

# NEW HORIZONS *for* NATURE

## Ireland's National Biodiversity Conference Report 2019

### FEATURING:

- Videos of all the talks
- Summaries, quotes and facts
- Impact reports
- Seeds for Nature
- ...and more!



An Roinn Cultúir,  
Oidhreacht agus Gaeltachta  
Department of Culture,  
Heritage and the Gaeltacht



IRISH  
FORUM  
ON  
NATURAL  
CAPITAL





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# National Biodiversity Conference

#BIODCON19



# WELCOME MESSAGE



**Ciaran O'Keeffe**

*Principal Officer, National Parks and Wildlife Service*

Making the decision to hold Ireland's first National Biodiversity Conference was easy, because we knew we needed to get better at communicating and engaging with all of the people and sectors that biodiversity needs: businesses, farmers, foresters, planners and regulators, as well of course as the broad conservation sector. Given the urgent challenges biodiversity faces, we felt the time was right to reach out and shine a light on the great work - and the pressing issues - going on across the country.

The event brought together people from all walks of life and energised and encouraged every one of us. President Michael D. Higgins' inspirational words powerfully affirmed the need for protection and restoration, and the huge range of contributions from the podium, the floor and online urged us all, in our wide-ranging roles and lives, to do more and to do better, for nature and natural capital.

For me, the key success was bringing together people with such a diversity of backgrounds and support them in their efforts to find common purpose. This Conference Report captures many of these contributions and will, I believe be a valuable reference tool in the long term, a source for ideas and solutions, and also a stimulus.

Since the Conference, we have seen the stark messages on biodiversity loss from IPBES, the Intergovernmental Platform for Biodiversity and Ecosystem Services. Those messages have had more reach and resonance than most and they have given us a further imperative for action.



**Jane Stout**

*Director, Irish Forum on Natural Capital*

Despite widespread concern about the current state of nature and the insufficient resources available to protect and restore biodiversity and ecosystems in Ireland, the first National Biodiversity Conference was filled with a sense of optimism.

It showed that different sectors are in fact pulling in the same direction, demanding the transformative changes - the paradigm shifts - that we need in order to ensure nature is the first consideration, not the last, in our decision-making. And it demonstrated that we are further down this road than we might think: people do care. They are willing to conserve nature. People do value biodiversity.

Support for nature came from all angles at this conference – from the impassioned speeches of President Michael D. Higgins, Inger Anderson (Head of the UN Environment Programme), ministers, corporates, NGOs... Nature conservation is no longer just an issue for ecologists. Future sustainable development comes from linking ecology, economics and ethics, and we need a mechanism to do that. I welcome the announcement of the 'Seeds for Nature' from government departments, semi-state organisations and others: this is a good start, and will allow us to build on the National Biodiversity Action Plan and existing legislation.

But there is still a long way to go, and the recent announcement of a Citizens Assembly for nature is an opportunity to continue the valuable work started at this conference. I would like to offer my sincere thanks to the organisers, funders and supporters of this conference and look forward a working together for nature for all of our futures.



# CONFERENCE OVERVIEW

On 20th & 21st February 2019, Ireland's first National Biodiversity Conference, 'New Horizons for Nature', was held in Dublin Castle. Over 500 delegates, including 89 speakers, from across the biodiversity conservation sector came together to talk, listen, learn and explore the way forward for biodiversity in Ireland. Talks covered a range of key issues, from engaging communities, young people and businesses to climate, water, agriculture and the economics of nature; the Together for Biodiversity Awards celebrated action for nature at the local level; and our 'Seeds for Nature' Charter saw 14 Government Departments, State Agencies, NGOs and businesses commit to taking action beyond their current work programmes to support the implementation of the National Biodiversity Action Plan 2017-2021.

## Why a National Biodiversity Conference?

We are losing global biodiversity at a rate unprecedented in human history. In Ireland, many of our protected habitats are in poor condition and 14% of assessed species are thought to be endangered. The number of plants, insects, mammals and birds that are threatened or endangered is growing year on year.

This matters for people as well as the planet. As the web of life breaks apart, the natural systems that give us food to eat, air to breathe and water to drink are increasingly vulnerable. Is that something we are prepared to accept?

It was time for a new approach and a new understanding. That's why we brought academics, artists, businesses, community groups, conservationists, ecologists, farmers, fishers, foresters, government, landowners, local authorities, NGOs, politicians, scientists and state agencies together to discuss the challenges, explore the solutions and figure out how to work together to achieve our common goal of reversing biodiversity loss and implementing the National Biodiversity Action Plan 2017 - 2021.

## Who spoke?

We heard from international leaders such as Inger Andersen, the Director General of the International Union for Conservation of Nature and incoming Executive Director of UNEP, and Humberto Delgado Rosa, Head of Natural Capital and Biodiversity at the European Commission (DG Environment).

We also heard from Irish leaders, including President of Ireland Michael D. Higgins, Professor Jane Stout, Director of the Irish Forum on Natural Capital, Professor John Fitzgerald, Chair of the Climate Change Advisory Council, and renowned journalist Ella McSweeney, along with a diverse range of specialists working at all scales across the length and breadth of the country.

## Who organised it?

The conference was co-organised by the National Parks and Wildlife Service (a part of the Department of Culture, Heritage and the Gaeltacht) and the Irish Forum on Natural Capital. Additional funding was generously provided by the Department of Agriculture, Food and the Marine, the Department of Communications, Climate Action and Environment, the Environmental Protection Agency, the Office of Public Works and Dun Laoghaire Rathdown County Council.

## About the organisers

The Department of Culture, Heritage and the Gaeltacht is the statutory body for nature conservation in Ireland. The National Parks and Wildlife Service, part of the Department, works to conserve a representative range of Irish ecosystems, to maintain and enhance populations of flora and fauna in Ireland, to designate and advise on the protection of habitats and species identified for nature conservation, to implement national and EU legislation and policies for nature conservation and biodiversity, to manage, maintain and develop State-owned National Parks and Nature Reserves, and to promote awareness of natural heritage and biodiversity issues.

The Irish Forum on Natural Capital brings together a diverse range of organisations and individuals from academic, public, private and NGO sectors who are interested in the development and application of the natural capital agenda in Ireland. Through the collaboration and leadership of its members, the organisation's aim is to help to value, protect and restore Ireland's natural capital and ecosystem services by supporting the adoption of natural capital concepts in public policy and corporate strategy, promoting informed public and private sector decision-making and assisting in the establishment of a national natural capital accounting standard.



# VIDEO SHORTCUTS

Click the buttons to watch online

## Day 1

### Opening Plenary

- ▶ **Welcome** Ciaran O’Keeffe (National Parks and Wildlife Service)
- ▶ **Launch** Minister Josepha Madigan, TD
- ▶ **Keynote** Ella McSweeney (Journalist)
- ▶ **Keynote** John Fitzgerald (Climate Change Advisory Council)
- ▶ **Keynote** Jane Stout (Irish Forum on Natural Capital)
- ▶ **Awards** Presentation of Together for Biodiversity Awards

### Parallel Session 1

- ▶ How can we engage communities to lead on conservation?
- ▶ How is climate change impacting on biodiversity?
- ▶ How can we value ecosystem services? (Marine)

### Parallel Session 2

- ▶ How can we engage farmers to conserve biodiversity?
- ▶ How can we manage river catchments for biodiversity?
- ▶ How are we financing biodiversity conservation?

### Parallel Session 3

- ▶ How can we engage young people with biodiversity?
- ▶ How can biodiversity be better integrated in agricultural policy?
- ▶ How do we account for natural capital and biodiversity?

### Closing Plenary

- ▶ **Debate** What’s the one thing we need to do to for nature?
- ▶ **Summary** Micheál Ó Cinnéide (Irish Forum on Natural Capital)
- ▶ **Close** Ciaran O’Keeffe (National Parks and Wildlife Service)

## Day 2

### Opening Plenary

- ▶ **Welcome** Katherine Licken (Dept. Culture, Heritage & Gaeltacht)
- ▶ **Global** Inger Andersen (IUCN)
- ▶ **Regional** Humberto Delgado Rosa (European Commission)
- ▶ **National** Michael Ewing (Irish Environmental Network)
- ▶ **Horizons** Tara Shine (Change By Degrees)
- ▶ **Keynote** President Michael D. Higgins

### Parallel Session 4

- ▶ How can we engage across sectors for biodiversity?
- ▶ How can we improve biodiversity on farm land?
- ▶ How can we value ecosystem services? (Land & Rivers)

### Parallel Session 5

- ▶ How can we engage businesses with biodiversity?
- ▶ How can we plan for climate adaptation?
- ▶ How do Payments for Ecosystem Services work?

### Parallel Session 6

- ▶ How can we engage the public through citizen science?
- ▶ How can we use nature-based solutions in river catchments?
- ▶ How should we be investing in nature? Panel Discussion

### Closing Plenary

- ▶ **Panel** New Horizons for Nature: What have we learned?
- ▶ **Summary** Yvonne Buckley (Biodiversity Forum)
- ▶ **Seeds** Seeds for Nature announcement



# IMPACT IN NUMBERS

420 delegates

89 speakers

46% female speakers

22 sessions

1235 e-poll responses

4,556 live stream views

1 national TV item

4 national radio items

39 press items

356k tweet impressions\*

\*During month of February

## High Delegate Satisfaction

(n=74)

How would you rate the conference overall?

EXCELLENT = 57%

VERY GOOD = 30%

GOOD = 12%

OK = 1%

Would you attend another event like this?

YES = 87%

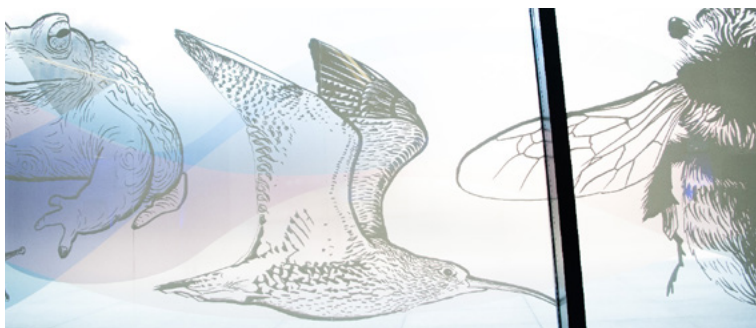
MAYBE = 8%

NO = 0%

LIVE STREAM = 3%



# IMPACT IN PICTURES



# IMPACT IN WORDS

"A transformational conference."

"It was really an incredibly inspiring conference and the arrangements and parallel sessions were excellent, efficiently arranged and effortlessly delivered. It was also wonderful to see biodiversity placed centre stage by the Minister, cross departmentally and in the national media."

"I came home full of energy and hope for biodiversity."

"I was very impressed by the array of speakers and themes covered. It was an exceptionally well run conference, with a very 'professional' look which is so important for creating the correct impression around biodiversity and natural capital."

"A marvellous, energising, stimulating, lively and well organised few days."

"Given the quality of people in the room and how well they expressed themselves, it is difficult to understand how we have got ourselves to this position."

"Fantastic to get so many different groups together in a positive and open dialogue. Also, without a doubt the slickest conference I've ever been to."

"It was a huge success and the networking alone will reap huge rewards. The groundswell of support from the public in general for all things green is at last being realised and we should all capitalise on that."

"Inspiring and energising. And a great meeting of friends and colleagues all of whom work, and have in many cases worked for many years, to conserve and sustain nature in Ireland."

"Your ambition, energy and amazing organisational skills have demonstrated that there is energy and support for action on biodiversity across many sectors and we have many partners willing and able to work with us to achieve our goals. I'm looking forward now to doing my bit to build on the success and energy of New Horizons to make those seeds grow and flourish."

"An uplifting and inspiring event. It really was buzzing."

"Wonderful, inspiring conference! It gave me so much motivation and food for thought."

"An amazing event with wonderful speakers."

"A terrific conference last week! There were some really engaging insights throughout the two days, fantastic speakers (highlight for me was the President's speech) and a great opportunity to talk to others who are working in this field."

"I'm not sure I've ever been to a better organised conference!"

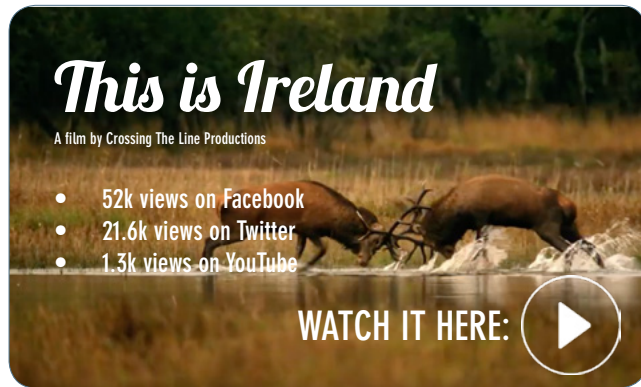
"A tremendous event, with excellent sessions over the two days, and great networking opportunities for projects like ours, which generally do our business in the field, over a gate or in a community centre."

"The smooth running of the event was testament to amount of work you put into it. We can only hope that the 'top brass' took something from it and as a nation we can change our ways before it's too late."

"It was a pleasure to attend. The whole event served to reinvigorate many of us who work away individually on our own bio programmes nationwide."



# IMPACT ON SOCIAL MEDIA



**Yvonne Buckley** @y\_buckley · Feb 20  
 Micheál Ó Cinnéide suns up day 1 of [#biodcon19](#) with a beautiful visual infographic - I'm loving the diverse ways of communicating through art, birdsong, amazing film footage & conversations at this conference. Well done [@BiodConJe](#)

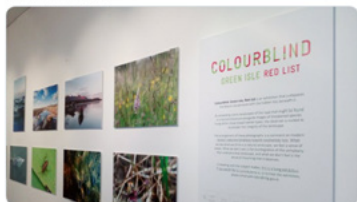
**Olivia's Cuckoo** @OliviaCuckoo · Feb 20  
 We've been following the action from Ireland's National Biodiversity Conference today at Dublin Castle. Inspirational speeches by those dedicated to protecting, conserving and restoring biodiversity throughout Ireland [#biodcon19](#)

**Irish Woodcock Project** @IrishWoodcock · Feb 20  
 A superb day at [#biodcon19](#) in Dublin castle, where I was invited to speak earlier on how to engage youth with nature. Now listening to [@whittedaway](#) and co wrapping up the day. Inspiring stuff!



