



DATE:

Oct 16, 2024

Report complied by:

Karina Lynch & Ian Wilson

#### **Executive Summary**

'Rewetting Cavan's Boglands' became 'Restoring Cavan's Boglands' early on in the project, at initiation stage. It was felt the original name might be too political or irritating to the farmers we hoped to engage who were already dealing with periods of excessive rainfall. This project focused on bogland in West Cavan however this could apply to bogland anywhere. Our attention was centred mainly, though not entirely, on the benefits of bogland restoration for sequestering carbon and improving biodiversity habitats. This project had a number of stands which we sought to marry, all running in parallel – the practical outreach to local communities through public meetings and field trips, the data collection through piezometers and the artistic element, namely a contemporary classical piece for live performance which would function like a summation of the project's aims. These strands had many points of intersection and each fed into and informed the others.

We understood that it was vital that we got our message out to people in the clearest ways possible and that was achieved through our advertising, public meetings, field trips, media coverage and social media engagement. The public meetings were organised in community halls to bring this project and its message straight into the heart of the community. We had three distinct layers to each meeting;

1. Karina organised and promoted the meetings locally. Ian used the meetings as an opportunity to tell people about his work as a composer and to give farmers, landowners,

people who owned bog, people who maybe inherited a strip of bog, environmental enthusiasts and sceptics an overview of how he sees the world and how he would be interacting with bogland over the duration of the year-long project. He told them what he would be doing and what he hoped to achieve through field recordings and his final composition. At the very least, this generated awareness and interest in his music and the intriguing world of a composer. As he recorded them he began putting his field recordings online so we could direct people to them and he could play them as part of our subsequent meetings to let people hear what a bog sounded like. People in West Cavan have not, it seemed, considered putting hydrologically-sensitive microphones into water or moss to hear what they sound like so this was most definitely something new for them.

2. Heather Bothwell has an unwavering love of the ecology of this area and her talks brought a different understanding of bogs to not just the attendees but to the team as well. She talked about bogs, social history, people and values. She exposed us both to images and to her excitement about the flora and fauna of the bogs and she began to help us see bogs as she sees them. We all became sensitive to moths, bog cotton and the different species of sphagnum moss and somewhat unbeknownst to ourselves we began to fall in love with these places too.

3.Our third bog champion was Francis Mackin, a hydrologist from Northern Ireland. Francis's interest lies in water tables but more notably stable water tables which support healthy bogs. Francis furnished us with information about raised bogs here in Ireland and compelling case studies about the measures that he and other hydrologists are taking in Ireland, in the United Kingdom and in other parts of Europe to effectively dam up these areas to allow rewetting and thus regeneration to occur. But Francis also brought with him a team of people from his company and 16 magic wands in the form of piezometers. Together at the initial stages of the project the team had approached up to 10 landowners to gain permission to place 16 piezometers on an area of bog known locally as Aughaweena Bog just outside of the town of Ballyconnell. These piezometers were a huge part of the project and allowed us to begin to monitor the water level of this bog and, put simply, to monitor how healthy this particular raised bog is. In tandem with the public meetings, field trips and music composition Francis and his team took monthly readings and compiled that data in reports to form part of the national picture of raised bog in the north west.

All of these strands came together as we chatted over tea, or walking along a lane towards an area of bog land in east Cavan where restoration is taking place or a bog in west Cavan where a farmer dreams of a vast restoration project or driving along a bog road with a farmer who has never stood on his own inherited bog but has a 'sorta idea of where it is'. We engaged farmers, and they watched us and wondered why we were so interested in bogs. Slowly through the meetings and the field trips and emails and texts farmers began to see bogs as something new and their behaviour towards them is changing and actually in a big way in West Cavan thanks to this project.

Restoring Cavan's Boglands challenged all the team in various ways and pushed them out of their comfort zones to explore this whole area in much greater detail than any of them might have imagined. West Cavan Bogs Association probably had one of their busiest years as Karina, Ian and the team kept moving it forward and pushing for more input and outreach. They admitted that it had been great for them and their group which had run out of steam, and they had learned a lot, not least how to read piezometers. Francis had kindly taken them out and had trained them to read piezometers and then some weeks later they all undertook to try it solo - which thankfully was a success.

