

AN URGENT ENQUIRY

ARTISTS BRIEF

An Urgent Enquiry

A Residency Commissioning Programme with Wexford County Council, Fingal County Council and Dublin City Council in collaboration with Invisible Dust, UK, supported by the Arts Council Invitation to Collaboration Scheme.

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An Urgent Enquiry Artists Brief

*“Nothing in nature exists alone” Silent Spring, Rachel Carson 1962 **

Background

Wexford County Council, Fingal County Council and Dublin City Council initiated a research project in 2017 titled *An Urgent Enquiry* with funding from the Arts Council under the *Invitation to Collaboration* scheme. Each local authority hosted a Think Tank at which artists, scientists and biodiversity experts presented approaches to Art, Biodiversity and Climate Change. The research project and enquiry has led to the next logical step and we are delighted to announce three significant artist residency commission opportunities in Wexford, Fingal and Dublin City. These commissioning opportunities will include collaboration with UK commissioning agency Invisible Dust, who will select one of the artists for an additional UK based residency in 2020. This international residency will expand upon specific themes relating to *An Urgent Enquiry* and their *Surroundings* Commissioning Programme.

Invitation

An Urgent Enquiry Artists Residency Commission offers artists the opportunity to reside for three months in each county to explore the biodiversity of each area and the effects of climate change, through research, interactions with environmental specialists, scientists and advisors, relating to the artists interest and engaging with local communities with support from the local authority Arts & Biodiversity Offices. There will be three residency commissions, one in Wexford, Dublin and Fingal. The outcome of each residency will result in new work/a public manifestation in autumn 2019. The selected artists will be supported throughout by *An Urgent Enquiry* steering group comprising of Arts & Biodiversity Officers and the Project Manager / Curator for *An Urgent Enquiry*, Denise Reddy.

Research Locations

Wexford: South Wexford Coastline

Fingal: Portrane and Rush Resorts

Dublin City: North Bull Island and Dublin Bay

Art Form

The curatorial panel are principally communicating these residency opportunities to the visual arts sector while acknowledging the scope for collaboration and interdisciplinary practices.

Timeframe

The residencies will take place over a three month time period from 1 May until 31 July, 2019. The outcome of each residency will be new work with a public manifestation in each county in October 2019. One artist will be selected for a follow on residency in the East Riding of Yorkshire, UK, with Invisible Dust as part of their *Surroundings* Programme in April 2020.

Budget

Each residency in Ireland is valued at **€20,000**. In addition to this, self-catering accommodation will be provided free of charge by each local authority, inclusive of utility costs such as heating and lighting. Designated curatorial project support and assistance is offered throughout the process. **The budget is inclusive of artist's fees, studio time, materials, VAT, process, production, insurance, outcomes and documentation.**

The artist selected as part of the Invisible Dust Programme will receive an additional **€10,000** to extend their commission and develop an iteration of it for *Surroundings* programme in the UK. This €10,000 is inclusive of €8,000 for artist fee, studio time, materials, VAT, insurance, outcomes and documentation, production costs, living expenses and €2000 for accommodation and travel expenses).

Context

It's not climate change it's everything change proclaimed Margaret Atwood as Ambassador for Invisible Dust's symposium, *Under Her Eye – Women & Climate Change 2018*. *

One of the greatest global issues of our time is climate change which effects biodiversity. *An Urgent Enquiry* and its considerations coincided with some of the most dramatic weather effects that Ireland has ever experienced. Predictions in relation to coastal erosion within fifty to a hundred year timeframes are already occurring earlier than anticipated and specifically along the east coast. In policy terms it will be increasingly a function of the local authorities to implement key changes and present opportunities for thinking, leadership and indeed moments of celebration of the unique local and collective biodiversity. In 2017 *The Department of Communications, Climate Action and the Environment* launched a nationwide *National Mitigation Plan* which was further supported in 2018 by the *National Adaption Framework* where the local authorities were placed to encourage the reduction of our carbon emissions through a series of collective acts.

An Urgent Enquiry highlighted the role of artist's contribution to this debate and through a series of Think Tank sessions in each county we drew together artists, scientists, activists and policy makers. What struck the participants in all the sessions was the pursuit and commitment to find a way to address these global concerns within a local context and a belief in the role of artists to offer thought provoking responses to these local and global issues.

Themes

The themes we explored collectively are nuanced in the areas of social, political and cultural attitudes. The common themes which emerged through the research phase were:

- Our shared coastline
- Climate change
- Disturbance
- The balance between nature and human activity
- Human awareness
- Understanding of place
- Interconnectedness

- Biodiversity and the unpredictability of the future in this regard.
- Unique flora and fauna
- Habitat loss and fragmentation

Artists by their nature of questioning, enquiry and creativity are well placed to offer insight, challenges and reflect on these issues.