**Maria Long** @murlong77 · Feb 20  
[#biodcon19](#) has been astounding ... same again next year?? No, actually... even bigger next year please!!! [@BiodConJe](#) [@DeptAHG](#) [@npwsBioData](#) [@EPAIreland](#) [@colltenews](#) [@JaneCStout](#) [@y\\_buckley](#) [@PresidentIRL](#) [@BSBIreland](#) [@BSBibotany](#) [@BioDataCentre](#)

**James Orr** @Jam\_Orr · Feb 20  
 I really enjoyed the first day of [#biodcon19](#)! The intro film by [@ctwildlife](#) and this fantastic photography exhibition in the hall reminded me why I'm doing what I'm doing!



**shirley clerkin** @shirleyclerkin · Feb 20  
 Looking forward to the next annual National Biodiversity Conference- new horizons for nature as this one is brilliant [@DeptAHG](#) [#biodcon19](#)

**Wilderness Blooms** @wildernessblooms · Feb 20  
 Bowled over the by breadth, depth, love, engagement and sheer bloody brilliance of [#biodcon19](#) I didn't have to add to emissions to get to Dublin from N Donegal, nor did I have to find childcare. Live stream was first class [@biodconje](#)

**Ben Malone** @BenMalone · Feb 20  
 Discourse. Dialogue. Listening. Language. Authenticity. Humility. Passion. Commitment.  
 Some of the keywords I have heard [@MichaelDiggins](#) utter this morning. What a passionate leader. He has captivated everyone at [#biodcon19](#) today. A very worthy champion of nature in [#ireland](#).

**Luke McGrath** @luke.mcgrath · Feb 20  
[@BiodConJe](#) what an excellent event today. Great opportunity to present my research on natural capital accounting and to hear others speak about our all too often ignored natural wealth [#loveinshresearch](#) [#naturalcapital](#) [#biodcon19](#)

**Wild Work** @wildwork · Feb 20  
 What a fantastic and important conference. A huge congratulations and thanks to [@BiodConJe](#), all the organizers and speakers [#biodcon19](#)



**changebydegrees** @changebydegrees · Feb 20  
 Women leading the way on biodiversity conservation! With Deirdre Lynn from [@npwsBioData](#) and Hannah Hamilton from [@theRiverField](#) organised [@BiodConJe](#) and the [@MiseAnJa](#) from [@Rte](#) [@ecoeye](#). [#biodcon19](#) [#strongertogether](#) [@HomewardBound16](#)



**Nichola Ní Bhradáin** @N\_Salmon · Feb 20  
 When my mother starts telling me about the decline of wildlife, you know [#biodcon19](#) has made the headlines!

**Ricky Whelan** @RickyWhelan · Feb 20  
 Im at [#biodcon19](#) without being there!! Live stream is excellent! [@LiamLy](#) giving a useful summary of [#CitizenScience](#) in Ireland. Looking forward to hearing other panellists [@OfFalyHeritage](#) [@iWDGnews](#) [@BatConservire](#) and [@BirdWatchIE](#) own [@bcaff1](#)!! [@BiodConJe](#) [@BioDataCentre](#)

**KRECEcological** @EcologicalKre · Feb 21  
[@BiodConJe](#) congratulations to NPWS for having the vision and making the effort to get such a breadth of Irish (and beyond) society to this event. From afar it seemed very worthwhile and hopefully from it will flow great things.

**NatureNorthWest** @nature\_west · Feb 21  
[@BiodConJe](#) Home in the northwest now. Thank you all for such an inspirational, motivating and incredibly well run conference!! Back to work (for biodiversity:) in the morning with a pep in my step! [#biodcon19](#)

**Margaret O'Gorman** @OGormanWHC · Feb 20  
 Discussion on [#tthing4nature](#) at [#biodcon19](#) [@BiodConJe](#) - we should be looking for a bigger slice of the pie we need to take over the damn bakery [@think\\_or\\_swim](#) Nice One and quoting [@GretaThunberg](#) tool Feel fear and act!

**Pádraic Fogarty** @whittedaway · Feb 20  
 "Don't just care... you need to show you care!" The wisest words from [#biodcon19](#) so far from a student of St. Michael's college, Dublin speaking at the young people's panel. 🙌

**Micheline Sketfington** @MichelineShSk · Feb 20  
 Now live from Biodiversity Conference in Dublin Castle: no less than 40 pledges ('seeds') by government & semi-state sectors for new initiatives for conservation & climate change!! [biodiversityconference.ie/seeds-for-natu](#)... Have we turned a corner...? Hope so, it's critical now [#biodcon19](#)

**Roisin Byrne** @LaRoisin · Feb 20  
 Thanks so much to [@BiodConJe](#) for deep thought on putting together everything on our first day at the national biodiversity conference 2019. Brilliant diversity in the room. Looking forward to 20 seed actions tomorrow.

**Caroline Sullivan** @flamingredapple · Feb 21  
 On the way back West after a great [@BiodConJe](#). It was a pleasure and an honour to be asked to partake. Well done for organising a conference that highlighted the current [#biodiversity](#) issues and some of the ways forward to make sure we don't burn down our house [#biodcon19](#)

**Yvonne Buckley** @y\_buckley · Feb 20  
 The top tweeted word in responses to [#tthing4nature](#) was "stop". It was used in the phrases "stop peat extraction" "stop tidying up" "stop mowing" "stop polluting rivers" "stop harvesting and burning peat" [#Biodcon19](#) [@BiodConJe](#)

**Josephine Madigan** @josephmadigan · Feb 20  
 Some Commitments made today:  
 • Double funding for biodiversity action to 1 million by 2021.  
 • Establish Climate action Programme in my department.  
 • Create Business & Biodiversity platform.  
 • Legislate a Biodiversity duty on public & local authorities.  
[#biodcon19](#) [@BiodConJe](#)



# PLENARIES





“This conference is titled ‘New Horizons for Nature’ and that is what we need if we are to protect, conserve and restore biodiversity.”

Minister for Culture, Heritage and the Gaeltacht Josepha Madigan, TD



WATCH THE FULL SPEECH



**“If we were coalminers, we would be  
up to our knees in dead canaries.”**

President of Ireland, Michael D. Higgins



**WATCH THE FULL SPEECH**



## Day 1: Opening Welcome

Ciaran O'Keeffe, National Parks and Wildlife Service



WATCH THE FULL SPEECH

## Day 2: Opening Welcome

Katherine Licken, Department of Culture, Heritage and the Gaeltacht



WATCH THE FULL SPEECH

## Day 1: Closing Summary

Micheál Ó Cinnéide, Irish Forum on Natural Capital



WATCH THE FULL SPEECH

## Day 2: Closing Summary

Yvonne Buckley, Chair of the Biodiversity Forum



WATCH THE FULL SPEECH



**“We need unflagging leadership with great vision, dedication and the ability to mobilise for action.”**

Inger Andersen



**WATCH THE FULL SPEECH**





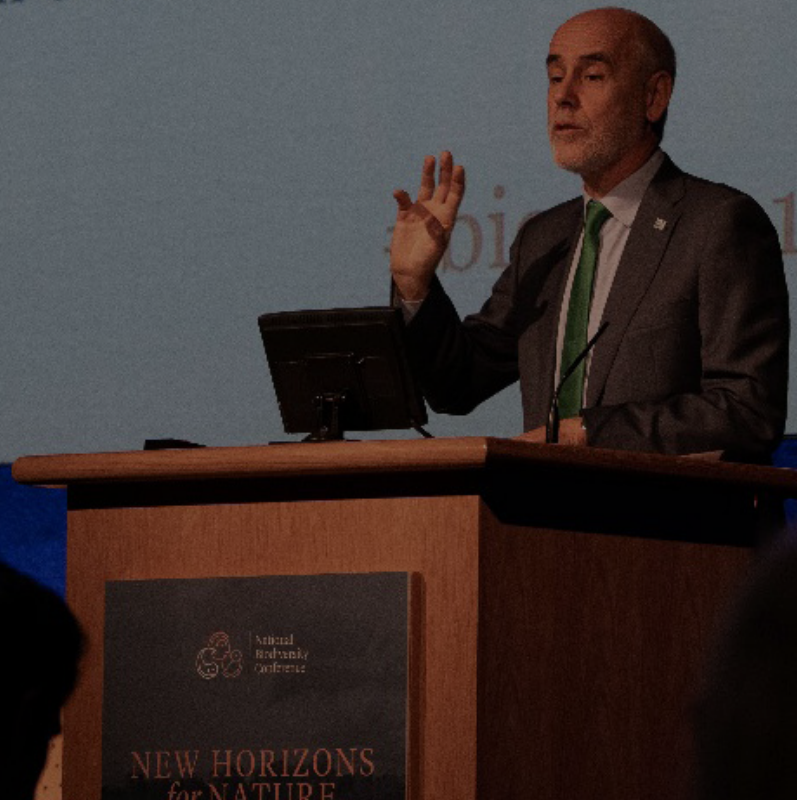
**“There are three layers of sustainable development, but there is only one which sustains the others: nature.”**

Humberto Delgado Rosa

Director for Natural Capital  
European Commission



WATCH THE FULL SPEECH





# Tara Shine



WATCH THE FULL SPEECH



**"It's not just places  
that make us feel  
connected to nature  
- it's also people."**



**"We, as one species  
out of two billion,  
belong in, and came  
out of, and are still  
part of the natural  
environment."**

# Michael Ewing



WATCH THE FULL SPEECH



# #1thing4nature

## The big issues

What's the one thing we need to do for nature? We asked a diverse panel of experts to choose their priority for biodiversity conservation in Ireland and debate them on the main stage. Then we asked the audience to vote for the priority they agreed with most, before submitting their own.

## Speakers and their #1thing4nature

- Padraic Fogarty, Irish Wildlife Trust (Moderator)

### Implement the National Biodiversity Action Plan

- Yvonne Buckley, Biodiversity Forum and Trinity College Dublin

### Stop climate change

- John Gibbons, Journalist and An Taisce

### Stop using biocides

- Eanna Ni Lamhna, Broadcaster and Author

### Develop an integrated land use policy

- James Moran, Galway Mayo Institute of Technology

## How did the audience vote?

An integrated land use policy



Implement the National Biodiversity Action Plan



Stop climate change



Stop using biocides



## Key quotes from speakers

*"We have to talk more, to have conversations around our kitchen tables and talk to politicians. Today was a great start along that journey."* — Padraic Fogarty

*"When was the last time you had to wipe dead insects off your windscreen? We have fewer than ever now because we are killing them in great numbers with biocides of all sorts."* — Eanna Ni Lamhna

*"Tackling climate change is seen as elusive as the fourth secret of Fatima, but it's painfully simple: we need, globally, the immediate decarbonisation of every sector, including food."* — John Gibbons

*"My big idea is a new integrated land use policy that will value people, nature and food together. It will solve all the other issues raised."* — James Moran

*"Even in intensive farming areas, 10% of the land can be managed within a green infrastructure, by rewarding farmers for biodiversity conservation."* — James Moran

*"We need to enforce the legislation we already have. We need the will, the funding and the engagement to implement the National Biodiversity Action Plan."* — Yvonne Buckley

## What's the audience's One Thing for Nature?



Click here  
to watch the  
full video



Padraic Fogarty  
IWT  
0:00 

Eanna Ni Lamhna  
Broadcaster  
2:23 

John Gibbons  
Journalist  
8:03 

James Moran  
GMIT  
15:23 

Yvonne Buckley  
TCD  
23:36 

Panel discussion  
Q&A  
29:55 

# Closing Panel: What have we learned?

## The big issues

For Day 2's closing panel, the discussion reviewed the key points raised across the three main themes of Engagement: Learning from Conservation Success, Planning For The Future and Investing In Nature. Ella McSweeney gave her summary of the six **Engagement** sessions, Andrew Jackson spoke on **Planning** and Jane Stout recapped **Investment**. The session closed with each panel member giving their one important takeaway or commitment inspired by the conference.

## Speakers and their #1thing4nature

- Eugenie Regan, UNEP-WCMC (Moderator)
- Ciaran O'Keeffe, National Parks and Wildlife Service
- John O'Neill, Dept Communications, Climate Action and the Environment
- Jane Stout, Irish Forum on Natural Capital and Trinity College Dublin
- Andrew Jackson, University College Dublin
- Ella McSweeney, Journalist

## Key quotes from speakers

*"My digest of **Engagement** would be 'Funding, funding, funding', translating what's happening on the ground upwards, and the sense that to engage people you need to connect with what affects them directly."* – Ella McSweeney

*"Thoughts from **Planning**: each planning tier must be consistent with the one above. The National Planning Framework contains biodiversity objectives, and it's up to us to ensure they filter down to regional, county and local plans. But plans are no substitute for robust, binding legal frameworks – don't be scared to litigate where necessary."* – Andrew Jackson

*"One of the big questions from **Investment** was, What are people willing to pay for the radical changes that are needed? ... It's about partnership and working together, we can't just expect investment from Government."* – Jane Stout

## Speakers' post-conference personal pledge:

*"As a scientist and a practitioner, I tend to put my head down and work and forget to communicate, so I'm going to commit to communicating more."* – Eugenie Regan

*"The National Biodiversity Data Centre provides people like me who work in journalism an amazing access to data and if they are not funded properly long-term that would be a shame to put it mildly, so I'll do everything I can do make sure that happens as professionally it helps me so much."* – Ella McSweeney

*"My one thing for nature would be to support and promote the next generation of young political leaders, particularly female leaders. I'm also going to put a pond in my garden and litigate more for biodiversity."* – Andrew Jackson

*"My personal commitment is to work outside of my comfort zone, to work with other sectors and to try to achieve the mission of valuing, protecting and restoring nature."* – Jane Stout

*"I'd like to work on biodiversity in the marine environment. We've been looking at different stakeholders and government departments that have jurisdiction in this area - or don't - and my commitment will be trying to push that out with colleagues on the biodiversity side to develop much more coherence in that sector."* – John O'Neill

*"This conference itself is a seed - and it has enabled us to get a reach into places that are sometimes hard to reach, high up in the food chain, and we need to nurture this and bring the outcomes of this to our senior level management, to politicians. And also to nurture the fact that we had an interest from a wide range of departments here, which isn't always the case. So we'll work on this seed."* - Ciaran O'Keeffe

Click here  
to watch the  
full video



Eugenie Regan  
UNEP-WCMC  
0:00 

Ella McSweeney  
Journalist  
0:45 

Andrew Jackson  
UCD  
4:48 

Jane Stout  
IFNC/TCD  
14:39 

John O'Neill  
DCCAE  
17:24 

Ciaran O'Keeffe  
NPWS  
26:16 



# ENGAGEMENT: LEARNING FROM CONSERVATION SUCCESS

The Engagement theme sought to explore a range of successful biodiversity initiatives around Ireland to see what we can all learn about engaging with others on biodiversity. We heard from community-based groups, young people, businesses, citizen science leaders, cross-sectoral projects and initiatives focussed on farmers. The key messages? Awareness and education, resourcing, engaging families as a whole, spending time in nature, listening, and simple, constructive and positive messaging.