The Bog Cinema at local Cottage Markets and International Bog Day with the Cuilcagh Lakelands GeoPark kept us busy all summer. The project concluded with a night for everyone: some eighty people packed into the Goods Store at Belturbet Railway Station for Culture Night. Ian had invited members of the public to assist him to make field recordings and some had taken on the challenge and taken out their phones in Teeboy Bog or Girley Bog and captured sounds which he added to his own and reworked into an accompanying soundscape. 'we have no prairies' is the resulting artwork from the project, a new contemporary classical piece for contrabass flute and contra-alto clarinet. Ian worked with two exceptionally talented professional musicians, Lina Andonovska and Cathal Roche. The piece was professionally recorded and a CD with accompanying artwork was designed. 'Restoring Cavan's Boglands' is now in hard copy.



### 02. BACKGROUND/INTRODUCTION

#### **Background**

#### **Project Lead**

Ian Wilson was born in Belfast in 1964 and began composing while at university. He has since written over 200 works including operas, concertos, 20 string quartets, a range of orchestral and chamber music and multi-media pieces.

His compositions have been performed and broadcast on six continents and presented at festivals including the BBC Proms, Venice Biennale and Frankfurt Bookfair and at venues such as New York's Carnegie Hall, London's Royal Albert and Wigmore Halls, Amsterdam's Concertgebouw and Muziekgebouw, Vienna's Musikverein and Tokyo's Suntory Hall.

In recent years, he has also worked with jazz musicians, sound artists, traditional Irish singers etc. He has completed many public art projects, working with amateur and youth groups and communities of interest all over Ireland. He has been featured composer at the Brighton and Presteigne Festivals as well as with the Hard Rain SoloistEnsemble in Belfast.

He was director of the Sligo New Music Festival from 2003 to 2011 and is a founding member of the National String Quartet Foundation. He received a Major Individual Award from the Arts Council of Northern Ireland in 2016.

#### Background to this project

Ian Wilson 'Having moved to West Cavan in late 2021, I was made aware of the work of the West Cavan Bogs Association some time afterwards by a colleague who works in Heritage. When the Creative Ireland Creative Climate Action fund II was announced my colleague suggested I should contact Heather Bothwell. Heather outlined the work both she and the WCBA did and emphasized the importance of bogs to the environment. After that it was a matter of conceptualizing the best way to approach a project from a musical point of view, as well as putting a strong practical element in place to help "effect change"!

## 03. TEAMWORK IS KEY

#### **WORKING TOGETHER**

#### Ian Wilson, Lead Artist



lan Wilson, composer, is the project lead. It was lan's vision that brought all of these people together for this year long project involving artists, project managers, volunteers, bog owners, WCBA and academics. Ian worked closely with Karina, Heather, Francis, musicians and other personnel to ensure the project came to a successful conclusion and is one that they are all very proud of.

### Karina Lynch Charles Project Manager



Karina Lynch Charles is a project manager and artist who oversaw all operational, administrative and marketing for the project. Karina was the main driving force behind the organisation of the outreach and engagement elements of Restoring Cavan's Boglands. Karina was instrumental in brainstorming new ideas to reach audiences, bog owners and to keep them engaged and up-to-date with all the projects many activities throughout the year via email and other channels.

### Heather Bothwell, West Cavan Bogs Association



Heather is a member of West Cavan Bogs Association, a Cuilcagh Lakelands GeoPark Guide and is an expert on the biodiversity of boglands. She is also a farmer and her family owns bog. Heather has a wealth of local knowledge, of farmers and farming, their mindset and who owns what bit of bog finding and accessing bog owners in this way was invaluable to getting the piezometers placed on bogland near Ballyconnell and reaching farmers who we may not have had access to otherwise.