Objectives of *An Urgent Enquiry*

- To provide forums where those concerned with arts and biodiversity can meet to discuss issues and exchange ideas relating to this important matter of worldwide concern.
- To consider the urgent issues of biodiversity, climate change and the impacts of human activity on nature and nature on humans.
- To engage with and interact with the public.
- The outcome will be new art work presented in each county with an open forum discussion event in autumn, 2019.
- To support artists to collaborate meaningfully with biodiversity experts and to connect with local communities.
- To position Irish artists within a developed international profile with *Invisible Dust*, UK.

Curatorial Panel

The curatorial panel for the residency commission opportunity are:

Liz Burns, Arts Officer, Wexford County Council

Caroline Cowley, Public Art Coordinator, Fingal County Council

Ruairí Ó Cuív, Public Arts Officer, Dublin City Council

Hans Vissor, Biodiversity Officer, Fingal County Council

Niamh Lennon, Planning and Biodiversity Officer, Wexford County Council

Biodiversity Officer, Dublin City Council (To be appointed in January 2019)

Alice Sharp, Director, Invisible Dust, UK

Denise Reddy, Project Manager/ Curator

Selection Process

Artists are invited through an open call to submit a proposal. Shortlisted applicants will be invited to attend an interview in March 2019 with panel members prior to the final selection. Each applicant will be considered for any one of the residency locations unless a location has been specified.

Proposals

Please provide a **PDF (Max 10 MB)** which includes the following:

- Contact details: Mobile number, postal, email and website address.
- A short text on why this commission is of interest to you and how you imagine working in co-operation with biodiversity experts. How your work could interact with communities and initial views on the possible outcomes of the residency commission. (maximum 1 A4 page)
- Examples of previous work.
- A maximum of 8 images with image list.
- Film and video work must be a maximum of 5 mins. Please provide vimeo links.
- Audio work must be a maximum of 5mins. Please provide audio links.
- A current C.V. (maximum 2 A4 pages)
- A budget breakdown

Please specify if you have a preference for a particular residency location.

Criteria

Applicants will be assessed on the following criteria:

- Quality and artistic ambition
- Track record
- Feasibility of the project
- Cultural and environmental value

Closing Date for Submissions

Closing date for receipt of submissions: Thursday 21 February 2019 at 5pm.

Online application only. Late submissions will not be assessed.

Please email your proposal to anurgentenquiry@gmail.com

Queries

Applicants are welcome to submit queries to Denise Reddy, *An Urgent Enquiry Project* Manager & Curator who will be the conduit between all the partnering local authorities.

Please email your queries to anurgentenquiry@gmail.com

Closing date for queries: Thursday 14 February 2019 at 4pm.

Essential Requirements

The successful applicants must:

- Be available for the timeframe of the residency commission and public outcome.
- Have their own transport as residency locations may not be near public transport.
- Have a valid tax clearance certificate.
- Provide Public Liability insurance cover of €6.5 million and Employers Liability to €13 million (where employees are engaged to work on the commission) with an indemnity to Wexford County Council, Fingal County Council or Dublin City Council, depending on the location of the residency.

General Conditions

- Late submissions will not be accepted.
- All PDF submissions should be clearly labelled with the applicant's name and contact details.
- As this is an Open Call competition there will be no feedback after Stage 1.
- The selection panel, whose decision is final, has the right to clarify any issue which may arise in the course of selection.
- Artists may be asked to supply the names and contact details of referees as part of the selection process.
- Wexford County Council; and its partners reserves the right not to award commissions and in this instance reserves the right to pursue other selection processes.

Terms and Conditions

- The successful artist will be issued with a contract.
 - The artwork must comply with Health and Safety standards. The successful submission will be subject to Health and Safety checks.
 - Child and Vulnerable Adults Protection: Selected artists will be required to follow national policy with regard to commissions involving interaction with children, young people and, vulnerable adults and where applicable undergo training in this area, as per national requirements.
 - Applicants should note that all commissions awarded are VAT inclusive, (whether VAT liability lies with the artist or the Commissioner). Non-resident artists from EU and non-EU countries must be aware of any tax or VAT implications arising from the commission and ensure that any costs arising from this are included in their budget.
 - Wexford County Council, Fingal County Council and Dublin City Council are subject to the provisions of the Freedom of Information Act (FOI) 1997, 2003. If you consider that any of the information supplied by you is either commercially sensitive or confidential in nature, this should be highlighted and the reasons for the sensitivity specified. In such cases, the relevant material will, in response to the FOI request, be examined in the light of the exemptions provided for in the Acts.
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Appendix