At the first parallel session exploring how to engage communities on conservation, one point that resonated was that people are a part of nature, not separate from it. A selection of wetlands project leaders recounted lessons learned from their success, noting a top-down, bottom-up approach is required, in terms of putting resources in place, giving people simple tools and allowing them to build on their own knowledge. The panel agreed that local solutions can be cost effective but should not be regarded as cheap labour. Citizen Science was praised as a source of wellbeing for participants as well as generating valuable data, however financial support is necessary if volunteer recording is to have long-term benefit.

Bridging awareness gaps between farmers and ecologists was covered in Session 2. The consensus was that this means looking at how we use language, and opening two-way conversations that will lead to better collaboration. Another key point is the need to engage farming families as a whole, including women and youth. Hill farmer Brendan Joyce called for the inconsistencies in agricultural and ecological guidelines to be addressed in upcoming CAP reforms. The Burren LIFE model was outlined as a farmer-centric project that empowers with rewards for delivering outcomes. Helping farmers to see value in a type of land previously seen as worthless makes a huge difference. Accessing funds should be less bureaucratic, while everyone agreed on the importance of education at all levels and sectors.

Education was also a hot topic in Session 3 where we heard from a number of inspiring young conservationists, including James Dunne, a transition-year student from St Michael's College, who told personal stories of engaging with nature. They spoke eloquently of how, in this era of School Strikes and Climate Change campaigns, many young people are a lot more aware and passionate about the environment than those in power realise. While using apps to engage was mentioned, we must not underestimate the wow-factor of getting out into the wonders of the wild - a point well-made by Clare Bromley, who runs Glenveagh National Park's teacher training workshops.

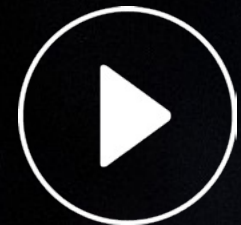
Day 2 saw a panel discussion between biodiversity experts working across a variety of sectors. After a run-through of lessons learned from the All-Ireland Pollinator Plan by the NBDC's Úna Fitzpatrick, each participant outlined their approach - the consensus was people are invariably keen to get on board once they understand the benefits of biodiversity-friendly measures, be it the move away from herbicides or leaving areas unmown. Messaging should be clear, constructive and positive. The panel suggested a collective framework for biodiversity engagement in the future, with a better distribution of biodiversity officers in local authorities and 'nature area' requirement for new developments.

The second session of Day 2 saw the launch of the BITCI's Biodiversity Handbook for Business to help Irish businesses make space for nature. As its Seed For Nature, Dublin Port committed to developing a Natural Capital Policy, employing an environmental scientist and ecologist to work on conservation of habitats. Meanwhile Dawn Meats' David O'Flynn spoke of integrating biodiversity into all the company's CSR policies and initiating an audit scheme with rewards for farmers to encourage best biodiversity practice. The importance of working with companies, as well as simply asking for financial support, was emphasised, as were the links to ongoing business objectives like employee health and wellbeing.

The final session focused on the importance of citizen science, how it is a vital source of data and public engagement as well as providing health and education benefits for volunteers. While it can deliver a robust data set, the results must be approached with the same rigour as any other, with caveats of bias and margin of error. The need for adequate training, tech support, and feedback were pointed out by speakers to help with volunteer retention, plus the need for continuous funding to ensure long-running programmes to observe changes in species and habitats. A Roadmap for Citizen Science would see a standardised approach to ensure volunteers are well-treated and to facilitate collaboration between various groups working on interlinking subjects.

**“One way to engage and enrich our relationship with the living world is to talk about love, emotion and affection.”**

Ella McSweeney, Journalist



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# How do we engage communities to lead on conservation?

## The big issues

How can local conservation groups engage their neighbours? How can they engage state agencies and other stakeholders? And what do state agencies and others need to know about engaging with communities?

## Speakers

- Bernie O'Flaherty, Local Authority Waters and Communities Programme
- Mark Horton, The Rivers Trust
- Kate Flood, Abbeyleix Bog Project and the Community Wetlands Forum
- Mary Mulvey, Irish Uplands Forum

## Key quotes from speakers

*"The starting point for the bottom-up approach is the issues that people identify with. What might be our priorities in agencies or government – like phosphates and pesticides – are not necessarily community priorities. We need to bear that in mind when engaging with communities."* — Bernie O'Flaherty

*"Communities are great at getting initiatives started but they need support in the long term: funding, sound partnerships and open information sharing with state bodies. We can be possessive with our information, but by sharing we can learn more about the water environment and engage more people."* — Mark Horton

*"Conservation is about people as much as it's about plants and peat. We need to start linking wellbeing with conservation in a much more clear way."* — Kate Flood

*"Community development is not for the faint-hearted. Community groups really understand that, and I think today the type of community groups we have are very very savvy. A new type of person is engaging and challenging how we do things. It's very exciting."* — Mary Mulvey

## Key issues discussed during Q&A

- Language at community level: the role of economic concepts such as natural capital, ecosystem services, benefits and value.
- Challenges of engaging communities: giving people meaningful opportunities, delivering positive local impact, supporting local initiatives.
- Funding: loss of key funding schemes, complexity of bureaucratic application processes, the value of volunteer time, the role of crowd funding.
- Turning volunteering into employment: project-based jobs, the issue of funding continuity and impacts on knowledge transfer, guiding opportunities via Airbnb experiences, etc., need for flexibility in funding models.
- Cooperation across groups: platforms to support collaboration, accessibility of toolkits, models and methods, role for academia in connecting initiatives.
- Managing conflict between conservation and amenity: need for facilitation and conversation to broaden perspectives, potential for coexisting outcomes, the role of community-based visioning processes.

## Resources


- Local Authority Waters and Communities Programme (website)
- The Rivers Trust (website)
- Abbeyleix Bog Project
- Community Wetlands Forum (website)
- Irish Uplands Forum (website)
- Catchments Unit (website, newsletter)
- List of Public Participation Networks in Ireland

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full video




Bernie O'Flaherty  
LAWPRO  
1:57 

Mark Horton  
The Rivers Trust  
7:20 

Kate Flood  
ABP & CWF  
19:05 

Mary Mulvey  
IUF  
30:39 

Panel discussion  
Q&A  
39:52 

## The big issues

*"The farmers genuinely wanted to do something for their own environment, for their community. I'd disagree that farmers don't care about the environment, they do. There was just no engagement up to now."* – Donal Sheehan

## Key issues discussed during Q&A

- Public funds: how to ensure a fair distribution towards biodiversity schemes on farms.
- Awareness: the need for more awareness of agriculture for ecologists and vice versa, knowledge sharing.
- Labelling: potential for a 'premium quality' label for meat products.
- Land use change: moving from cattle to tillage to combat climate change.
- Education: the importance of more biodiversity education for farmers.
- Payment: encouraging public support by purchasing products from farmers involved in biodiversity projects; importance of 'payment' to engage farmers.

## Resources

- High Nature Value Farming (website)
- Results-Based Agricultural Payment Schemes (website)
- Irish Natura Hill Farmers Association (website)
- BRIDE Project (website)
- Teagasc (website)

## What's the best way to engage farmers?

*"With a simple score sheet, we changed the farmer's ability to see what his land was worth."* – Dolores Byrne



0:00

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# How can we engage young people with biodiversity?

## The big issues

What empowers youth to take action for biodiversity conservation? How did this generation's young leaders become interested in nature? What kind of programmes and projects best support their engagement? What questions do they have for older generations about how to affect change, and what do they need from us in order to take action?

## Speakers

- Niamh Fitzgerald, Birdwatch Ireland
- James O'Neill, Wildlife Artist and Photographer
- Jessica Hamilton, BSBI Kerry
- James Dunne, Transition Year Student, St Michael's College
- Clare Bromley, Glenveagh National Park

## Key quotes from speakers

*"Youth today are often thought to be overly sensitive and have an inflated sense of entitlement – but many feel entitled to a better world, a healthier, cleaner environment in which our fellow species can thrive. We are sensitive to the issues around biodiversity and are willing to speak up about it."* – Niamh Fitzgerald

*"My generation grew up in this very sterile Ireland so I'm not surprised most haven't got a handle on biodiversity. It's easy to bash farmers for that but that's not fair. It's not only farmers we need to engage with but also their children."* – James O'Neill

*"We need to make people aware of what we have before we lose it and all we have left are anecdotal stories and photographs."* – Jessica Hamilton

*"Ministers don't realise the amount of young people out there that actually know about biodiversity and actually care. A lot of us are already engaged."* – James Dunne

*"I call it the ripple effect. Teachers come to the course for a week, go back to school in the autumn, hopefully more committed to teaching nature and biodiversity lessons. The children then go home to their families and talk about what they have been learning and those families are part of a wider community. So 25 teachers for one week can have a much wider impact than you'd think."* – Clare Bromley

## Key issues discussed during Q&A

- Making biodiversity mainstream: how to engage youngsters day to day, the importance of experiencing nature hands-on.
- School strategy: using a spiral learning approach ie building up to field trips from in-class and on-campus lessons.
- Eco ambassadors: the need for passionate voices.
- School strikes: the inspirational impact of a global youth-led protest.
- Political action: need for strong government strategies and eco campaigns.
- Making our voices heard: finding a way for policymakers to connect with youth directly.
- Apps and internet: the use of technology as a tool to reach young people.


## Resources


- Birdwatch Ireland (website)
- Botanical Society of Britain and Ireland, BSBI Kerry (website)
- Clean Coasts (website)
- My Waste (website)
- My Little Plastic Footprint (website)
- Glenveagh National Park (website)
- Easy Treesie (website)

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Niamh Fitzgerald  
Birdwatch Ireland  
0:00 

James O'Neill  
Photographer  
2:32 

Jessica Hamilton  
BSBI Kerry  
10:34 

James Dunne  
St Michael's College  
21:20 

Clare Bromley  
Glenveagh National Park  
29:20 

Panel discussion  
Q&A  
42:00 

0:00

# How do we engage across sectors for biodiversity?

## The big issues

How do you design a programme that helps farmers, businesses, councils, policymakers and the general public to get involved? And what do these groups need from the conservation sector to take action? This session hears from leaders of the All-Ireland Pollinator Plan and representatives from various sectors.

## Speakers

- Úna Fitzpatrick, National Biodiversity Data Centre
- Juanita Browne, All-Ireland Pollinator Plan
- Pat Foley, Geashill Tidy Towns
- Anne Murray, Biodiversity Officer, Dún Laoghaire-Rathdown County Council
- Carmel Brennan, SSE Airtricity

## Key quotes from speakers

*"We need to identify simple vehicles that can be used to sell the biodiversity message to a very wide audience."* – Úna Fitzpatrick

*"We need champions working in communities in a bottom-up way."* – Juanita Browne

*"We set up a Trees For Families scheme to try to ensure as much local ownership of the idea as possible...when the Pollinator Plan came along, we realised that had given us a fantastic foundation to build on."* – Pat Foley

*"Some people have this perception of how manicured areas should look, they get anxious if they perceive that we're not managing them, so it's important to explain we are just managing them differently."* – Anne Murray

*"Farmers are often getting pushed and pulled one way or another, but areas managed for biodiversity can be an alternative income source for them so we are hoping to engage more with them on this."* – Carmel Brennan

## Key issues discussed during Q&A

- Planning for biodiversity: specific landscape requirements for pollinators.
- Biodiversity Officers: the need for more and better distribution of dedicated staff within county councils, particularly outside the capital.
- Dedicated nature areas: could we make a requirement for every school, estate, business to have a wildlife area?
- More leadership from the top: many projects are 'bottom up', coming from individuals in the community; a need for more government funding.
- Move away from herbicide use: already a dramatic change in the last few years, message is definitely getting through to limit its use re Tidy Towns, etc.
- Food labels: potential for recognition for food producers working in biodiversity.

## What's the best way to engage across sectors?



## Resources

- All-Ireland Pollinator Plan (website)
- National Biodiversity Data Centre (website)
- Geashill Tidy Towns (website)
- Tidy Towns (website)
- DLR Biodiversity (website)
- SSE Airtricity's Generation Green (website)

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Úna Fitzpatrick  
NBDC  
0:00

0:00

Juanita Browne  
NBDC  
32:45

Pat Foley  
Tidy Towns  
33:04

Anne Murray  
DLR Co Co  
41:38

Carmel Brennan  
SSE Airtricity  
46:15

Panel discussion  
Q&A  
51:17



# How can we engage businesses with biodiversity?

## The big issues

What's the business case for biodiversity and what are the business benefits of taking action? What can businesses do to reduce negative impact and maximise their positive impact? What kinds of projects are they undertaking and how can we inspire more to get involved?