#### Francis Mackin, Hydrologist



Francis is a hydrologist and is an associate water management and risk flood manager in Northern Ireland. His company offers numerous services including: Detailed water quality modelling and impact assessments, Mathematical modelling of groundwater, Water framework directive studies. Frances travels across Ireland and the United Kingdom developing plans for rewetting bogs amongst other things. He delivered presentations on raised bog, ground water, and the hydrological status of a healthy bog versus a dry bog. He was key to placing the piezometers at Aughaweena Bog and coordinated the monthly data collection. He and his team are currently analysing the data and we hope to have their report by the end of November.

#### Dmitry Germanov Videographer



#### Kate Flood, PhD



Dr Kate Flood is a researcher focusing on the cultural and social dimensions of peatland conservation and the role of communities in contributing to the restoration and resilience of peatlands. Her research integrates social science, ecology, and the humanities to explore the relational networks between people and peatlands. Her research focuses on exploring the valuation of cultural ecosystem services at Irish peatlands and also looks at the role of community conservation initiatives in the protection of wetlands and peatlands in Ireland. Dr Kate Flood took us on a guided tour of Girley Bog currently under restoration.

#### Lina Andonovska Flautist



Flautist Lina Andonovska is a leading performer of her

#### Volunteer Ecologist Emmeline Cosnett



Emmeline is a field ecologist with Woodrow Sustainable Solutions Ltd who has worked in a variety of terrestrial and aquatic environments. She has carried out research on peatland and has completed training in same. Emmeline came onbaord as a volunteer and took us out on a field trip to Teeboy Bog, Bawnboy Co Cavan owned by one of the farmers we engaged through the project, Patrick Byrne. Emmeline's love of bogs was very evident from the outset. She accompanied us on our first field trip having read about the project in the local newspaper. She then volunteered time as an ecologist. She also gave us the use of a an animated project she completed in college which served as and extremely useful information and education tool for people who knew nothing about how bogs were formed.

### Cathal Roche Clarinettist

Dmitrijs Germanov is a videographer who came on all of our field trips and extensively documented the project for us. We felt it was important to film the work as it would be a resource for West Cavan Bog Association going forward but also for the farmers we engaged to help support their behaviour change.

generation, equally at ease with interpreting notated scores, collected sounds and spontaneous improvisation.

She has performed with some of the world's most important voices in art music and is flautist with 4-time Grammy Award-winning ensemble Eighth Blackbird (USA).



Cathal Roche has been at the forefront of producing and playing innovative new music in Ireland for the last 10 years and continues to build a reputation at home and abroad as a creative saxophonist extending techniques and devising new compositional mediums. Cathal's recent collaborations have been the Kimura - Roche Duo(with pianist Izumi Kimura), Dao(with Polish percussionist Rafael Kolachi), and *crOw* (with composer lan Wilson). Well known in jazz circles though his 20 year involvement with Dublin jazz ensemble The Dirty Jazz Club,

#### Paddy Gilroy, Chair WCBA



Paddy Gilroy is Chair of West
Cavan Bog Association and
was a volunteer helper for the
entire project. Paddy is a
farmer and has a wealth of
local knowledge. He was
always there to lend a hand
and to provide wisdom and
encouragement throughout
the process. If Paddy was
there it was going to be a
good day.

## 04. Outputs & Outcomes



We agreed a number of outputs and outcomes as per the Draft Service Agreement. There was a creative element to the project and a behavior change element driven by public meetings and field trips to dry and wet bogland.

Here is how we did in the creative section:

#### Completed:

lan composed a series of field recordings on local bogland (wetted and dry) using dry and hydrology microphones to capture the sounds of moss, watery bog holes, land etc.

lan invited field trip participants to think about the sounds of the bogs we visited and encouraged them to record the sounds they heard using their mobile phones.

lan composed a live performance piece 'we have no prairies' based on the field recordings and sounds captured by participants which he turned into a soundtrack.

He rehearsed the new composition with two professional musicians for live concert performance.

lan pushed for the piece to be performed by a contrabass flute and contra-alto clarinet; this piece is truly a pioneering piece of music and these two instruments have not been used as a duet in any ensemble lan or the team are aware of.

lan pushed for the piece to be recorded and put on CD with accompanying artwork and has had success having it broadcast on numerous radio stations in Ireland and the UK.						