Biodiversity Information

County Wexford Biodiversity

Wexford is a county rich in biodiversity. Habitat biodiversity includes marine, coastal, terrestrial, wetland, freshwater and upland habitats. Wexford has an extensive and diverse coastline which supports a wide range of coastal habitats such as lagoons, dune systems, lakes and reefs of international and national conservation interest. County Wexford supports a diverse range of native species associated with terrestrial, freshwater, coastal and marine habitats and is regarded as an internationally important stronghold for breeding seabird colonies as well as breeding wildfowl.

The South Wexford Coast is a unique natural heritage coastline. Located in 'the Model County' in the sunny south-east corner of the island of Ireland, the south coast of County Wexford is one of Ireland's special areas of natural beauty and biodiversity. It is special because it supports a wealth of natural heritage resources and a unique cluster of nature sites.

The South Wexford Coast extends from the craggy limestone tip of Hook Head in the west, to the granite foreland of Carnsore Point in the east up to the soft coastline of The Raven. This richly endowed coastal strip supports 11 European designated Natura 2000 sites. To have so many sites of such international importance clustered together on such a short length of shoreline makes the South Wexford Coast one of Ireland's outstanding natural heritage resources.

The sand dunes that decorate the very impressive fringing gravel barriers on the South Wexford Coast and the three coastal lagoons trapped behind them are priority habitats that are flagged for special conservation actions because they are in danger of disappearing within the territory of the European Union. The north Wexford Harbour and Slobs is the lowermost part of the estuary of the River Slaney. The site is divided between the natural estuarine habitats of Wexford Harbour, the reclaimed polders known as the North and South 'Slobs', and the tidal section of the River Slaney. The seaward boundary extends from the Rosslare peninsula in the south to the area just west of The Raven Point in the north. Of particular importance is that it is one of the two most important sites in the world for Greenland White-fronted Goose.

Hook Head is of international importance for its outstanding fossils and geological formations. The tip of the headland and its cliffs are popular spots for sea watching for migrant birds, whales and dolphins.

Bannow Bay is an excellent example of an enclosed estuarine system. The very extensive sand flats and mudflats exposed at low water attract a great diversity of wetland birds in winter including an internationally-important population of Light-bellied Brent Geese. Saltmarshes of exceptional species diversity are found above the mudflats and support Perennial Glasswort, a plant that is confined in Ireland to the South Wexford Coast.

Keeragh Islands. Between May and September, the two, tiny, low-lying Keeragh Islands hold a large, nationally-important colony of breeding Great Cormorants. In winter, the predator-free islands are an important and safe night roost for wildfowl and other birds.

Ballyteige Burrow is one of the most impressive shingle-based dune systems in Ireland. The fixed dunes support several declining plant communities, rare species of lichen and flowering plants. The site also supports a coastal lagoon, mudflats and estuary. The Cull is a wetland rich in waders and waterfowl. The hind-dune slob or polder provides feeding from Whooper Swans in winter.

Saltee Islands. The two Saltee Islands, lying some 5km offshore, are numbered among the best-known seabird sanctuaries in north-west Europe. They are internationally important for holding an assemblage of over 20,000 breeding seabirds, are easily accessible and are one of the best-documented sites in the country. Saltee Island Great is also a major site for spring and autumn land bird, butterfly and moth migration. Grey Seals breed there and the underwater marine life around the islands is both very diverse and of exceptional quality.

Tacumshin Lake is a coastal lagoon (priority habitat in the EU Habitats Directive). The lagoon is a haven for wildfowl and wading birds and is one of the most important ornithological sites in Ireland. The occurrence of internationally important populations of Whooper Swan and Black-tailed Godwit is of especial note. The site is of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds.

Lady's Island Lake is among the biggest and best examples in Ireland of a sedimentary lagoon. The site supports an exceptional diversity of plant and animal life and at least 13 lagoonal specialist species, the highest number for any lagoonal habitat in the country. The critically endangered Cottonweed plant survives on the barrier and is not found growing anywhere else in Ireland. The largest mixed colony of breeding terns in Ireland is found on islands in the lake together with a large colony of Black-headed Gulls. The site has one of the highest diversities of breeding wildfowl species in the country and is of high conservation importance.

Carnsore Point, the south-eastern cornerstone of the island of Ireland, is a hotspot for watching seabirds on passage and is part of a large offshore underwater area protected for its reefs and species-rich marine life. The intertidal and offshore reefs are formed of Carnsore granite, a coarse pinkish-brown rock, and range from very exposed to moderately exposed wave action.