## Speakers

- Margaret O'Gorman, Wildlife Habitat Council
- Bernadette Phelan, Business in the Community Ireland
- Eamonn O'Reilly, Dublin Port Company
- David O'Flynn, Dawn Meats
- Cathy Cronin, Intel Ireland
- Richard Watson, Center Parcs

## Key quotes from speakers

*"Don't ask how to get money from a corporation. Ask how you can work with them."* – Margaret O'Gorman

*"We devised The Biodiversity Handbook to help businesses understand why biodiversity matters to them, and to come up with a menu of practical things to do. Businesses like doing, they like action."* – Bernadette Phelan

*"There's a lot of talk of them and us. I don't see that dichotomy."* – Eamonn O'Reilly

*"As a business we have to make things work for us. This wetland saves us €20,000 a year – otherwise we'd have to conventionally clean our wastewater. The beauty of it is it also gives back to the environment."* – David O'Flynn

*"We want employees to stop and reap the health benefits of the natural features of our workplace."* – Cathy Cronin

## Key issues discussed during Q&A

- Why businesses bother with biodiversity: executives live in the environment too, co-benefits, consumer demand, reputational risk, corporate responsibility becoming the new normal.
- Credibility: Origin Green, raising the bar to drive change, outliers.
- Scope for biodiversity initiatives by Dublin Port: looking first at the physical area of the port, the channel, the bay and the peninsula, Bull Island and the Tolka Estuary, likely to look further afield in the future.

## What's the best way to engage businesses?



## Resources

- Wildlife Habitats Council (website)
- BITCI's Biodiversity Handbook for Business (document)
- Dublin Port Company (blog)
- Dawn Meats (website)
- Center Parcs (website)
- Intel Ireland (website)

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Margaret O'Gorman  
WHC  
0:00



Bernadette Phelan  
BITCI  
8:55



Eamonn O'Reilly  
Dublin Port Co.  
14:00



David O'Flynn  
Dawn Meats  
21:46



Cathy Cronin  
Intel Ireland  
29:50



Richard Watson  
Center Parcs  
35:54



Panel discussion  
Q&A  
42:40



# How can we engage the public through citizen science?

## The big issues

What is citizen science? What makes people want to get involved? How does it support better biodiversity management and how can the public and organisations work together? What would a 'Roadmap for Citizen Science' look like?

## Speakers

- Liam Lysaght, National Biodiversity Data Centre
- Amanda Pedlow, Offaly County Council
- Simon Berrow, Irish Whale and Dolphin Group
- Tina Aughney, Bat Conservation Ireland
- Brian Caffrey, Birdwatch Ireland

## Key quotes from speakers

*"Citizen Science is not cheap labour – it's cost effective but we have to invest resources in it."* – Liam Lysaght

*"A lot of people feel that, although they are working alone collecting data, they are part of something bigger... They feel valued." – Amanda Pedlow*

*“There’s nothing worse than creating a scheme with three-year funding, getting a motivated group of recorders together... and then there’s no more funding. Any roadmap must show ways to maintain schemes over long periods.” – Simon Berrow*

*"The more a team feels ownership of their site, the more likely they will return to survey from year to year."* – Tina Aughrey

*"There is a survey for everyone – even if you only know a few species in your garden you can still take part and contribute a very valuable, meaningful set of data."* – Brian Caffrey

## Key issues discussed during Q&A

- Collaboration challenges: day-to-day struggle is time-consuming, access to equipment/resource material, need for a citizen science framework, funding.
- Supports available: heritage officers, offer from Natural History Museum to provide access to reference collections.
- Training: issues with volunteer labour for complex scientific studies, citizen science at school level, NBDC focus on collecting quality data to influence policy - training and education secondary due to lack of capacity.
- Retention of volunteers and continuity of programmes: need for standardised approach, feedback and recognition for volunteers.

## What's the best way to engage the public through citizen science?



## Resources


- National Biodiversity Data Centre (website)
- Offaly County Council Heritage Section (website)
- Irish Whale and Dolphin Group (website)
- Bat Conservation Ireland (website)
- Birdwatch Ireland (website)
- Natural History Museum Collections (website)

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Liam Lysaght  
NBDC  
0:00 

Amanda Pedlow  
Offaly Co Co  
12:41 

Simon Berrow  
IWDG  
22:54 

Tina Aughney  
BCI  
31:38 

**Brian Caffrey**  
BWI  
42:57 

Panel discussion  
Q&A  
49:36 

0:00



# PLANNING FOR THE FUTURE

This theme explored three critical challenges for the future of biodiversity: climate, agriculture and water. We heard from specialists working at river catchment-scale as well as those working on the ground using nature-based solutions; we learned about the priorities for agricultural policy from ecologists, academics, farmers and civil servants, along with farm-level biodiversity interventions from those at the coalface; and we explored how climate change is impacting biodiversity and what we can do to adapt.

The opening session looked at monitoring climate change and its impact on biodiversity. We heard how ICHEC uses global and regional models to predict temperature increase, future rainfall levels and incidences of extreme weather. Multiple ensemble simulations are required to look at best and worst-case scenarios. A rundown of recent ICARUS studies showed how these changes are affecting wetland (41% loss) and upland (18%) habitats. Suggestions to combat fragmentation include improving functional connectivity, corridors and buffers and rewetting bogs. We saw stark figures from NBDC on species loss due to habitat degradation, while the discussion explored the actions needed now: funding the National Biodiversity Action Plan, citizen science and long-term modelling projects.

The next session focused on managing river catchments. Alarming Living Planet Index figures on aquatic biodiversity loss were referenced and Mary Kelly-Quinn (UCD) spoke of being at a 'tipping point'. Specialists from the EPA and Nore Vision outlined water quality declines due to agriculture and forestry, and urged actions with co-benefits (e.g. flood relief) and filling of knowledge gaps on a catchment basis. Farmer John Foley explained how he manages his land for conservation of the freshwater pearl mussel. Actions include buffer areas, water troughs, peat plugs, switching cattle breeds, wintering and a move away from P-based fertiliser. The panel also explored the cultural, recreational and educational value of waterways.

Session 3 looked at how to improve agricultural practices to benefit biodiversity. Andy Bleasdale (NPWS) recommended an Action Framework to identify Natura priorities and a CAP Strategic Plan and Bill Callanan (DAFM) referred to regulation, incentivisation and market pull as the main drivers of change, and the need to mainstream the sustainability message to augment consumer expectations. Farmer communication was another issue: a Teagasc survey showed confusion about the reasons for designations, but farmers become a willing and positive force for change once on board. Flor McCarthy (IFA) urged that education and economic viability is vital in bringing a younger generation onto the land.

Day 2 began with a session on improving biodiversity on farm land. The need for tailored agri-environmental schemes was noted and the example of the Reeks project was outlined: an EIP with a two-tiered farm management approach, using both results- and action-based payments. Ponds and their role in improving water quality at catchment level within a year were discussed, as were the main drivers of farmland bird decline. Key actions included working at bigger ecological scales, better targeting of measures, higher payments for better management and more flexibility. Bernard McKay (farmer) told how he changed his farming practices, as intensification didn't pay dividends. The session emphasised that farmers must be given the right incentives and knowledge to adapt, and are receptive to change.

The next session aimed to gather feedback on the draft Biodiversity Sectoral Climate Change Adaptation Plan. A range of issues were discussed: the need for biodiversity to be reflected in other sectors' plans and as an 'adaptive option', data and monitoring gaps, and the fact that biodiversity increases resilience and contributes to climate action so existing threats to biodiversity are also a priority for adaptation. On the question of buy-in from other sectors, all agree that responsibilities need to be pinned down. The full cost of implementing the plan is unknown and filling data gaps requires resourcing (citizen science could play an important role). Four Climate Action Regional Offices will produce regional adaptation strategies.

The final session focussed on nature-based solutions. Alan Sullivan (Rivus) set out the role of soft/ecological engineering in aquatic habitats, with examples of Geocoir anti-erosion matting reinforced with woven willow. We heard how most applications to the Community Water Development Fund so far have been for education/awareness, due to lack of community-level capacity for bigger projects. We heard about natural water retention measures and the 'slow the flow' principle, which involves small structures like peat dams and corner-field bunds. Meanwhile, the OPW is investigating how to integrate nature into flood risk management via drainage maintenance, better river barriers and meander-connect research.

**“If we are to succeed, we have to get buy-in from everybody, and that is what this conference is about.”**

Professor John Fitzgerald



**WATCH THE FULL SPEECH**





# How is climate change impacting on Ireland's biodiversity?

## The big issues

What do we know about how climate change affects biodiversity, now and in the future? What do we need to do to better monitor the impacts, and adapt? How is biodiversity data helping to monitor a changing climate?

## Speakers

- Matthew Jebb, National Botanic Gardens
- Paul Nolan, Irish Centre for High-End Computing, ICHEC, and Met Éireann
- John Coll, NUI Maynooth
- Tomas Murray, National Biodiversity Data Centre

## Key quotes from speakers

*"It is vital that we change public opinion because that is what leads to voter choice, and that leads to political change."* – Matthew Jebb

*"There's a value to running a large ensemble of projections to get a handle on the uncertainty of different climate change scenarios. A mix of international and regional models allows policy makers to make decisions on more extreme projections."* – Paul Nolan

*"Original research doesn't take place in a bubble... So much more could be done if we had stable funding to join up landscape data, climate data and biological data."* – John Coll

*"Depending on what level you start studying biodiversity, the driver is going to be different. The overarching impact of climate change is there but its signal may not be clear and it's interacting with all sorts of other factors.... The number one driver is still habitat loss."* – Tomas Murray

## Key issues discussed during Q&A

- Offsetting emissions: Forestry schemes a threat to habitats? Positive as long as it's done intelligently.
- Actions to take now to protect species vulnerable to climate change: National Biodiversity Action Plan, need for finance and public support, can go a long way to protecting biodiversity if implemented.

## Show of hands

Strong consensus in the room to call upon Government to:

- Actively support and promote the capacity of third level institutions to conduct research into the development of regionally accurate climate models.
- Ensure the long-term, stable future of the National Biodiversity Data Centre.
- Support climate projective and ecosystem service change science by establishing a network of long-term, ecologically monitored sites; further developing biological indicators of climate change; and ensuring an open-licence database.

## Resources

- National Botanic Gardens (website)
- Irish Centre for High-End Computing (website)
- Maynooth University's ICARUS Climate Research Centre (website)
- Stockholm Resilience Centre's Planetary Boundaries Research (website)
- National Biodiversity Data Centre (website)
- Long-term Ecological Research Network (website)

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Matthew Jebb  
NBG  
0:00 ▶

Paul Nolan  
ICHEC  
4:41 ▶

John Coll  
NUI Maynooth  
23:33 ▶

Tomas Murray  
NBDC  
46:33 ▶

Panel discussion  
Q&A  
1:04 ▶

0:00

# How can we manage river catchments for biodiversity?

## The big issues

River catchments are the unit of management for water quality under the Water Framework Directive, but what does that mean for biodiversity? How can we consider community priorities while working to boost water quality in catchment-scale management?

## Speakers

- Mary Kelly-Quinn, University College Dublin
- Marie Archbold, Environmental Protection Agency
- Caroline Crowley, Nore Vision Project
- John Foley, Beef Farmer in KerryLIFE Project

## Key quotes from speakers

*"Aquatic biodiversity is largely out of sight, and out of mind."* – Mary Kelly-Quinn

*"No one river reach or catchment will support all species so it's important to protect as many branches as possible."* – Mary Kelly-Quinn

*"Improving aquatic biodiversity is about targeting the right measure in the right place. It's about talking to one another across different agencies, to identify where to get the best bang for our buck, for measures that will have multiple benefits."* – Marie Archbold

*"We need to think beyond our particular disciplines or silos, and work together on broader solutions."* – Caroline Crowley

*"If there was no payment, would farmers get involved? Yes, there'd be a few but certainly not all. And going forward in some shape or form, all farmers will have to be involved."* – John Foley

## Key issues discussed during Q&A


- Knowledge gaps: can't measure everything, use select indicators or genetic signature, Red List at more regular intervals, integrating biodiversity into water monitoring, fill gaps on a sub-catchment basis, commit to a number of habitats, avoid duplication, Blue Dot Project, citizen science including the new NBDC programme on dragonflies and damselflies
- Incentives for landowners: Money gets things started, once engaged, people understand the real value of project, incentives are needed to get all involved.
- Native woodlands and freshwater catchments: need paid-for but mandatory measures, uptake is difficult as it encroaches on land in marginal areas, need for just transition, subsidies, design of agricultural schemes is a political question, CAP reform needed, Native Woodland Scheme measures need to be part of the Single Farm Payment - not just forestry measures
- Water monitoring: catchment walks by LAWPRO identify pressures and agriculture issues that are passed to ASSAP who liaise with farmers on action, monitoring aligned with existing programmes and spot checks
- Nitrates Action Plan: need to change how nutrients are managed, Nitrates Action Plan derogation is under review.

## Resources

- Living Planet Index (website)
- Environmental Protection Agency (website)
- River Basin Management Plan for Ireland 2018-2021 (report)
- The Nore Vision Project (website)
- Kerry LIFE Project (website)
- Dragonfly Ireland 2019-2024 (website)

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Mary Kelly-Quinn  
UCD  
0:00 

Marie Archbold  
EPA  
10:35 

Caroline Crowley  
Nore Vision Project  
25:46 

John Foley  
Kerry LIFE  
37:53 

Panel discussion  
Q&A  
48:35 

0:00



# How can biodiversity be better integrated in agri policy?

## The big issues

How is biodiversity currently dealt with in agricultural policy? Have we made progress towards Target 3 in the EU Biodiversity Strategy 2020, to improve the contribution of agriculture and forestry? Is there room for improvement in Common Agricultural Policy proposals post-2020?