## 'we have no prairies'



The two instruments chosen evoked the deep earthy sounds lan, the team and the some 200 participants encountered in the bogs they visited.

lan and the musicians recorded the 32-minute piece professionally.

lan worked with a graphic designer on the artwork for the CD and double gatefold CD cover and that is now available and has been sent to radio stations who include contemporary classical music in their playlists.



lan will now set distribute the recording via national and international radio broadcasters (Northern Sound, iRadio, RTÉ Radio 1, RTÉ Lyric fm, BBC Radio 3)

### we have no prairies

for contrabass flute, contra-alto clarinet & soundtrack (2024)



pp/p

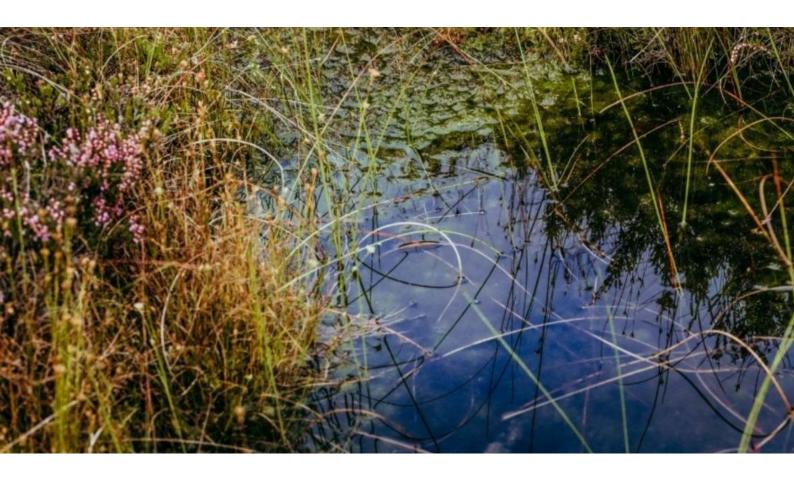
### **Behavioural Change Outcomes**

Outcomes agreed in the Draft Service Level Agreement:

Major Success for the Project:

The West Cavan Bogs Association, our partner in the project "Restoring Cavan's Boglands," has recently received special funding to initiate a restoration plan for a significant local bog Fartrin/Aughaweena on the outskirts of Ballyconnell in West Cavan. They attribute this achievement to the support provided by our project, which included publicity efforts, public meetings, field trips, and scientific data collected by the hydrology team. The Local Authorities Water Program has officially approved the funding, with the Community Water Development Fund granting resources for a professional restoration plan for the Fartrin/Aughaweena bog.

In total, thirteen farmers and bog owners have signed letter and joined this initiative, significantly exceeding our initial goal of engaging with 6 to 8 farmers and supporting their behaviour change around how they were using their bog or in many cases not using it. This is the first steps to restoring a large tract of bog in West Cavan, the first such project in the west of the county and is a major achievement.



#### Other Good News and Successes:

We have also worked directly with another 6 to 7 bog owners from different parts of Cavan and maintained their engagement throughout the process. We have observed behavior changes in 3 of those 7 bog owners. Two others remain interested but are at an earlier stage of engagement.

We have gathered a year's worth of hydrological data on the Fartrin/Aughaweena Bog contributing valuable insights to the national assessment of bog health in Ireland. Additionally, we have raised awareness about climate change by including hydrologist Francis Mackin in our team, who provided evidence-based insights and examples of best practices from both Ireland and the UK.

We promoted climate literacy and enhanced the capacity for self-sufficiency among the public by demonstrating to bog owners how they can implement changes in their management practices. Francis' presentations displayed a variety of dams and restoration plans aimed at rewetting bogs. Field trips to Killyconney Bog and Girley Bog showcased these artificial dams in old drainage locations, serving as real-life examples of successful restoration efforts.

We empowered local stakeholders to make positive behavioral changes by providing information and concrete examples to encourage them to consider rewetting their boglands. Additionally, we trained members of the West Cavan Bogs Association to read piezometers, enabling them to monitor the water table and overall health of Aughaweena Bog—and any other bogs, for that matter.