Wexford Harbour and Slobs Special Area of Protection (SPA) is one of the most important ornithological sites in the country supporting internationally important populations of Greenland White-fronted Goose, Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit. The site is an important centre for research, education and tourism. Wexford Wildfowl Reserve, located within Wexford Harbour and Slobs SPA, is a Ramsar Convention site, a Biogenetic Reserve and a Statutory Nature Reserve. Parts of the Wexford Harbour and Slobs SPA are also designated as Wildfowl Sanctuaries.

The Raven SPA extends from north of Rosslare Point to Blackwater Harbour on the coast of Co. Wexford. The Raven is an important bird site, being part of the Wexford Slobs and Harbour complex. Of critical significance is that it forms the principal night roost for the internationally important Wexford Harbour population of Greenland White-fronted Goose. The Raven SPA is a breeding site for Little Tern. These birds nest on the shingle and sandy beaches or on offshore sandbanks. Numbers vary a lot between years – this partly related to the suitability of potential nesting habitat after winter storms, which create or destroy sandbars and shingle ridges.

Issues

Some of these habitats are considered under pressure and some of the species that they support are in decline and under threat. There are many reasons why some of this diversity of species and habitats is being lost. The most common reasons are loss and degradation of habitat, introduction of non-native species, pollution, disturbance of species and over-exploitation. One factor in this story is climate change and the resulting coastal erosion with increased storm events our soft coastline is being lost at an increasing rate. Disturbance from recreational pressure is also an ever increasing threat as populations increase so does the need for recreational time and space. However the simple act of people walking dogs off lead along these beautiful unspoilt areas can have a huge impact on species.

While the loss of biodiversity might be regarded as a global issue, action is needed at national and local levels if we are to slow down and stop the rate at which species and habitats are being lost. This is vital to our existence as we rely on nature for so many goods and services such as clean air and water, food and fuel.

Useful links

County Wexford Biodiversity Action Plan

<https://www.wexfordcoco.ie/sites/default/files/content/Environment/BiodiversityComm/Co.%20Wexford%20Biodiversity%20Action%20Plan%202013-2018.pdf>