## Speakers

- James Moran, Galway-Mayo IT
- Micheál Ó Briain, DG Environment
- Andy Bleasdale, National Parks and Wildlife Service
- Bill Callanan, Dept Agriculture, Food and the Marine
- Catherine Keena, Teagasc
- Flor McCarthy, Irish Farmers Association

## Key quotes from speakers

*"Farmers and landowners essentially manage 75% of the land base, forestry included, so it's vital how well this is managed, not only for food production, but for the air we breathe, the water we drink and the environment we live in."* – James Moran

*"Any way forward will have to be a win-win situation that makes economic sense to farmers and also provides environmental gains."* – Micheál Ó Briain

*"Our report card will be the evaluation of the habitats of the species in Ireland. If we're not working well together, we are not working well for biodiversity and we'll have failed. We must overcome any obstacles to work collectively and build trust."* – Andy Bleasdale

*"There's a lot of my department colleagues here - and our predominant objective is to listen."* – Bill Callanan

*"Farmers listen to farmers. We must support visionary farmers who are leaders in biodiversity."* – Catherine Keena

*"We must make it easier for young people coming into the industry or we won't have another generation on the land."* – Flor McCarthy

## Key issues discussed during Q&A

- Contradictory messages for farmers: clarity called for as some guidelines for keeping land eligible for agricultural subsidies are in apparent conflict to environmental actions.
- The push for intensive farming: it's no longer the norm, over 60% is now at low-level intensity farming. Livestock levels are also getting lower, it's an evolving situation.

## Statistics

- CAP is by far the largest source of EU funding for biodiversity, estimated at €65.7bn 2014-2020)
- 97% of dairy farmers would like to see wildlife co-existing with dairy on farms

## Resources

- Galway Mayo IT Department of Natural Sciences (website)
- DG Environment (website)
- National Parks and Wildlife Service (website)
- Teagasc (website)
- Department of Agriculture, Food and the Marine (website)
- Irish Farmers Association (website)

Click here  
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James Moran  
GMIT  
0:00 


Micheál Ó Briain  
DG Environment  
4:35 

Andy Bleasdale  
NPWS  
19:54 

Bill Callanan  
DAFM  
32:14 

Catherine Keena  
Teagasc  
43:18 

Flor McCarthy  
IFA  
52:45 

Panel discussion  
Q&A  
58:56 

0:00

# How can we improve biodiversity on farm land?

## The big issues

What can farmers and the people working with them do to improve biodiversity on farm land? Are there general rules that anyone can follow or do actions need to be site-specific? What can farmers achieve if they work together? How should actions be framed and communicated?

## Speakers

- Patrick McGurn, Aran LIFE
- Patricia Deane, Reeks EIP
- Elaine McGoff, An Taisce
- Alan Lauder, Curlew Task Force
- Bernard McKay, Farmer

## Key quotes from speakers

*"If it pays well for organic, for species-rich grassland, farmers will adapt for it. Farmers are driven by the market, we will adapt for whatever the market pays for - we're businessmen."* – Patrick McGurn

*"I'm a great believer in people power, working together to get things done. We all have a responsibility to talk, to consider, consult and communicate."* – Patricia Deane

*"We need to do something now. If we went out today and put a pond on every farm, we would see an increase in biodiversity within a year."* – Elaine McGoff

*“Let’s define the conditions we want and let farmers find the solutions - they are the best people to do that. They know their land better than anybody.” – Alan Lauder*

*"If you have an available system of measures to improve biodiversity, farmers will very quickly latch on if they see them being viable economically. They are the ones who will make the quickest outcomes on biodiversity." – Bernard McKay*

### Key issues discussed during Q&A

- REPS/GLAS schemes: not showing value on a national level due to the broad and shallow approach, with no real drive to target options to the best effect.
- Agri-environmental schemes: farmers will adapt if it's economically viable – for example, now is a perfect time to introduce sheep destocking as no longer good margins in it, conservation plans for all farmers would be ideal in future.
- Uncontrolled burning: fear that payments will be cut unless a burn is done to bring land into agricultural use, need to manage and educate on best practice.
- Organic farming: often not viable due to price of fodder and need for major reseeding; must be done in tandem with other beneficial measures.
- Consumer choice: advice to buy local is not ideal for meat - species-rich grassland is not good fodder, animals need to move elsewhere to finish grazing.

## What are the best easy wins for farmers?



## Resources

- Aran LIFE Project (website)
- Macgillicuddy Reeks EIP (website)
- An Taisce (website)
- Freshwater Habitats Trust UK (website)
- Living Planet Report 2018 (report)
- Curlew Task Force (website)
- Benchmarking of Farm Productivity and Sustainability Performance (report)

[Click here to watch the full video](#)




Patrick McGurn  
Aran LIFE  
0:00 

Patricia Deane  
Reeks EIP  
6:26 

Elaine McGoff  
An Taisce  
16:42 

Alan Lauder  
Curlew Task Force  
25:50 

**Bernard McKay**  
Farmer  
36:03 

Panel discussion  
Q&A  
43:33 

0:00



# How can we plan for climate adaptation?

## The big issues

An interactive session looking at suggestions for the Biodiversity Sectoral Adaptation Plan. Under the statutory National Adaptation Framework for Climate Change, 12 sectors, including biodiversity, are required to prepare Sectoral Adaptation Plans. It aims to protect biodiversity from the impacts of climate change and to conserve and manage ecosystems so that they deliver services that increase the adaptive capacity of people and biodiversity.

## Speakers

- Margaret Desmond, Environmental Protection Agency
- Tara Shine, Change By Degrees

## Key quotes from speakers

*"Biodiversity is a cross-cutting topic, it requires a cross-sectoral approach, it's not beholden to one government department alone but spread between a number of areas."* – Margaret Desmond

*"Biodiversity in itself is an adaptation option - other sectors will be looking at it as a solution to dealing with climate change in their plans."* – Margaret Desmond

*"Looking at extreme events over the last ten years, we collected anecdotal evidence. We don't actually collect regular data on how extreme events are affecting our biodiversity, nor do we have a long-term monitoring programme to follow that... Until we have proper monitoring in place, we are going to be planning without the full deck of cards."* – Tara Shine

*"Investment in biodiversity is one of the key strategies we can make, both to mitigate and adapt to climate change - action number one would be to find the money to actually implement the National Biodiversity Action Plan."* – Tara Shine

## Suggestions from the floor for the Biodiversity Sectoral Adaptation Plan

*Objective 1: How can we protect and restore biodiversity to increase the resilience of natural and human systems to climate change?*

- Farming: move away from chemical agriculture, focus on local produce.
- Target subsidies: urban/rural disaggregation.
- National Soil Strategy: need an EU Directive on soil.
- Natura 2000: strengthen network and implementing existing schemes.
- Data gaps: wall-to-wall national habitat map, baseline info.
- Marine life: protect and promote kelp forests.

*Objective 2: How can we improve understanding of the impacts of climate change on biodiversity?*

- Conduct vulnerability assessments.
- Develop extreme event scenario modelling.
- Extend All-Ireland Pollinator Plan to more species.
- Embed biodiversity in the school curriculum.
- Tap into knowledge and life-time observation of older citizens.

*Objective 3: How can we improve landscape connectivity to facilitate mobility in a changing climate?*

- Connecting protected areas: wildlife corridors, greenways, buffer zones.
- Understand how climate change affects fragmentation.
- National Landscape Strategy: no resources or implementation.

*Objective 5: How to ensure sufficient financing is available to implement the plan?*

- Connect corporate funds to turbo-charge existing grants for farmers working in biodiversity, as per the National Woodlands Scheme.
- Find ways to leverage funds to urgently carry out landscape mapping.

## Resources

DCCAE's Adapting to Climate Change Information (website)

Click here  
to watch the  
full video



Introduction

0:00



Margaret Desmond

EPA

2:41



Tara Shine  
Change by Degrees

9:53



Panel discussion

Q&A

23:46



0:00

# How can we use nature-based solutions in river catchments?

## The big issues

How can we use nature to help alleviate floods, improve river health and benefit biodiversity? What does 'ecological engineering' mean for a river and in what circumstances is it the appropriate approach? What kind of local actions are communities undertaking? And are nature-based solutions necessarily solutions for nature?

## Speakers

- Marcus Collier, Trinity College Dublin
- Alan Sullivan, Rivus
- Sheevaun Thompson, LAWPRO
- Mary Bourke, Trinity College Dublin
- Nathy Gilligan, Office of Public Works

## Key quotes from speakers

*"Michael D talked about language here. We hear a lot about nature being the problem for us, we want to look at nature as being a potential solution. We're aiming to use nature not just as a form of technology but looking at the co-benefits that come with it, the social, ecological and economic."* – Marcus Collier

*"To use a Star Trek analogy, I want to put a cloaking device around every single body of water in our land – then we can manage it and it will work in the context of flood alleviation and biodiversity."* – Alan Sullivan (from Q&A)

*"Communities need real incentives - they need grants, they need capacity, but they need awards as well."* – Sheevaun Thompson

*"Do what you can, where you are, with what you've got – it's about looking at the natural topography and seeing what we can do retain water in the landscape longer, sustainably and naturally."* – Mary Burke

*"The ethos is evolving, it's halfway between soft and hard engineering... Natural measures will work to complement flood storage and defences. If we can soften the catchments, it'll help prepare us for more extreme weather events."* – Nathy Gilligan

## Key issues discussed during Q&A

- Development planning: houses must be built with a wider setback from rivers to prevent flooding, make use of parks in this.
- Arterial drainage: getting water off the land as quickly as possible is not the best approach.
- Public responsibility: households can take more actions for protecting their own property, flood-proof doors, etc.
- Native Woodlands Scheme: package is there, identify areas that could benefit, engage with landowners through public meetings, incentives, awards, grants.
- 'Catchment communities': break away from rural/village divide, co-design with locals who know their land and conditions.
- Slow water: buffer zones and habitat restoration go hand-in-hand with water attenuation.
- Soil permeability: need to slow down water flow on land affected by compaction of earth through farming vehicles and animals.


## Resources

- Rivus Ecological Engineering (website)
- Local Authority Waters and Communities Project, LAWPRO (website)
- Water Heritage Day (website)
- Water Framework Directive (legislation)
- OPW Drainage Guidance (report)
- OPW Cork City Flood Relief Scheme (website)

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full video




Marcus Collier  
TCD  
0:00 

Alan Sullivan  
Rivus  
4:25 

Sheevaun Thompson  
LAWPRO  
16:31 

Mary Bourke  
TCD  
26:02 

Nathy Gilligan  
OPW  
37:40 

Panel discussion  
Q&A  
47:26 

0:00



# INVESTING IN NATURE

This theme took a wide-ranging view of the economics of nature: how we finance biodiversity in Ireland, how we value natural capital and the ecosystem services it provides, how we account for that value in monetary and non-monetary terms, how land managers are being reimbursed for delivering ecosystem services, and how we should be investing in nature. The key messages? The funding gap is huge, the value of nature is poorly understood and accounted for, and we need to invest urgently.

The Investing in Nature theme opened with a session on valuing ecosystem services in the marine. We heard from an economist, an ecologist and a scholar of literature on the multiple benefits that our oceans, seas and coastlines provide to both society and the economy. We learned that the natural capital approach involves measuring and expressing the value of assets. These assets provide ecosystem services that generate benefits for society and the economy. The natural capital approach uses accounting techniques and economic language to tell the stories of these assets, and while it is often not necessary to use monetary valuation to express that value, it remains the “least worst” common unit to help us understand nature’s relative importance and make better decisions.

The second session explored the question of how we finance biodiversity conservation. Led by the team of environmental economists behind the recent Biodiversity Expenditure Review, it highlighted the global biodiversity funding gap of c. \$250bn/annum and outlined the national biodiversity budget of c. €250m/annum, or 0.13% of GDP – significantly lower than the IUCN’s recommended 0.3%. Of that total, 80% is subsidies, 10% is operational and 6% is salaries, leaving 4% for capital investment (i.e. direct investment in nature). The State provides the vast majority of this funding (97%): DAFM is responsible for 75%, and 42% is linked to EU funding. Financial Needs Assessment is being undertaken to establish the levels of funding required to deliver the National Biodiversity Action Plan.

The final session of Day 1 focussed on how we account for natural capital and biodiversity. We were reminded of the origins of accounting: to reduce to numbers in order to tell a story and augment through dialogue. The UN System of Environmental Economic Accounts was presented, which includes biophysical accounts that relate to biodiversity (e.g. habitat condition and extent), and the application of this approach was explored through a case study from Bord na Mona. Monetary accounts were also explored using recreational case studies from Northern Ireland that generated 50 to 80 times what was invested in their maintenance, in terms of public goods. We also heard of the role 'Genuine Savings'

can play as an indicator of sustainable development, by measuring a nation's wealth - including its natural wealth - rather than economic activity (as per GDP).

The second day began with a session on how we value ecosystem services from land and river systems. We heard how pollination services in Ireland - as opposed to bees themselves - can be valued in economic terms (€902m/annum), and the importance of incorporating biophysical and qualitative data alongside economic data into holistic decision-making frameworks. We learned about the importance the public place on the ecosystem services provided by freshwater habitats, and explored their economic value using willingness to pay methods. Of the five services selected for assessment, wildlife habitat was the most valuable across all three study catchments. We also heard how Coillte is using a new 'Bioclass' approach to summarise and prioritise biodiversity management in its forests. Lastly, a study was presented on provisioning, regulating and cultural ecosystem services and disservices from agricultural systems at catchment scale.

Next, we learned about Payments for Ecosystem Services (PES) models around Ireland. We heard how the Burren LIFE Project changed how 'success' was measured by paying for biodiversity-positive results rather than actions, redefining the "product" as species-rich grasslands while building in flexibility for farmers. We also heard about the impact of a locally-adapted PES on the habitats of the Aran Islands and the importance of using whole-farm assessments in generating catchment-scale benefits for freshwater pearl mussels in the Kerry LIFE project. It was noted that payments are typically restricted to costs incurred and income foregone, rather than the value of the ecosystem services generated - an important issue for policy.