In alignment with the fund's theme of "Connecting to the Biodiversity Crisis," we highlighted the direct relationship between rewetting boglands and the increase in flora and fauna over time. This was illustrated by our field trips to Killyconney Bog in Mullagh and Girley Bog in Co. Meath, both of which are undergoing restoration projects.

At Teeboy Boy, we examined a bog that had been left undisturbed for some time and documented the diverse species found there, encouraging landowner Patrick Byrne to continue this natural restoration process. Patrick is actively pursuing the dream of restoring Teeboy Bog and feels the project has helped him move this dream forward to the next phase.

We enhanced understanding of the changing climate through the project's informational features, showcasing existing successful examples and promoting climate literacy. In our field trips to Aughaweena Bog and the bog at Castlesaunderson, we encountered dry bog areas with scrub and trees, which our experts indicated would transform into woodland bogs if no intervention occurred.

Visual comparisons of healthy and unhealthy bog conditions were presented by Heather and Francis at our public meetings and at St. Killian's Heritage Centre in Mullagh.

By demonstrating how rewetting boglands is an effective method for addressing the impacts of climate change at both local and national levels, our project has inspired bog owners to recognise their role in promoting biodiversity in Cavan and improving their local ecosystems. This effort has also contributed to a renewed focus on the local environment through our collaboration with the Arts Office, Creative Cavan, and their Council's climate action team.

We anticipated greater engagement from the climate team at the local authority level, noting that decision-makers were not as proactive as we had hoped. However, we plan to present the upcoming data report from Dr. Francis Mackin on the year-long hydrology study of Aughaweena Bog to Cavan County Council in hopes of securing a meeting to discuss its findings.

Despite the challenges, we have made progress, as evidenced by Heather and Karina being invited to present the project during Science Week in Cavan in November 2024.

We partnered with the West Cavan Bogs Association throughout, including a trip to Queen University Belfast to present at their arts & sustainability event in April 2024.

Through Heather Bothwell we established links with the Community Wetlands Forum and she told them about our project at a regional meeting

We established links with 2 members of Cavan Communities 4 Climate Action and they attended 1 of our public meetings and the Girley Bog field trip led by Dr Kate Flood.

We arranged three public meetings and four field trips.

We also hosted the bog cinema at The Cottage Market Seasonal festival in Cavan town and showed 3 of our documented field trips to patrons.

We gained the attention of The Cuilcagh Lakelands UNESCO Geo Park and they asked us to partner with them for International Bog Day. We held a field trip at Aughaweena Bog and a social event afterwards for about 30 people showing videos and answering questions.

## 05. Public Engagment Outcomes

Public Engagement outcomes, e.g., levels of audience engagement and participation (if appropriate), media coverage, social media analytics, etc.;

#### 1st Meeting, Kildallan Community Centre: October 2023

#### Media Coverage

- Northern Sound FM: Daily reach 12,000 26,000 people
- Anglo Celt Newspaper: 13,000 copies sound weekly
- Poster/Road Sign Campaign: In place for 14 days reach: 2000 people
- Social media: Views 1,290

43 people attended. Ian Wilson, Francis Mackin & Heather Bothwell presented information about the project and about boglands in Ireland and more specifically bogland in Co. Cavan. We had tea and refreshments and encouraged people to stay on and chat about the content of the evening.

We had land owners from across the county in attendance.

#### Outcomes

- 1. 2 Farmers from Mullahoran came. They told us by the end of the meeting that they have bog that they are interested in rewetting.
- 2. Kathleen and Angela bog owners at Fartrin signed up to our fist field trip
- 3. Patrick Byrne bog owner made himself known and Karina followed up with an email
- 4. Engaged Local Agricultural Rep. Oliver Crowe

#### 1st Field Trip to Killyconney Bog / November 2023

#### Media coverage

- Northern Sound FM: Daily reach 12,000 26,000 people
- Anglo Celt Newspaper: 13,000 copies sound weekly
- Poster: In place for 14 days reach: 250 people
- Social media: Views 870

17 people went to Killyconny Bog Project in Mullagh for a talk and video presentation and a visit to the bog and tea and refreshments after.