National Parks and Wildlife Service www.npws.ie

Wexford Wildfowl Reserve

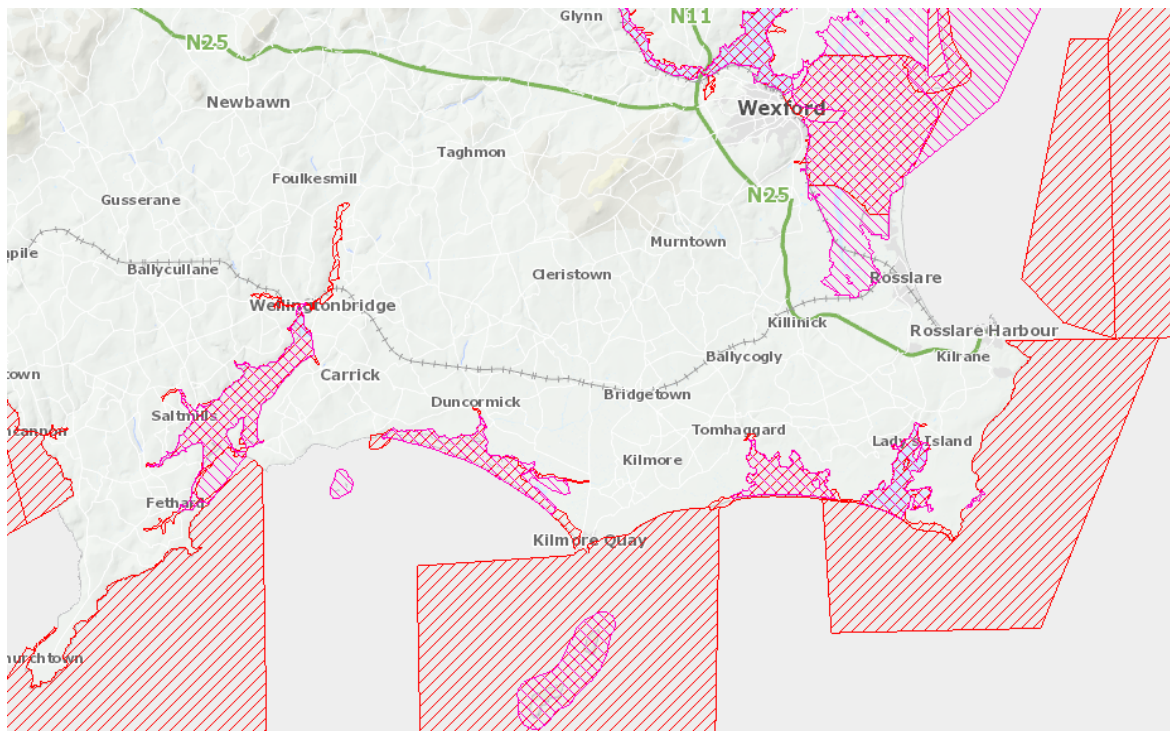
www.wexfordwildfowlreserve.ie



Figure 1 Aerial view of Our Lady's Island



Sanderlings on shore



South Coast of Wexford from Hook Head in the West to The Raven in the East

Fingal County Council Biodiversity

The Fingal Coastline

The scenic coastline of Fingal is a wonderful natural amenity resource for the people in the county. The 55 kilometres long coastline is also home to thousands of plants and animals that live in the great diversity of habitats that make up our coastline such as the estuaries, dunes and beaches. The coastline is our most important wildlife resource with most of the protected sites and protected wildlife species in the county found along our shores.

Estuaries

The coastline of Fingal is characterised by the three large estuaries of Rogerstown, Malahide and Baldoyle. These estuaries with their extensive mudflats and saltmarshes are amongst the most important nature conservation areas in Fingal. Every year, up to 40,000 migratory birds spend the winter feeding and resting at Fingal's estuaries. Wading birds such as Black-tailed Godwit, Curlew and Snipe probe in the mud in search for the millions of tiny creatures that live there. Other birds such as the Brent Goose will feed on the Eelgrass and algae growing on the mudflats, while Cormorants and Red-breasted Mergansers can be seen diving for fish. The sheltered waters of the estuaries also provide nursery areas for many fish species that live out in the sea such as Herring, Seabass, Cod and Pollack.

Sandy and Shingle Beaches

In autumn and wintertime, the long sandy beaches are important roosting sites for the large flocks of estuarine birds that appreciate the open character of the beaches. Breeding birds on our beaches have largely disappeared as a result of disturbance caused by dogs and people. However, Ringed Plover still breeds along the coast and there is hope for a return of the Little Tern at Portrane. Throughout the year, birds such as Pied Wagtail and Ringed Plover can be observed running along the shore looking for insects among the rotting plant material that has washed up on the shore. Typical strandline vegetation includes colonizer species such as Sea Rocket (*Cakile maritima*), Frosted Orache (*Atriplex laciniata*) and Saltwort (*Salsola kali*). These plants are often joined by dune forming grasses such as Sea Couch (*Elytrigia juncea*) and Lyme-grass (*Leymus arenarius*).

The very mobile shingle and gravel beaches are subject to continuous disturbance and are therefore generally sparsely vegetated. However, this habitat type does include some national or Dublin rarities such as Yellow Horned-poppy (*Glaucium flavum*), Sea Holly (*Eryngium maritimum*) and Sea Kale (*Crambe maritima*).

Sand Dunes

The extensive sand dune systems at Rush, Portrane, Donabate, Malahide, and Portmanock are some of our richest biodiversity hotspots in the County. They are also amongst the most fragile habitats around the Fingal coast and unfortunately much of the dune habitat is covered by golf courses, holiday homes or caravan parks. The dune grassland vegetation is very similar to the species composition of Dry Calcareous and Neutral grasslands and includes Common Bird's-foot-trefoil (*Lotus corniculatus*), Kidney Vetch (*Anthyllis vulneria*), Common Restharrow (*Ononis repens*), and Wild Thyme (*Thymus praecox*). Substantial colonies of the legally protected Hairy Violet (*Viola hirta*) grow abundantly in the stable dune grassland of Portmarnock and Donabate and the Red Data Book species Spring Vetch (*Vicia lathyroides*) occurs in a few sites here too. At Corballis the dune slacks have Marsh

Helleborine (*Epipactis palustris*), Field Gentian (*Gentianella amarella*) and Black Bog-rush (*Schoenus nigricans*) all of which are now very rare plants in Dublin. The many plants attract many insects such as butterflies, moths, burrowing bees and wasps, including some nationally uncommon species such as the Small Blue butterfly and the solitary bee *Osmia aurulenta*.