The final session was a far-reaching discussion in response to the question 'How should we be investing in nature?'. Financial instruments, corporate citizenship, market demand, government investment, community inclusion, growing the biodiversity workforce, food supply chains, rural development and taxation were explored, as well as the need to stop investing in things that actively damage nature.

**“We need a new economy.  
One which has nature at the heart.”**

Professor Jane Stout



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# How can we value ecosystem services in the marine?

## The big issues

How can we value the wide range of services that marine ecosystems provide to society and the economy? Which services do we choose to value, and how do we calculate that value? Which units of value do we use?

## Speakers

- Tasman Crowe, University College Dublin
- Daniel Norton, National University of Ireland Galway
- Melanie Austen, Plymouth University
- John Brannigan, University College Dublin

## Key quotes from speakers

*"Ecologists come from a biodiversity point of view, while economists come from a human point of view. Where humans interact with ecosystems is where ecosystem services are generated."* — Daniel Norton

*"If whale watching is something we want to improve, what trade offs are involved? Restoring mammal diversity for recreation might benefit people's health, but there might also be disadvantages for food provision. These things are all in different units. Economists ask how would you make decisions, not just for the environment, but at the same time allocating scarce resources for health, transport, education, employment? To put the environment on the same footing as everything else, we need to know their relative importance and have consistent values across decisions. Money is a convenient unit for that - or, at least, it's the least worst unit."* — Melanie Austen

*"Cultural ecosystem services inspire deep attachment, they're unique to place and connect with identity and belonging, so are important points of entry to encourage greater care of the environment."* — John Brannigan

## Key issues discussed during Q&A


- Ecosystem goods and services: distinctions between the two, selecting those to assess, understanding trade offs.
- Communications between government agencies: fragmentation of roles between government departments, communicating value - a noun or a verb?, the difficulty of comparing with other benefits, whose values matter?
- Case studies: plastic pollution upsetting cultural values, whaling as food versus whaling as cultural value.
- Trade offs: complexity of ownership rights, marine spatial planning, data deficiency in measuring change in ecosystem service delivery, valuation.
- Natural capital and saving nature: support for decision-making and logical trade offs, "This is what happens if..." - revealing implications, not an advocacy tool for conservationists.
- Abiotic services: can include as something to be protected, lack of information, cost-benefit analysis.

## Resources

- Whitaker Institute's Socio-Economic Marine Research Unit (website)
- Plymouth Marine Laboratory (website)
- Valuing Ireland's Blue Ecosystem Services (report)
- Biodiversity indicators as an information source on ecosystem services (paper)
- Natural Capital Assessment Tools for North Devon Marine Pioneer (website)
- Cultural Value of Coastlines (website)


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Daniel Norton  
NUI Galway  
1:18 

Melanie Austen  
Plymouth University  
13:19 

John Brannigan  
UCD  
24:54 

Panel discussion  
Q&A  
35:52 

0:00

# How are we financing biodiversity conservation?

## The big issues

Between 2010 and 2015, €1.49bn was spent on biodiversity conservation in Ireland. Where does this money come from? How was it spent, what for, and by whom? Where else should we be looking for biodiversity finance?

## Speakers

- Craig Bullock, University College Dublin
- Rachel Morrison, University College Dublin

## Key quotes from speakers

*"We have a significant biodiversity funding gap. At present, we spend \$30bn to \$52bn pa globally, but it has been estimated that we really need \$290bn to \$385bn pa to sustain biodiversity and functioning ecosystems."* — Craig Bullock

*"We took a broad definition of biodiversity expenditure: any expenditure whose purpose was to have some sort of positive impact on biodiversity or could be related in some way to the objectives of the Convention on Biological Diversity or the National Biodiversity Action Plan."* — Rachel Morrison

*"Ireland spent €1.49bn on biodiversity from 2010 to 2015, an average of €250m per year. This equates to 0.31% of total government spend and 0.13% of GDP. The IUCN suggests we should be spending at least 0.3% of GDP."* — Rachel Morrison

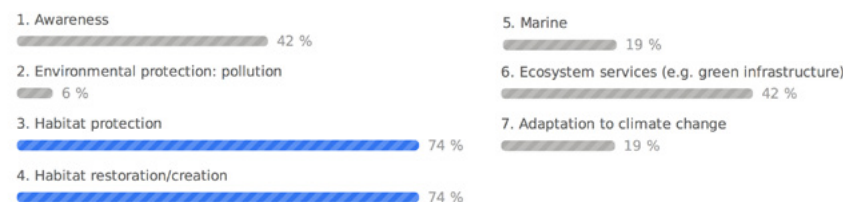
*"80% of the spend is on subsidies, 10% is operational and 6% is on salaries, leaving a very small amount for capital spend. We're not seeing investment in rebuilding nature and habitats."* — Rachel Morrison

*"DAFM is responsible for 75% of the total spend. Most goes to NBAP Target 4 (wider environment). The lowest-funded is Target 5 (marine)"* — Rachel Morrison

## Key issues discussed during Q&A

- Exclusion of expenditure on parks and green spaces: a weakness of report, hard to define biodiversity value, too much of an unknown.
- Global ecological restoration finance: money is there, challenge is project due diligence for donors, need for upskilling to improve access to finance.
- Corporate social responsibility: spend typically is under €200k, hope to include in future Financial Needs Assessment report.
- Climate finance: co-benefits need to be explored, peatlands carbon storage.
- Formal categorisation: some Depts tagged expenditure, co-benefits.
- National Lottery: very little going to nature currently.
- Farmer incentives: more rational incentives needed, need to engage.

## Where would delegates like to see more money spent?



## Resources

- Ireland's Biodiversity Expenditure Review (report)
- UNDP Biodiversity Finance Initiative (website)
- Tracking Biodiversity Expenditure in the EU budget (report)
- Scaling-up finance mechanisms for biodiversity (report)
- Funding Environmental NGOs in Ireland (report)

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to watch the  
full video



Craig Bullock  
UCD  
2:28



Rachel Morrison  
UCD  
11:57



Craig Bullock  
UCD  
36:39



Panel discussion  
Q&A  
45:40





# How do we account for natural capital and biodiversity?

## The big issues

How can methods from accountancy and economics help us understand how people benefit from nature? What are the risks and limitations of this approach? What are the benefits and opportunities? Does it have to involve monetary units? And how can biodiversity be incorporated in a meaningful way?

## Speakers

- Jane Stout, Trinity College Dublin and Irish Forum on Natural Capital
- Luke McGrath, NUI Galway
- Catherine Farrell, Bord na Mona
- Jonathan Bell, Northern Ireland Environment Link
- Eugenie Regan, UNEP-WCMC

## Key quotes from speakers

*"Natural Capital Accounting (NCA) is a requirement in SDG 15.9 and in the National Biodiversity Action Plan. NCAs can integrate environmental and economic data to provide a more comprehensive and multi-purpose view of the interrelationships between the economy and the environment."* — Jane Stout

*"An economy is defined as sustainable if it is capable of providing non-declining wellbeing or welfare through time. This can be achieved if the correctly-valued comprehensive wealth of the economy - all of those capital stocks that provide us with welfare - are maintained for future generations. This forces us to broaden our conception of capital beyond the traditional view of buildings and machinery to look at nature as a valuable asset that's worth maintaining."* — Luke McGrath

*"We're all evolving, we don't want to stay in our silos - we need to talk the same language and use the same approach to Natural Capital Accounting."* — Catherine Farrell

*"For a relatively small investment, (our NCA shows that) the public is getting a massive return in terms of public good: total benefits are 50 to 80 times greater than the cost of maintaining them. NCA has been very useful for highlighting the value of the natural environment, which may otherwise remain hidden. To a policy-maker or politician ... when you show them the real value of a site, it can be quite powerful."* — Jonathan Bell

*"Accounting was built to tell stories, so let's not forget the origins of accounting and what it's actually for: reducing to numbers so that we can then augment, and have a discussion and interrogation about what these actually mean for our economies."* — Eugenie Regan

## Key issues discussed during Q&A


- Time frames for accounts: choosing a logical starting point, history of the land use, lack of data being a barrier to telling a story over time - start now.
- Site selection: how to choose, organisational priorities, availability of data.
- Benefit value versus maintenance cost: role of intrinsic value in justifying investment in sites with lower economic value, challenges in planning contexts with significant developer interests, net environmental gain.
- Biodiversity in national-level natural capital accounting: lack of available data.
- Data gaps: agree a common methodology, need for baseline national habitat map, data demand from another discipline - onus to finance and provide it.

## Resources

- UN System of Environmental-Economic Accounting (website)
- Natural Capital Accounting projects in Northern Ireland (reports)
- UNEP WCMC (website)

Click here  
to watch the  
full video




Jane Stout  
TCD  
0:00 

Luke McGrath  
NUIG  
5:38 

Catherine Farrell  
Bord na Mona  
14:44 

Jonathan Bell  
NIEL  
27:33 

Eugenie Regan  
UNEP-WCMC  
36:52 

Panel Discussion  
Q&A  
46:11 

0:00

# How can we value ecosystem services from land and rivers?

## The big issues

Terrestrial ecosystems provide people with an enormous range of benefits that are delivered through 'ecosystem services'. But how do we define them? How do we measure them? And once we've done those things, how do we value them? Where do monetary values come in? How can we capture cultural values?

## Speakers

- Micheál Ó Cinnéide, Irish Forum on Natural Capital
- Jane Stout, Trinity College Dublin
- Mary Kelly-Quinn, University College Dublin
- Aileen O'Sullivan, Coillte
- Daniel Norton, NUI Galway

## Key quotes from speakers

*"The total value of pollination services should integrate different types of values and different ways of measuring those values. We can't just think about economic value, we need to think about socio-cultural value and health. The challenge is to bring this holistic framework together to inform decision-making."* — Jane Stout

*"The Ecosystem Services Approach presents opportunities for us to demonstrate the importance of healthy ecosystems to economies and human wellbeing. Importantly, it helps to illustrate the links between good water quality and human wellbeing, which is more easily appreciated than an abstract goal of good ecological status."* — Mary Kelly-Quinn

*"Even in businesses - places where people don't expect to find it - there is a willingness (to restore and protect biodiversity), it's just that the structures aren't there. We need to develop structures that connect the finance with the work we want to do."* — Aileen O'Sullivan

*"Separating land and water policy will lead to poorer outcomes for society. We looked at 46 catchments in Ireland to measure agricultural land use. We found that farming types are less diverse at catchment scale than county scale. A catchment approach to target policy actions towards one farming system can support an integrated management approach within that river system."* — Daniel Norton

## Key issues discussed during Q&A


- Bringing finance, sales and marketing functions into the conversation: listening to and including other groups is not easy, the need to bring others with you, recognising the full range of benefits that are delivered by ecosystem services and the importance of integrating their value in decision-making.
- Potential for spatial agricultural planning at national/regional/local levels: issues of ownership, tradition and markets, the need to incentivise change for farmers at the margins who might switch from one farming type to another, targeting options to meet ecosystem service demand, the onus is on Irish government given national CAP strategic plan.
- Biodiversity at Coillte: biodiversity features are protected across whole estate (Bioclass is additional), body of research on forest-water interactions.
- Valuing regulating and cultural ecosystem services in forestry: usefulness of valuation, need for practical structures for known priorities.

## Resources


- ES MANAGE Project, UCD (website)
- POLLIVAL, TCD (Twitter)
- Coillte Bioclass Project (news item)
- Valuing Agricultural Catchment Ecosystem Services, NUIG (report)

Click here  
to watch the  
full video





Micheál Ó Cinnéide  
IFNC  
0:00 

Jane Stout  
TCD  
3:50 

Mary Kelly-Quinn  
UCD  
16:30 

Aileen O'Sullivan  
Coillte  
33:48 

Daniel Norton  
NUIG  
47:55 

Panel Discussion  
Q&A  
1:01 

0:00



# How do Payments for Ecosystem Services work?

## The big issues

What are Payments for Ecosystem Services? How are they designed and implemented? Who gets paid, and who pays? What is the impact and what can we learn about various projects that have used them to support biodiversity conservation?

## Speakers

- Caroline Sullivan, Hen Harrier Project
- Sharon Parr, Burren Programme
- Amanda Browne, Aran LIFE
- Derek McLoughlin, Results Based Agri-environmental Payment Schemes Project / Pearl Mussel Project

## Key quotes from speakers

*“Flexibility is key in almost everything we do in life and it should be the same for our Ecosystem Services.”* – Caroline Sullivan

*“One of the most important things to come out of the Burren are the lessons learned. Another is that it helped to change mindsets... actions and ideas become farmer-led. Farmers are partners not the problem.”* – Sharon Parr

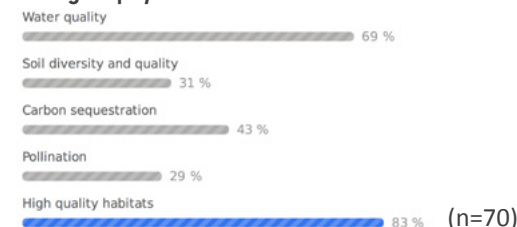
*“If we want fantastic species-rich grassland, we need farmers and a payment system that is locally adaptable and fits the regional farming structure.”* – Amanda Browne

*“One nifty way of incentivising improvements in environmental quality is to use payment increments... we’d like farmers to see their land as areas of natural resources rather than ‘Areas of Constraints.’”* – Derek McLoughlin

## Key issues discussed during Q&A

- Farmer buy-in: communication through demonstration days; build up slowly, word-of-mouth spreads, people will follow success. Listen to and address issues, find ‘champion farmers’.
- Scoring system: how to agree what constitutes species-rich grassland? Walk through to check winterage rather than species counting, based it on set suite of indicator species.
- Flexibility is built in and criteria can change.
- Admin costs: trialling self-assessment and drones for mapping; less support costs over time, despite huge EU agri-payments things are worse than ever, these projects show actual benefits so are better than a “social security scheme” for farmers; they bringing employment locally so are value for money.
- Land sparing vs land sharing: in some situations leaving land wild is better than targeted measures, however often excluded from payments, need for integrated land use policy.