#### Outcomes

1. Clare and Barry Smith asked to engage further with the project

- 2. Declan Fitzpatrick Bog owner admitted he had never been to his bog and was now interested
- 3. Lilly O'Connor, bog owner, came and said she learned a lot that day and felt different about her bog now.
- 4. Kathleen and Angela Gallagher Bog Owners came on this trip and said they would engage other bog owners near their strip.
- 5. Clare Smith came and discovered that a new farm they had bought and were about to plant with native trees was actually bogland. They have refrained from planting it and have begun allowing it to naturally rewet
- 6. One attendee mentioned that 27 acres of bog was for sale at Fartrin Bog in Ballyconnell on the day.

Subsequently Karina approached Maurice Eakin, Director of the NPWS, to inform them of the sale and to see if this was something that they might be interested in.

Maurice said he was, and that he would also contact Nuala Madigan of Irish Peatland Conservation Society and inform her. Karina subsequently spoke with Nuala and they are keeping an eye on this section of bogland.

From that field trip a new link was make with a second ecologist Emmeline Cosnett who offered us a volunteer day from her company in Sligo.

#### **2nd Meeting: The WCBA AGM December 2023**

#### Coverage

- Northern Sound FM: Daily reach 12,000 26,000 people
- Anglo Celt Newspaper: 13,000 copies sound weekly
- Poster/Road Sign Campaign: In place for 14 days reach: 3,000 people
- Social media: Views 889

12 people in attendance

#### Outcomes

- 1. New committee selected
- 2. New energy in the group
- 3. Restoring Cavan's Boglands praised for the energy it was bringing to their association.

#### 3rd Meeting: An zoom/ online meeting / January 2024

Frances Mackin engaged in a hydrological survey of bog owner Patrick Byrne's land and presented an online meeting for 14 people including Patrick.

#### 4th Meeting: Templeport Community Centre / March 2024

#### Media Coverage

- Northern Sound FM: Daily reach 12,000 26,000 people
- Anglo Celt Newspaper: 13,000 copies sound weekly

- Poster/Road Sign Campaign: In place for 14 days reach: 1,000 people
- Social media: Views 778

24 people attended that meeting. Ian, Francis and Heather presented to the audience and we all stayed on after and had tea/refreshments and chatted about the topic of bogs and the information we had just heard.

#### Outcomes:

- 1. There were 12 bog owners in attendance, John, Martin were two we engaged, others were hesitant but left contact emails and Karina kept in contact throughout
- 2. There were 2 members of Cavan Communities 4 Climate Action
- 3. We invited people to sign up for our third field trip

#### 2nd field Trip to Girley Bog, Co. Meath

#### Coverage

- Northern Sound FM: Daily reach 12,000 26,000 people
- Anglo Celt Newspaper: 13,000 copies sound weekly
- Posters: In place for 14 days reach: 230 people
- Social media: Views 579

22 people attended the field trip including two farmers from the Cavan/ Meath border who seen the article in the paper

#### Outcomes

- 1. The two farmers Sid and Pat who met us there said they had cut turf all their lives but were never aware of a wet bog or of the variety of plants and animals a wet bog could support including wading birds. They said they would go home and think about this. We have kept in contact. They are not cutting anymore.
- 2. We had John and Imelda from Mullahoran on this trip, they are still considering what to do with their bog and if they feel ready to consider taking the next steps.
- 3. We had a number of other bog owners who again said that this was food for thought and something they were completely unaware of prior to the trip. They didn't understand how rewetting worked or the benefits.
- 4. One farmer said he'd wait and see if there would be incentives from the government before deciding to do anything.

#### 3rd Field Trip: Teeboy Boy - private land / April 2024

We visited Teeboy Bog belonging to one of the farmers we engaged at the first meeting, Patrick. Patrick didn't want a huge crowd so we brought 10 people.

We had organised a zoom between Patrick and Frances our hydrologist in January and Francis made a hydrological survey of his land attended by 14 people.