Cliffs and Rocky Shores

Rocky and soft sedimentary cliffs line much of the Fingal coast. The steep rocky cliffs of Howth Head are home to numerous breeding seabirds such as Kittiwake, Fulmar, Herring Gull and Guillemot. Shag and Black Guillemot breed along the inaccessible rocky shoreline at the base of the cliffs. The exposed intertidal rocky shores at Howth show a typical zonation of kelp, mussels or barnacles and lichens in progression up the cliffs. The more moderately exposed and sheltered intertidal rocky shores further north support a much wider variety of marine plants and animals with Bladder wrack (*Fucus vesiculosus*), Serrated wrack (*Fucus serratus*), Barnacles, Limpets, Mussels, Starfish and Periwinkles. Rock pools are often the best place to see some marine wildlife including Hermit Crabs, Beadlet Anemone, Shore Crab, and Shrimp.

The steep and soft sedimentary cliffs between Rush and Balbriggan hold several colonies of Fulmar and are home to Sand Martins that tunnel into these soft soils.

Inshore Waters

The inshore area of the Irish Sea along the Fingal coast are classified as an important spawning and nursery area for several commercially important fish species such as Cod, Whiting, Plaice, Herring and Mackerel. These fish species spend their juvenile period in the calm waters in the estuaries and along the shore, before moving out to the choppier waters of the Irish Sea. So far 47 different species of fish have been recorded along the Fingal coast. These small fish provide the main food source for the thousands of breeding seabirds of the islands along Fingal's coast.

All Irish coastal waters within the 200-mile limit were declared a sanctuary for whales and dolphins in 1991. Whales and dolphins are regularly seen off the Fingal coast, and sometimes are found stranded on the shoreline. Six species have been observed along our coast particularly at Howth and Skerries; Harbour Porpoise, Common Dolphin, Striped Dolphin, Bottlenose Dolphin, Minke Whale and Fin Whale.

The Islands

There are six islands located just off the Fingal coast. These are Ireland's Eye near Howth, Lambay near Rush, and Colt, St. Patrick's, Shenick and Rockabill near Skerries. These islands are home to about 100,000 breeding seabirds during the summer months. Rockabill is home to Europe's largest colony of Roseate Terns, one of Europe's rarest breeding seabirds. Lambay Island holds Ireland's largest "mixed" seabird colony and is of international importance. Ireland's Eye and Lambay Island hold two out of the six colonies of Gannets in Ireland. The three large Cormorant colonies on St. Patrick's Island, Lambay and Ireland's Eye collectively form a "supercolony" that comprises the largest aggregation of the species anywhere in Britain or Ireland. The most abundant sea birds are Guillemot and Kittiwake.

Key Issues for Nature in Fingal

We are lucky to have a great diversity of habitats and species in County Fingal. However, the biodiversity resource we see today is only a small fraction of the resource we had here in the past. The fortunes of many habitats and species have changed over the last decades as the environment came under increasing pressure from development, changing farming practices and climate change. The most important threats to nature along our coast are described in more detail below:

