish.

There are other, hierarchic approaches to interdisciplinary collaboration that often lead to the expectation that the task of one partner is to serve and support the other. This may be acceptable so long as the question asked is of a strictly linear problem-solution variety, such as the need to supply data to inform the implementation of a predetermined policy decision. But it does not reflect the true spirit of what an interdisciplinary partnership can deliver, and the degree to which each form of engagement can expose a dimension of an enquiry that would otherwise be missed. When decisions are based upon variables that may not fit conventional parameters, such as community input into landscape management decision-making, things can become complex and other forms of expertise must be deployed.

Whilst the scientific input brought insight and rigour to the evidence gathering activities of the participants, they in turn have demonstrated that direct engagement with sensory, material, and emotional qualities of place can weave a rich web of association that reaches beyond functional realities but is informed by their interdependence. Understanding how estuary systems work and the challenges inherent in their management was core to our intention, providing narrative and context to each participant, that then fostered ownership, belonging, and perhaps responsibility, but certainly the awareness of the validity of their own point of view.

Wilford Bridge, Melton, Ruth Richmond, 2021



So far, this discussion has emphasised the need to recognise the importance of the contribution a lay public can make towards discovering and capturing the value of its own landscape. From the vantage point of any specialist, each one of us is a lay person; however, in another context, roles reverse, and specialist turns lay person. This is only relevant in the context of the premise of our research 'to reach a broader, unspecific social grouping that values the estuary as a place to live in or visit but fits no identifiable category'. We have found that for each participant engaged in the project, there is a point of view, which may be insightful but too singular to integrate with the different levels of knowledge and expertise that would normally informed an estuary management plan. But in the act of interaction, both online and in our landscape meetings, a collaborative and social learning has evolved, enriching our crossdisciplinary discussions and raising the integrated knowledge and understanding of estuary and coastal systems and their governance.

Undoubtedly, the extraordinary wealth of knowledge and insight that our participants have contributed to the project is an asset, and the effort to create context and establish synergies to integrate it into an overarching scheme will be just as much a challenge as it can be to harmonise disparities within any interdisciplinary partnership.

### Landscape decisions

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Due to unavoidable delays caused by Covid-19 that brought significant administrative challenges to the local authority and its alignment to our community partner, the Deben Estuary Partnership (DEP). As we pushed forward with the Deben Soundings project, we fell seriously out of step with the progression of the Deben Estuary Management Plan, the scoping document for which was finally distributed mid-2021.

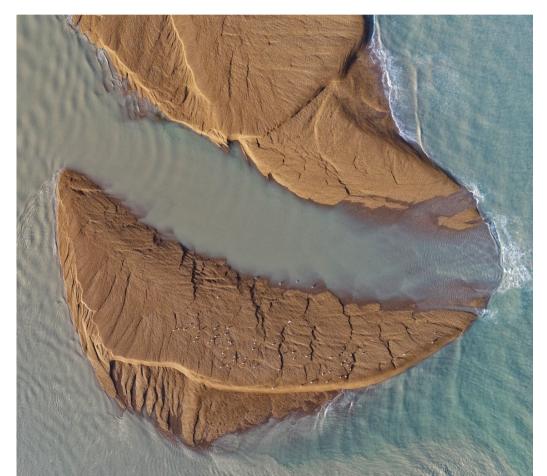
We have kept the DEP well informed of the progress of the Deben Soundings project and indeed, once we were able to hold events in the estuary landscape, we ensured that DEP members were invited to join the debate. It is only as we reach the end of the Deben Soundings project that discussion within the DEP around progression of the management plan has recommenced. Whilst regrettable that the project has not progressed in tandem with the revision of the estuary management plan, the DEP chair has noted that the outcomes and findings from Deben Soundings will directly feed into and inform the management plan process.

Whilst it was never a part of our brief to, in any way, broker landscape decision making, we have been able to reach out to a sector of the community that has not previously considered itself active in the discussion over how the estuary landscape should be managed. The previous Deben Estuary Plan of 2015 broke new ground by integrating the interests of key stakeholders on the estuary, but stopped short at engaging a broader community of interest that, although not so easy to quantify, is conspicuous in its absence. This is the community that we felt we should foster, since although it may have presence, it doesn't have influence.



Deben Soundings, Simon Read, 2020-

In addition to its own substantial residential community the Deben Estuary is a hugely popular visitor destination, and attracts large numbers to sail, walk, or just enjoy the landscape, particularly during the summer months. Although these visitors arrive from the immediate Deben valley, or further afield, they share a passionate attachment to the estuary landscape and the opportunities it offers. This fundamentally subjective connection to the estuary, although representing a large constituency, is not considered so far as landscape management is concerned since, although it may have an interest, it does not have a franchise.



Not unlike other intangible benefits that landscapes afford such as peace, tranquillity, and fresh air, the pleasure experienced from the place itself is just as real as any other more quantifiable value, and through our Deben Soundings project we have sought to give this a voice.

Our Sounding Change participants have been given an opportunity to explore the estuary landscape in depth, and gain insight into the complex interaction of estuary systems and the challenges of achieving a balanced estuary management programme. If we are to encourage a community other than those stakeholders with identifiable and circumscribed interests to contribute to the discussion, it must be from an informed and engaged point of view. Although we have been able to reach a broad spectrum of the community and have promoted a lively exchange of views through our events and online platform, the most a network project such as this can expect is to enhance appreciation of the physical landscape and promote awareness of the connectivity between informed and imagined experience. This represents an improvement in the capacity of the community to contribute positively to the next iteration of the Deben Estuary Management Plan.