Volunteer ecologist Emmeline Cosnett conducted this field trip.

Patrick's bog was exceptionally interesting and we are still supporting him to look for grants to move forward with his restoration plans and hope to keep in contact with him.

Patrick is fully engaged and ready to take the next steps.

#### 5th Public Engagement/Outreach

#### The Bog Cinema at The Cottage Market Festival Cavan / June 2024

We hired a bus and showed a number of the documented field trips and meetings/presentations to members of the public in an effort to engage people in a different way.

We engaged approx. 160 people over the 2 days.

#### 6th Public Engagement/Outreach

We partnered with Cuilcagh Lakeland Geo Park for International Bog Day and held a field trip to Aughaweena Bog in Ballyconnell with guide Heather Bothwell.

We engaged over 150 people through advertising

Cuilcagh Lakeland GeoPark Website: 1,000

21 people in attendance and we brought everyone back for refreshments and showed two documented videos at Tom Regan Hall.

#### Final public Engagement / Sept 2024

Poster campaigning locally: 570 people

Social Media: 1,200

Cavan - Culture Night Brochure 3,590

Northern Sound 12,000-20,000 people

#### **Culture Night 2024**

Live performance of 'we have no prairies' by Ian Wilson at The Goods Store Belturbet for Culture Night 2024.

We had approx. 80 people who attended this event.

Overview of the event with artist statement:

Karina opened the evening with an overview of the project and lan went into further detail and introduced musicians Lina and Cathal and their instruments who in turn gave demo's of how the instruments work and a little bit of info on them.

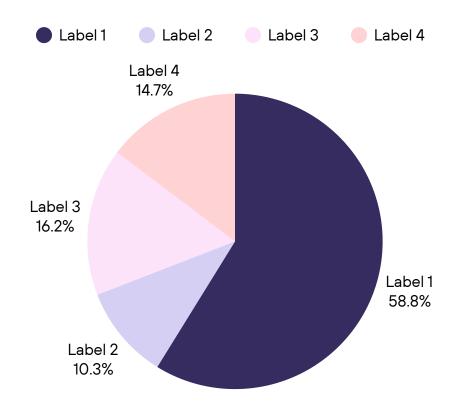
"we have no prairies" is a 32-minute contemporary classical piece for contrabass flute, contra-alto clarinet and soundtrack.

"My role was to compose a piece of music that would somehow reflect the nature and aims of the project, and so I began by making a number of field recordings in different types of bogland, both drained and restored, so I could hear the characters of both and compare them. Water, birdsong and insect life were all important sonic elements, and the times of year I made the various recordings were also a factor. I then produced a soundtrack comprised of edited and processed field recordings which became the basis for the new work, then composed music for two wonderfully low wind instruments: Lina Andonovska's contrabass flute and Cathal Roche's contra-alto clarinet; Lina and Cathal are both wonderful musicians I have worked with often." says composer lan Wilson. "we have no prairies" (also the first line of Seamus Heaney's beautiful poem "Bogland") combines substantial sections of composed music with occasional improvised passages and interlude-type soundtrack-only passages; its trajectory follows a "back-to-life"-type narrative, sonically speaking.

The event was a huge success and Ian had promised on the night to deliver CDs to the Railway Museum when they were completed. Karina will now contact the venue and supply them with CDs for the audience members many of whom have already been asking the date of their arrival.

It was a hugely successful event and an education in new music. Contemporary classical music is not heard live often, if ever, in towns in Cavan like Belturbet, a small border town. The audience was very responsive and interested not only in Ian and the music, but also the subject matter. We were blown away by the response. People really got into the evening and wanted to talk to Ian and the performers after. We had tea and refreshments available so the majority of people stayed on and chatted with us and each other telling their bog stories. Many people could be heard saying 'I will never look at bogs in the same way' or 'I always thought of bogs and the language that came out of bogs as being demeaning, where terms like "bogger" or "bog man or bog woman" came from but now I see them in a different light'.