1. Habitat Loss & Fragmentation
2. Disturbance
3. Climate Change

Habitat Loss and Fragmentation

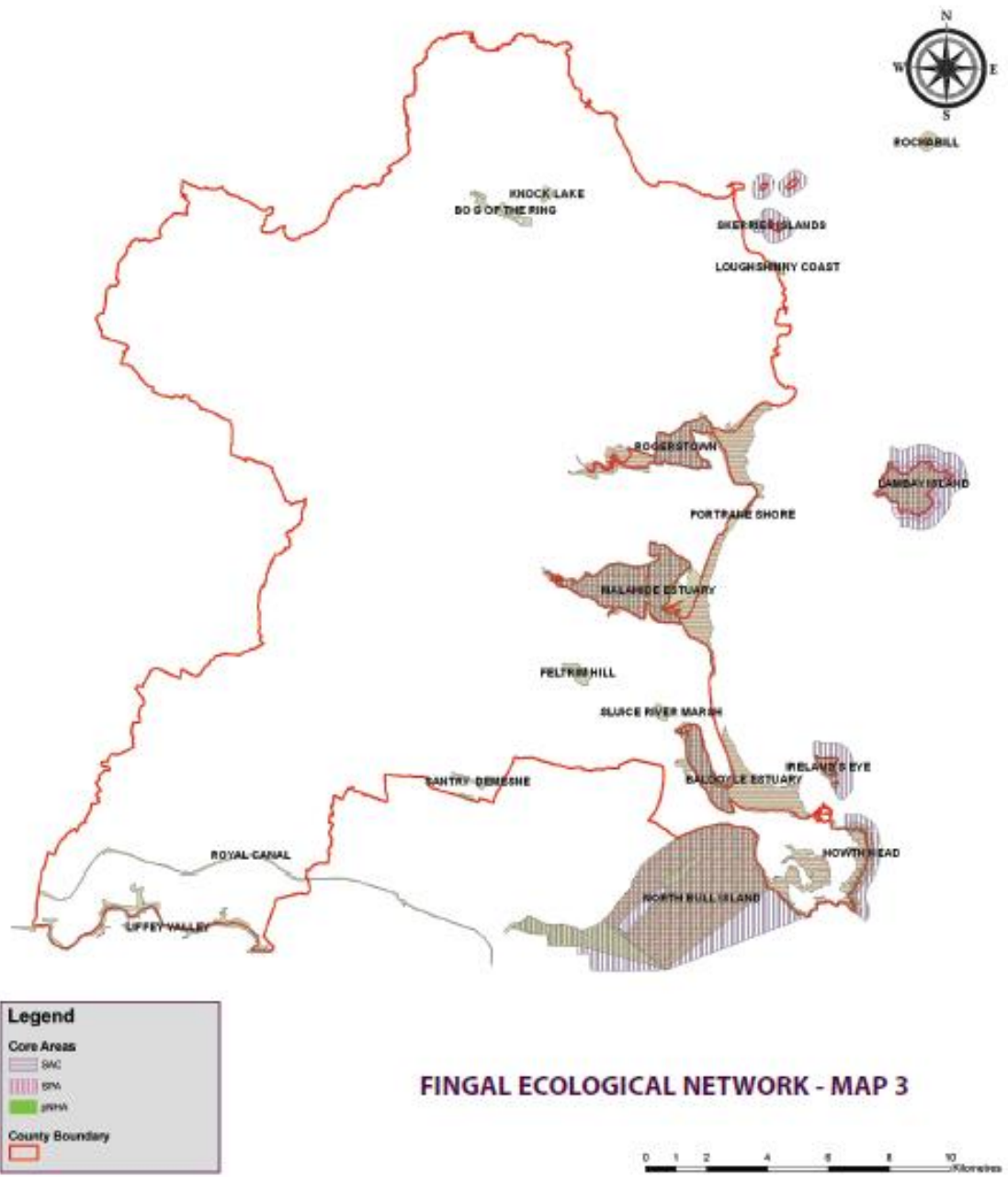
The National Biodiversity Plan identifies habitat loss and degradation as the main factor eroding biodiversity in Ireland today. Although Ireland's landscape and habitats have been modified by human activity since the island was settled, the pace and scale of change rapidly accelerated from the latter half of the 20th century. The rapid development of houses, roads golf courses and other infrastructure along our coastline have led to a major loss of coastal habitats (dunes and saltmarsh in particular).

Disturbance

Some of the most important nature conservation sites in Fingal are the estuaries and the islands, because of the thousands of birds that winter and breed there. At the same time, our scenic coast is a popular amenity resource with thousands of visitors frequenting our coast and beaches every year. The wintering birds are in Ireland to recover from their long flight, spend the soft winter here while fattening up for their return journey to the Arctic. If these birds are continuously disturbed by visitors and dogs they use up a lot of energy, which hampers their recovery and can affect the breeding success and mortality rates in the Arctic. Similarly, disturbance to the bird colonies on the islands by leisure craft can affect the success of the breeding season of the seabirds. Controlling and guiding the flow of people along our coast to avoid disturbance to the main nesting, feeding and roosting sites will be one of the major challenges for Fingal as the County continues to grow.

Climate Change

Climate change affects our coastal habitats and species in a myriad of ways. Sea level rise and increasingly stormy conditions are putting significant pressure on our coastal habitats in particular. Dunes and saltmarshes are eroding away, leading to a loss of these habitats but also threatening houses and roads located behind these natural coastal defences. The coastal erosion problem is particularly bad in Portrane and Rush and to a lesser degree at Sutton. We are likely going to experience more coastal erosion and coastal flooding in the future and it will be important to start planning for these climatic changes and take serious steps to tackle climate change at a local level.



Dublin City Council Biodiversity

Location

Dublin Bay is bisected by the shipping lane of Dublin Port. Its natural shallow harbour brought about the genesis of Dublin City as a major international port, first as a centre of trade controlled by the Vikings and then as the 'second city' of the British empire. The Bay has always been challenging for navigation due to its numerous shallows and contains over 400 shipwrecks classed now as national monuments.