## What ecosystem services are you most willing to pay for?




## Resources


- Hen Harrier Project (website)
- Burren Programme (website)
- Aran LIFE Project (website)
- Pearl Mussel Project (website)
- Results-Based Payments for Ecosystem Services (website)

Click here  
to watch the  
full video



Caroline Sullivan  
Hen Harrier Project  
0:00 

Sharon Parr  
Burren Programme  
7:54 

Amanda Browne  
Aran LIFE  
24:25 

Derek McLoughlin  
RBAPS  
33:52 

Panel discussion  
Q&A  
48:30 

0:00

# Panel Discussion: How should we be investing in nature?

## The big issues

How should we finance biodiversity conservation? What are the priorities for the future? What financial mechanisms are available? How can we ensure that biodiversity spending has the maximum possible positive impact? This panel discussion features policy experts in heritage and agriculture, a geographer and the president of a corporate conservation NGO.

## Speakers

- Eugenie Regan, UNEP-WCMC
- Niall Ó Donnchú, Dept Culture, Heritage and the Gaeltacht
- Bill Callanan, Dept Agriculture, Food and the Marine
- Margaret O’Gorman, Wildlife Habitats Council
- Patrick Bresnihan, Trinity College Dublin

## Key quotes from speakers

*“We need to look beyond the attitude of ‘government gives’ to the creative use of financial instruments. Now is our moment.” – Niall Ó Donnchú*

*“In the US, large utility companies are saying to their vendor pool, show us that you are doing nature-based programming, and we will give you more points in our vendor selection process.” – Margaret O’Gorman*

*“How to finance conservation? We are already investing in activities, so the real question is...how do we stop financing activities that destroy biodiversity and start investing in those that promote it?” – Patrick Bresnihan*

*“After regulation and incentives, the critical driver in terms of change is market pull. It’s clear the market is demanding greater sustainability, I just don’t think there is sufficient pull there yet. It needs to be articulated better.” – Bill Callanan*

## Key issues discussed during Q&A

- Brand Ireland: is our green image vulnerable? Every brand must give evidence for credibility but competitiveness is still king. Public buy-in needed too.
- Agricultural evolution: some measures are bad for both the environment and rural community, farmers can adapt, substantial CAP funding and reforms are in motion; alternative food systems.
- Are consumers prepared to pay more? There’s a limit to what average person will pay for organic produce. Policies can open up new markets, Brexit may force changes in system.
- More biodiversity officers: Government has doubled funding for biodiversity actions, it’s up to local authorities to spend where needed.
- Expertise: lack of paid roles, more investment in people and job security required, continuity is vital in order to build our biodiversity knowledge.
- Taxation: public support? Rural infrastructure is being stripped, so attach biodiversity projects to idea of rural development. Tax is not popular concept, benefits must be visible.

## Priorities for the future

- Patrick: Long-term investment, i.e. building relationships with farmers.
- Margaret: Smart regional and urban planning.
- Niall: Conservation management plans with respect to rural communities, national parklands for wellness, expertise without excluding local knowledge
- Bill: from a political point of view we need to translate the issue into a language people can understand and respond to.

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full video



Panel discussion

Q&A

0:00



0:00



DUBLIN CASTLE — 20 & 21 FEBRUARY 2019

# NEW HORIZONS *for* NATURE



An Roinn  
Cultúir, Oidhreachta agus Gaeltachta  
Department of  
Culture, Heritage and the Gaeltacht



IRISH  
FORUM  
ON  
NATURAL  
CAPITAL

#BIODCON19



# SEEDS FOR NATURE CHARTER

The Conference Charter, 'Seeds for Nature', was announced on February 20th 2019. The Charter was agreed at a meeting chaired by Minister Josepha Madigan in Dublin Castle on the first day of the conference, which was attended by Minister Bruton, Minister Doyle and other senior leaders from 14 Government Departments, state agencies, private sector and non-governmental organisations. The 'Seeds For Nature' Conference Charter comprises a suite of commitments for nature and biodiversity that go beyond the respective organisations' current work programmes to support, scale up and fast track the implementation of the National Biodiversity Action Plan.



Top row: Ciaran O'Keeffe (NPWS), Michael Ewing (Environmental Pillar/Irish Environmental Network), Hannah Hamilton (Irish Forum on Natural Capital), Tina Roche (Community Foundation for Ireland), Catherine Farrell (Bord na Mona), Yvonne Buckley (Biodiversity Forum/Trinity College Dublin), Jane Stout (Irish Forum on Natural Capital/Trinity College Dublin), Paddy Mahon (City and County Managers Association), Niall O'Donnchu (Dept Culture, Heritage and the Gaeltacht). Bottom row: John McMahon (OPW), Gerard Britchfield (Caillte), Minister of State Andrew Doyle TD (Dept Agriculture, Food and the Marine), Minister Richard Bruton TD (Dept Communications, Climate Action and the Environment), Minister Josepha Madigan TD (Dept Culture, Heritage and the Gaeltacht), Denis O'Sullivan (Gas Networks Ireland), Eamonn O'Reilly (Dublin Port

## The Department of Agriculture Food and the Marine will:

### Agriculture commitments:

1. Co-finance with NPWS the development of resources for the "Farming for Nature" project, developed by Burren Beo.

### Forestry commitments:

2. Intensify the promotion and implementation of the Native Woodland Conservation Scheme and commits to increasing the uptake of the scheme five-fold during the lifetime of the current National Forestry Programme.

## Marine Commitments:

3. Having 100% of the Irish trawling fleet participating in the Clean Oceans Initiative to collect marine waste and debris at sea and bring it ashore for appropriate disposal.

## The Department of Communications, Climate Action and Environment will:

4. Work with the NPWS on Phase II of the Observe programme to greatly improve our knowledge of protected species (especially whales and dolphins and seabirds) and sensitive habitats across Ireland's extensive Exclusive Economic Zone.

# SEEDS FOR NATURE CHARTER

**The Office of Public Works will:**

5. Develop a National Seed Bank conserving Irish flora in the National Botanic Gardens and complementing ongoing plant conservation measures. The measures already under way to protect our rarest plants will be expanded to cover all threatened plant species in the State, identified by the recent Red Data Listing.

6. Partner with the EPA on a major new research project – Slow Waters – which is a strategic assessment of natural water retention measures and with Trinity College Dublin on ecosystem services of Ireland's forests for flood protection.

**The Department of Housing Planning and Local Government will:**

7. Expand the Marine Protected Area network.

8. Provide Planning Policy Guidance to support the integrated planning for green infrastructure within statutory land use plans, in line with the objectives of the National Planning Framework.

**The Department of Culture Heritage and the Gaeltacht will:**

9. Double the fund for Heritage and Biodiversity officers to implement biodiversity actions, including action to tackle Invasive Alien Species at local level (co-delivered with the City and County Managers' Association).

10. Work with An Garda Síochána to progress a Memorandum of Understanding that provides for a closer working relationship, particularly for combatting wildlife crime.

11. Run a Communications Campaign to inspire and motivate Irish citizens to take action for nature.

12. Establish an Irish Business and Biodiversity Platform with the Minister for Business, Heather Humphreys T.D. The Platform will promote best practice and seek commitments for biodiversity action and reporting from the private sector. Founding members (in principle, subject to Terms of Reference) include Gas Networks Ireland, Eirgrid, Kepak, Dawn Meats, Coillte and Bord na Mona.

13. Establish a Climate Action Programme. Provide funding for research to improve our understanding of the impacts of climate change on biodiversity and also for assessing the potential of nature-based solutions for mitigating and adapting to climate change. We will join forces with the EPA to support a bid for transnational funding on these important societal challenges.

14. Promote draft legislation introducing a biodiversity duty which will place a requirement on public bodies to embed biodiversity in carrying out their functions as to promote or restore nature. (Actioned in May 2019.)

15. Undertake a Financial Needs Assessment for biodiversity to determine what we need to spend to achieve our national targets and work towards a resource mobilisation strategy for the National Biodiversity Action Plan.

16. Provide a small grant scheme to help specialist biodiversity recorders carry out field surveys on some of our most under-studied species.

17. Make a proposal to Government on Natural Capital to raise awareness across Government of the natural capital approach to valuing and accounting for the benefits that nature provides to people and to the economy.

18. Fund the work of the Biodiversity Forum in overseeing the delivery of the National Biodiversity Action Plan.

19. Continue to fund the National Biodiversity Data Centre and its citizen science programmes.

**The City and County Managers' Association will:**

20. Provide appropriate match funding (i.e. 15% or more) to the funding to Biodiversity and Heritage Officers to implement biodiversity actions, including action to tackle Invasive Alien Species at local level (Relates to #13 above).

**The Community Foundation for Ireland will:**

21. Launch a €250,000 Environment and Nature Fund in 2019. CFI hopes to grow this further this year and in the coming years. (Actioned in May 2019.)



# SEEDS FOR NATURE CHARTER

**Coillte will:**

22. Restore Hazelwood Forest, a 130ha woodland in a Special Area of Conservation on the banks of Lough Gill. The work will take 2-3 years to complete at a cost of c. €500k.

**Dublin Port Company will:**

23. DPC will develop a Natural Capital Policy for Dublin Port to provide a framework for the Port to achieve sustainability, complementing the implementation of Masterplan 2040 (reviewed 2018) as part of which €1billion will be invested in port infrastructure in Dublin over the next ten years.

**Bord na Mona will:**

24. Rehabilitate 20,000ha of cutaway bog to wetland and woodland mosaics by 2025.

25. Restore a further 1,000 hectares of raised bog habitat by 2025.

26. Fund GHG research on Birch woodland habitats on rehabilitated cutaway bogs.

27. Continue to deliver on actions set out in the BnM Biodiversity Action Plan 2016-2021.

28. By 2025, develop the necessary plans for the rehabilitation of all BnM bogs.

29. We will explore the use of the United Nations SEEA (System of Environmental and Economic Accounting) to develop Natural Capital approaches to rehabilitation outcomes.

30. Continue to work with statutory bodies, including state agencies and ENGOS, to ensure compliance and benefits are realised by a wide range of stakeholders.

**Gas Networks Ireland will:**

31. Manage all infrastructure, asset base and office locations on the island of Ireland and in Scotland in line with biodiversity best practice by 2025.

32. As part of our renewable gas strategy, support the All Ireland Pollinator Plan and the promotion of Red Clover (which is good for bees and the soil) by encouraging farmers to grow this as a feedstock crop to be used for the production of biogas.

33. Strive for Net Positive Impact on biodiversity on all works and to engaging with the communities in which it operates and seeking to enhance biodiversity in collaboration with those communities.

**The European Commission (DG Environment) will:**

34. Work in partnership with Ireland to optimise investments for biodiversity under EU funds for the next financing period and commits to a stakeholder workshop in Ireland to explore these opportunities in May 2019.

**The Irish Forum on Natural Capital will:**


35. Continue to work with Government, financial institutions and corporates to develop natural capital accounts and to further integrate biodiversity in natural capital accounting.

**The Heritage Council will:**

36. Expand the Heritage in Schools Programme to Second Level, with a particular emphasis on biodiversity.

# TOGETHER FOR BIODIVERSITY AWARDS

The Together for Biodiversity Awards aimed to celebrate the work of community-level conservationists on a national stage. 58 entries were received from all across the island, from Beara to Belmullet to Co. Tyrone, with projects on rivers, pollinators, corncrakes, freshwater pearl mussels, high nature value farms and oak woodlands.

Finalists were shortlisted through an online public competition, which received 25,000 individual votes. The winners were then chosen by a panel of experts from the National Parks and Wildlife Service, Irish Forum on Natural Capital, Irish Wildlife Trust, Dublin Port Company and the National Biodiversity Data Centre. The awards were generously funded by Dublin Port Company, administered by the Irish Wildlife Trust and supported by the conference organisers. The winners were presented with their prizes by Minister Josepha Madigan TD, Minister of Culture, Heritage and the Gaeltacht and Eamonn O'Reilly, CEO of Dublin Port Company. Winners received €2,000 to spend on biodiversity projects and runners up received €500. **Watch the awards presentation:** 

## Learning Together for Biodiversity Award

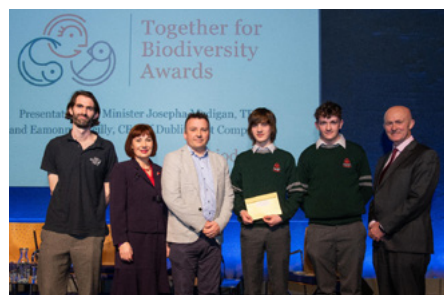
Biodiversity projects run by schools

**Winner: St. Colman's Community College, Midleton, Co Cork**

*Runners up:*

*St. Saviour's National School, Co Wicklow*

*Gaelscoil Charraig Uí Leighin, Co Cork*



## People Together for Biodiversity Award

Community group projects (over €3k budget)

**Winner: Moore Community Council CE Scheme, Co Roscommon**

*Runners up:*

*John Sullivan Resource Centre, Co Roscommon*

*Newbridge Tidy Towns Assoc., Co Kildare*



## People Together for Biodiversity Award

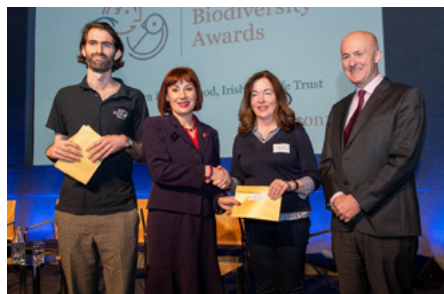
Community group projects (under €3k budget)