The Knolls, Helene Burningham, 2021

# Transferability

Although based upon a specific location and case study, and conducted under the extremely unusual logistical circumstances of Covid-19, there were lessons learned in this project that are certainly applicable to other research programmes seeking a similar community engagement component. This is an opportunity to discuss the successes and shortfalls of strategies that we have deployed within our research programme.

Due to constraints imposed by Covid-19, it was essential to immediately establish an **online presence** to both disseminate information and to act as a community forum. In a pandemic context, the only means to effectively set up participatory networks was to do this entirely online, but there are tangible advantages to this approach:

- The use of an online forum is a means to engage a wider community that might have a strong affinity with a landscape but may not be physically located in the immediate area or may not be able to participate in person within a prescribed timetable.
- It enables a fluid relationship with the overall coordination of the project that can be conducted according to a self-determined itinerary.
- Feedback and support can be responsive, and online group meetings arranged as and when the participants considered them beneficial.

The disadvantages of online operation were:

- An inherent narrowing of involvement to those who exist and function within the online / digital world.
- A precondition that participants operate independently according to their own timetable and with no direct critical support or personal contact and connection across the group. In our project, only those with a strong sense of motivation, or those who teamed up with each other have followed the project through to completion.
- For the participants, the absence of a sense of their physical engagement with both location and media.





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As the limitation upon group meetings lifted after Autumn 2021, we were able to hold **events in the landscape** for targeted groups of participants. Through these events we explored themes such as management of flood defences or the dynamics of the estuary. The positive outcomes for this initiative were:

- Discussions could be directly contextualised.
- Keeping numbers of attendees to around 20 (i.e. within the limits set for social gatherings) guaranteed an informal exchange of opinion, and avoided becoming a guided tour. In this, we combined a representative range of stakeholder interests with a small number of specialised advisors to promote a lively but informed exchange of views.
- Following a walk through the landscape with a relaxed gathering around light refreshments introduced an element of conviviality and the opportunity for continued conversational exchange and reflection between the participants.

The limitation of these events was that we could only reach out to a small but representative part of the community, which, as noted above, was also a benefit:

- The meetings in the landscape were a substitute for our original intention to hold similar events for larger groups at venues across the estuary valley. Arguably, these would have greater reach, but would have been a challenge to coordinate as interactive participatory events.
- The limit on numbers attending may have appeared exclusive, however, a review of the debate and discussions for each event has been made available to a broader audience via the project website.

Our **use of an exhibition** as a launch event, particularly the fact that it was held in a high street gallery, permitted access and reach to a broader local community than would likely be possible through public meetings:

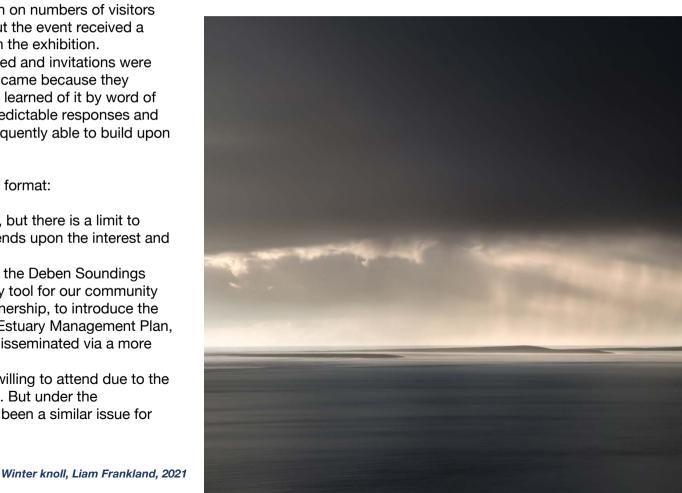
- The exhibition was curated by both Helene Burningham and Simon Read who were available to discuss the material displayed and the aims of the project with visitors. The enforced Covid-19 limitation on numbers of visitors meant that many who sought out the event received a personal guided journey through the exhibition.
- Although the show was advertised and invitations were sent out, the majority of visitors came because they happened to be passing, or had learned of it by word of mouth. This brought some unpredictable responses and discussions that we were subsequently able to build upon through the life of the project.

The disadvantages of an exhibition format:

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- Exhibitions work well to engage, but there is a limit to which they can inform that depends upon the interest and attention of the audience.
- Although it fulfilled objectives of the Deben Soundings project, it was a less satisfactory tool for our community partner, the Deben Estuary Partnership, to introduce the need for a review of the Deben Estuary Management Plan, which would have been better disseminated via a more orthodox public meeting.
- Institutional partners were less willing to attend due to the Covid-19 guidelines at that time. But under the circumstances, this would have been a similar issue for any form of public engagement.

The **alliance of science and art** represents a reflexive approach to data and other forms of knowledge that are not so readily quantifiable. The skillsets we have applied are drawn from many fields of expertise, and although driven by the demands of the project itself, they are no more than practical solutions to logistical problems and there is no reason why they should not be drawn down and applied to other circumstances.



## Acknowledgements

Thank you to all the individuals and organisations who have been involved in the project to date:

**Bawdsey Estate Bawdsey Parish Council** Boathouse Café, Bawdsey Deben Estuary Partnership (DEP) East Suffolk Council Eastern Association of Inshore Fisheries and Conservation Authorities (IFCA) Environment Agency Felixstowe Ferry Harbour Master Internal Drainage Board (IDB) Middlesex University National Trust **River Deben Association (RDA)** Shottisham Parish Council Strutt and Parker, Land Agents Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Suffolk Wildlife Trust University College London (UCL) Waldringfield Boatyard Waldringfield Flood Defence Group Waldringfield Harbour Master Waldringfield Parish Council Waldringfield Sailing Club Woodbridge Riverside Trust

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