<https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=89e50518e5f4437abfa6284ff39fd640>

Protected Habitats and Species

The North Bull Island is the most designated site in the Republic of Ireland and has been officially recognised for its important biodiversity for a century. North Bull Island was designated as a UNESCO Biosphere Reserve in 1981 and was extended and re-designated in 2015 as **Dublin Bay Biosphere Reserve** (DBBR) to create a model for managing biodiversity at an ecosystem level in an urban area (<http://www.dublinbaybiosphere.ie/about>). It presents a concept which is more identifiable to the public and fosters greater awareness and wider engagement in active management by citizens. The Biosphere will be composed of a core area of wetland areas designated as part of the EU's Natura 2000 network. Each of the core zones contains unusual flora and fauna communities found in many remnant pockets of vegetation which exemplify the landscape history of the Dublin region prior to its development as a capital city. North Bull Island has two Natura 2000 sites: Special Protection Area (SPA) for birds under the Birds Directive and a Special Area of Conservation (SAC) under the Habitats Directive. Additionally, South Dublin Bay also has both an SPA and SAC. The core is supported by terrestrial buffer zones of parklands, greenbelts, golf courses and greenspace along watercourses that directly supply the protected wetlands and a marine buffer. A transition zone surrounds the core and buffer and is where people live and work sustainably to manage the Bay.

Dublin Bay comprises a wetlands complex of international importance for its coastal and estuarine habitats and its overwintering migratory bird populations. The DBBR has recorded 180 species of birds. It provides habitat for 30 species of water birds, with in excess of 37,000 water birds spending the winter in the bay complexes (30,000 in Dublin Bay and 7,000 in Baldoyle Bay) each year (Birdwatch Ireland). It is internationally important for Light-bellied Brent Goose, Knot, Black-tailed Godwit and Bar-tailed Godwit, and supports nationally important numbers of a further 18 species. These birds are protected under Ireland's international treaties with the Irish government's ratification in a number of conventions and agreements, including the EU Birds and Habitats Directives, the Convention on Biological Diversity and, since 1999, the African-Eurasian Migratory Waterbirds Agreement (AEWA) of the Bonn Convention. There are two wetland complexes designated under the RAMSAR Convention - North Bull Island and Sandymount Strand - in Dublin Bay.

North Bull Island alone has five Red Data Book vascular plant species, four rare bryophyte species, and is nationally important for three insect species (McCorry and Ryle, 2009). Many plants in the DBBR are known to show great adaptation to extreme coastal conditions and

variations of microclimate, and significant genetic variation and hybridisation can occur (Doogue, et al 1999; Curtis and Wilson, 2013). The North Bull Island and parts of the DBBR buffer zone in north Dublin include populations of Irish Mountain Hare (*Lepus timidus hibernicus*), a uniquely Irish sub-species of a species of national and international importance, but under severe pressure from recreational disturbance and illegal poaching (Nulty and Hayden, 2012).

Useful links

Dublin City Biodiversity Action Plan 2015 – 2020

http://www.dublincity.ie/sites/default/files/content/Press/Documents/Draft%20Dublin%20City%20Biodiversity%20Action%20Plan%202015-2020%20_November%202015_.pdf

EuroMAB Conference for all UNESCO Biospheres in Europe and North America will take place from 2-5 April 2019 at Dublin Castle. <http://euromabdublin2019.ie>

Footnotes

*Rachel Carson's *Silent Spring*, published in 1963 is a powerful exploration of the effects of human interference with our natural world, her writing on the subject is acknowledged in literary critique for her descriptive prose detailing the beauty of our environment.

*The Urgent Enquiry Project Partner team, attended the symposium programme by Invisible Dust – *Under Her Eye, Women and Climate Change* 1st – 3rd of June 2018 at the British Library where Margaret Atwood discussed the possible fictional futures described in her writing that were already becoming reality.

* Established in 2009 by Director and Curator Alice Sharp, Invisible Dust is a UK based commissioning organisation that works with leading artists and scientists to produce new and exciting artworks exploring our environment that spark local and national conversations around pressing environmental concerns. In 2018 Invisible Dust organised *Under Her Eye* with author Margaret Atwood and Paris Climate Agreement 2015 leader Christiana Figueres in London. Invisible Dust artists include Turner Prize winners Elizabeth Price and Jeremy Deller. This residency will be part of the *Surroundings* Programme, a three year commissioning programme with international artists on environmental themes taking place with the Humber Museums Partnership with the three local authorities of Hull, East Riding of Yorkshire and North Lincolnshire. Invisible Dust will offer an international exchange for one of the selected artists to develop an iteration of their commission in the UK as part of the final year of Invisible Dust's *Surrounding* Programme. Providing an opportunity to develop a closer connection between the east coast of Ireland and the east coast of Yorkshire, the commission will be realised in the East Riding of Yorkshire in April 2020 at one of their museums, with time spent in the region in February / March 2020 to develop the project.

www.invisibledust.com