**Winner: Baile Slachtmhar Bhéal an Mhuirthead, Co Mayo**

*Runners up:*

*Carrigaline Tidy Towns, Co Cork*

*Tipperary Tidy Towns Group, Co Tipperary*



## Farming Together for Biodiversity Award

Farmers working in conservation partnerships

**Winner: The Burren Programme - Oliver and Pat Nagle**

*Runners up:*

*Kerry LIFE Project – John Foley*

*Aran LIFE – Míchéal Ó Conghaile*



## Local Biodiversity Champion Award

Biodiversity projects run by individuals

**Winner: Tommy Earley, Co Roscommon**

*Runners up:*

*Patrick Fahy, Co Mayo*

*Feargal Ó Cuinneagáin, Co Mayo*



## Working Together for Biodiversity Award

Biodiversity projects run by businesses

**Winner: Gas Networks Ireland**

*Runners up:*

*The Burren Nature Sanctuary*

*ABP Food Group*



# MEDIA AND PRESS

## Television

### RTE One

Six One News

George Lee (at 17:41)

## Radio

### RTE Radio 1

Morning Ireland

Cian McCormack with Jane Stout, Ciaran O'Keeffe and John Foley

### RTE Radio 1

Drivetime

Mary Wilson with Inger Andersen and Yvonne Buckley

### RTE Radio 1

Callan's Kicks

Oliver Callan

### Newstalk

The Hard Shoulder

Ivan Yates with Cara Augustenbourg

## Press (print & online)

### NATIONAL

#### RTE.ie

'Conference to recommend ways to tackle losses in Irish biodiversity'

By Cian McCormack on February 20th

#### RTE.ie

'Nature has more or less collapsed in Ireland'

By George Lee on February 20th

#### The Irish Times

'Species decline doesn't just happen elsewhere. It's a serious Irish problem'

By Kevin O'Sullivan on February 16th

#### The Irish Times

'Irish Butterfly Monitoring Scheme detects decline above global average'

By Kevin O'Sullivan on February 16th

#### The Irish Times

Government to scale up efforts to prevent species loss

By Kevin O'Sullivan on February 20th

#### The Irish Times

'Humans cannot keep destroying nature and species, Higgins says'

By Kevin O'Sullivan on February 21st

#### The Irish Times

'"This is what we need to protect", highlighting Ireland's biodiversity'

By Kevin O'Sullivan on February 21st

#### The Irish Times

'Forty actions agreed to address 'biodiversity crisis''

By Kevin O'Sullivan on February 21st

#### The Irish Times

'We can no longer afford our double-speak on environmental action'

By Paddy Woodworth on April 24th

#### The Independent - Farm Ireland

'President Higgins questions environmental benefits of agricultural subsidies'

By Claire Fox on February 21st

#### The Independent - Farm Ireland

'GLAS scheme hasn't delivered on bird numbers'

By Claire Fox on March 8th

#### Irish Examiner

'How some home truths can help save the planet'

By Peter Dowdall on January 19th

#### Irish Examiner

'Measures announced to protect Irish biodiversity'

By Digital Desk Staff on February 20th

#### The Times (Ireland Edition)

'Feed birds to do your bit for climate, says minister'

By Catherine Sanz on February 21st

#### The Times (Ireland Edition)

'Farmers need bigger push in climate fight, says Higgins'

By Aaron Rogan on February 22nd

#### The Times (Ireland Edition)

'Save our soil plea as plans agreed to help nature'

By Catherine Sanz on February 22nd

#### The Times (Ireland Edition)

'Saving species 'will take more than bird feeders''

By Catherine Sanz on February 23rd

#### The Times (Ireland Edition)

'Funding cut for National Biodiversity data centre despite 'nature charter''

By Catherine Sanz on February 24th

#### TheJournal.ie

'Opinion: Time is running out to save planet earth so we are organising a campaign of civil resistance'

By Ciaran O'Carroll on May 4th



# MEDIA AND PRESS

## **GreenNews.ie**

'President Higgins: Timeframe to halt extinction crisis 'perilously short'

By Niall Sargent on February 21st

## **GreenNews.ie**

'Sustainable model key to save our fragile eco-system'

By Niall Sargent on February 21st

## **GreenNews.ie**

'Results-based farm funding to protect biodiversity is key'

By Niall Sargent on February 21st

## **GreenNews.ie**

'Ireland ranks low for action on Sustainable Development Goals'

By Niall Sargent on February 22nd

## **Irish Farmers' Journal**

'Farmers will follow paths that make their farms viable'

By Barry Cassidy on February 21st

## **Agriland**

'IWT: Government must prioritise Ireland's "extinction crisis"'

By Charles O'Donnell on February 19th

## **Agriland**

'President: More can be done to harness farmers' goodwill'

By Charles O'Donnell on February 21st

## **Agriland**

'Registrations open for the National Biodiversity Conference'

By Breifne O'Brien on November 19th

## **Agriland**

'New biodiversity 'charter' announced at national conference'

By Charles O'Donnell on February 21st

## **Agriland**

'Drumshanbo organic farmer announced as local biodiversity champion'

By Caroline Allen on March 23rd

## **BreakingNews.ie**

'Measures announced to protect Irish biodiversity'

By Digital Desk Staff on February 20th

## **Silicon Republic**

'If we were coalminers, we would be up to our knees in dead canaries'

By Colm Gorey on February 21st

## **REGIONAL**

### **Connaught Telegraph**

'Biodiversity champion Pay wins award'

By staff writer on January 15th

### **Mayo Advertiser**

'Biodiversity award for Belmullet Tidy Towns'

By Staff Writer on February 22nd

### **Tipperary Live**

'Tipperary bog restoration features at major national biodiversity conference'

By Reporter on February 1st

### **Wicklow People**

'Report reveals how climate has already changed'

By Jim Hurley on March 9th

## **INTERNATIONAL**

### **CNN**

'Food supply under threat due to biodiversity loss across globe: UN report'

By James Griffiths on February 22nd

### **The Guardian**

'World's food supply under 'severe threat' from loss of biodiversity'

By Jonathan Watts on February 21st

### **UKFundraising.co.uk**

'Irish foundation announces new environmental funding'

By Howard Lake on March 11th

### **The Week**

'Severe' threat to food from decline in biodiversity, says UN'

By Staff Writer on February 22nd

# FACTSHEET

## BIODIVERSITY

- Ireland has over 30,000 recorded species living in 117 habitats
- 9% of Irish habitats listed in the EU Habitats Directive have favourable status
- 16.8% of terrestrial land in Ireland is legally protected within the Protected Area Network (Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas)
- 1.32% of Ireland's marine area is legally protected within the Protected Area Network (Special Areas of Conservation and Special Protection Areas)
- Of Ireland's 30,000 recorded species, only 10% have been assessed as per IUCN Red List protocols (not including birds)
- Of that 10%, 461 Irish species are endangered (this includes 'Critically Endangered' and 'Endangered' categories)
- 84 Irish species are Regionally Extinct
- 27% of breeding bird species are declining and 19% are increasing
- 37 bird species are on Ireland's Red List of Birds of Conservation Concern
- There are over 500 plant species on the Aran Islands, 50% of the Irish flora
- In invasive alien species categories, there are 48 of high risk, 79 of medium and 250 of low risk. There has been a recent rise in high risk species
- The Living Planet Index shows that, globally, 41% of insect species are in decline, along with 22% of vertebrate species
- The NPWS aims to recruit a total of 84 Rangers to cover all regions by 2020

## FRESHWATER

- One third (1,460) of Ireland's 4,829 waterbodies are at risk of not meeting WFD status objectives
- 124 of 356 rivers and lakes are at risk of not meeting their high ecological status under the WFD
- If a water body moves from 'good' to 'moderate' status, it can lose up to 40% of its species
- Almost 30% of a catchment's macroinvertebrate biodiversity is unique to its headwaters
- The Living Planet Index found that freshwater biodiversity has fallen by over 80% since the 1970s
- 50% of Irish riverine species occur in less than 5% of sites
- Ireland has 35% of EU freshwater pearl mussel stock

## CLIMATE

- Mean temperatures will increase 1-1.6C by mid century, 3C by end of century
- From 2031-2150, predictions from the combined data of nine impact models shows 32% losses of suitable climate space in blanket bogs
- Tests show modern populations of water fleas have genetically adapted to a 4C rise in baseline temperatures since 1960s; 22 long-term community datasets (12-34yrs, post 1980) observed a +0.3C per decade
- Sea level projections show 350km<sup>2</sup> and 600km<sup>2</sup> of coasts are vulnerable to sea level rises by 1m-3m, up 3.4cm since 1990
- Half a degree rise over a 50-year period has changed the sex ratio of the snake pipefish in our coastal waters
- 100m length of willow revetment used to stabilise a riverbank can sequester 280kg of CO<sub>2</sub> per year

## PEOPLE

- In a Facebook poll by BSBI Kerry, Jessica Hamilton asked what it would take to engage youth more: 67% said Education, 26% said Government, 7% said Other
- 88% of people want the government to do more to protect bees
- 97% of dairy farmers would like to see wildlife co-existing with dairy on farms

## ECONOMY

- Biodiversity delivers at least €2.6bn worth of benefits pa to Ireland
- There is a global biodiversity funding gap of c. \$250bn pa
- Ireland spent €1.49bn on biodiversity from 2010 to 2015, which equates to 0.13% of GDP. The IUCN recommends we spend at least 0.3% of GDP
- 80% of Government spend on biodiversity is on subsidies, 10% is operational and 6% is on salaries, leaving a very small amount for capital spend. We're not seeing investment in rebuilding nature and habitats
- DAFM is responsible for 75% of total spend (€65.7bn 2014-2020): most goes to NBAP Target 4 (wider environment). The lowest-funded is Target 5 (marine)
- The value of pollination services to the Irish economy is estimated at €902m pa
- The value of wastewater treatment (regulating ecosystem service) in the marine environment to the Irish economy is estimated at €360m pa
- The value of recreation to people (cultural ecosystem service) along the coast is estimated at €1.7m per annum

# DELEGATE FEEDBACK AND SURVEY RESULTS

## How would you rate the conference overall?

EXCELLENT = 57%

VERY GOOD = 30%

GOOD = 12%

OK = 1%

## Would you attend another event like this?

YES = 87%

MAYBE = 8%

NO = 0%

LIVE STREAM = 3%

## How would you rate the quality of the presentations?

EXCELLENT = 41%

VERY GOOD = 46%

GOOD = 10%

OK = 3%

N/A = 1%

## How would you rate the range/diversity of the presentations?

EXCELLENT = 28%

VERY GOOD = 47%

GOOD = 19%

OK = 5%

## How would you rate the relevance of the presentations?

EXCELLENT = 32%

VERY GOOD = 49%

GOOD = 9%

OK = 8%

POOR = 1%

## How would you rate the live streaming?

EXCELLENT = 16%

VERY GOOD = 12%

GOOD = 8%

N/A = 64%



# DELEGATE FEEDBACK AND SURVEY RESULTS

## How would you rate the quality of the communications?

EXCELLENT = 32%

VERY GOOD = 42%

GOOD = 15%

OK = 7%

N/A = 4%

## How would you rate the venue?

EXCELLENT = 54%

VERY GOOD = 27%

GOOD = 8%

OK = 6%

N/A = 6%

## How would you rate the conference's value for money?

EXCELLENT = 40%

VERY GOOD = 32%

GOOD = 22%

OK = 4%

N/A = 15%

## How would you rate the catering?

EXCELLENT = 20%

VERY GOOD = 30%

GOOD = 27%

OK = 9%

POOR = 1%

N/A = 12%

## How would you rate the use of Sli.do (e-polling software)?

EXCELLENT = 30%

VERY GOOD = 28%

GOOD = 19%

OK = 8%

POOR = 1%

N/A = 14%

## Overview of Comments:

Comments were very varied - there were calls for more sessions, fewer sessions, more days, fewer days. There was some consensus: more exhibition space was needed, as was a dedicated time slot for exhibitions. Gaps in the programming were noted as urban biodiversity, the marine, and gaps in targeted sectors included planners, landscape architects, etc.

(n=74)

# THANK YOU FROM THE ORGANISERS

The idea for this conference was born out of a simple observation: nature needs us. On the grand scale of epochs and ages, of course, it doesn't. Nature will go on like it always has. But we're on human time...

The species and habitats that we grew up with need us. The ageing freshwater pearl mussel needs us. Our aching peatlands need us. The hungry barn owl needs us. They, and many others, need all of us to stand together for nature. And whether we truly realise it or not, all of us need them.

It was only an idea, this conference. An idea that we had to create something that would energise our tired, frustrated, exceptionally hard working friends and colleagues. An idea to create something that would bring us together to celebrate nature, to push forward as a community, find our common voice and stand together for nature in Ireland.

Something beautiful, accessible and warm, that would be real about the challenges and inspire us to reach for the opportunities. Something that would change things.

We'd never attempted anything like this before, so we took our idea and ran with it, then kept running, figuring it out as we went. Lots of people said yes, others didn't say no, and we brought them with us. We had hundreds of conversations, listened hard, took reams of notes and filled spreadsheet upon spreadsheet. Gradually - after multiple iterations - a plan evolved.

Ireland's first National Biodiversity Conference, *New Horizons for Nature*, took place on February 20th and 21st 2019 at Dublin Castle. It sold out five weeks in advance. Delegates and speakers joined us from every corner of the island and beyond, both in person and through the live stream. The media noticed: biodiversity was featured on every major news outlet in the State. To say we feel privileged to have been a part of what was achieved over those two days is an understatement.

Thank you to everyone who helped to make Ireland's first national biodiversity conference such a success: to all the helpers for their hard work, especially the inimitable Paul Laycock who kept the show on the road, to our friends and colleagues across the sector for their support and enthusiasm, and to the many new faces we have met who welcomed this event with open arms.

For us - two passionate conservationists who became fantastic friends creating something we never thought possible - this event will remain etched in our memories for many years to come.



**Deirdre Lynn**  
National Parks and Wildlife Service



**Hannah Hamilton**  
Irish Forum on Natural Capital



# #TeamNature