## 06. A SUMMARY OF EVALUATION



Label 1: Learned new information about bog especially the benefits of rewetted bog: Yes 58.8%

Label 2: Already knew about rewetting bogs or had heard of the term wet bogs? Yes 10.8%

Label 3: Would now consider rewetting bog you own? Yes 16.3%

Label 4: Are going to actively rewet bog or allow bog you have to naturally rewet? Yes 14.7%

#### An Overview of Findings:

- Many bog owners are not farmers.
- They are as many women bog owners as men.
- People acquire bogs through a variety of ways: Inheritance // With the sale of a house the house comes with a strip of bog / Bog as part of an active farm all farms have some bog attached // Bogland owned by farmer or landowner who has no idea where their strip is and no real interest
- The majority of bogs are not being cut in the area in question, West Cavan
- People are unaware of a "wet bog" or why a wet bog is a good idea or what bogs were like historically

- There is a small amount of bog that is being cut personally
- People are unaware of how bogs are formed

#### Did we achieve all our goals, yes and no?

We have 7 people seriously looking at their bogs and 3-4 engaing in behaviour change.

- We have 3 people now committed to rewetting their bogs with two now actively engaging in this process. We have people talking and thinking. We have owners of numerous bogs in West Cavan now aware of what rewetting bog is and how you go about it and why you would do it.
- What we learned from bog projects like Killyconney Bog in Mullagh is that it takes approx. 20-30 bog owners working together to rewet a large section of bog.
- We learned that there are not as many single-owned bogs as one might have imagined.
- We engaged over 400-500 people directly with this project and at a moderate estimate 15,000 indirectly through radio, newspaper and social media but this could be many more.

# 07. IMAGES































### MARKETING & VIDEOS

#### Video Documentation

Girley Bog with Dr Kate Floors - Click here to watch: ⊕14 June 2024

#### **Teeboy Bog**

https://youtu.be/E4ZUHU04OM0?si=\_z9fzZzG60eZTHWu

#### **Bog Hydrology Lecture with Dr Francis Mackin**

https://youtu.be/\_SXd-W-qqYw?si=pi3bolesGlvNH2kL

#### **Bog Animation by Emmeline Cosnett**

https://youtu.be/Rmh-hzclqx0?si=miJDtjc2s9fceTTw

MARKETING: Media & Interviews etc.

https://www.anglocelt.ie/2023/10/22/sign-up-for-new-project-restoring-cavans-boglands/



### Sign up for new project 'Restoring Cavan's Boglands'

A new 10-month project 'Restoring Cavan's Boglands', a Creative Climate Action project, will launch this Tuesday, October 24, at Kildallan Community Centre near Ballyconnell. An introductory talk and Q&A will get underway at 8:30pm.

Project leader, composer Ian Wilson, is seeking to

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Project leader, composer Ian Wilson, is seeking to engage with communities, landowners, and interested individuals through three social information events and three educational field trips to restored boglands across Ireland.

The boglands project aims to encourage landowners to restore their boglands.

The first event will feature a short presentation by hydrologist/ecologist Francis Mackin, an expert in Irish boglands, with contributions by Heather Bothwell, a local biodiversity expert and member of West Cavan Bogs Association.

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The Restoring Cavan's Boglands project is open to people from all across Co Cavan interested in finding out more about bogland. To register email: restoringcavansboglands@gmail.com or visit West Cavan Bogs Association on Facebook for updates.

Restoring Cavan's Boglands is a recipient of government funding from the Creative Ireland Programme.

https://www.anglocelt.ie/2023/11/05/landowners-have-nothing-to-fear-from-rewetted-bogs-says-expert



Francis Mackin addressing the meeting in Kildallan Community Centre.

Northern Sound FM



Francis Mackin addressing the meeting in Kildallan Community Centre.

Northern Sound FM

Landowners have nothing to fear from rewetted bogs, says expert

Landowners have nothing to fear from rewetting and restoring bogs, was the message relayed at a meeting held in a rural townland in West Cavan heard last week.

The well attended meeting held in Kildallan Community Centre last Thursday night was the first in a series of awareness meetings in the locality, organised by the West Cavan Bogs Association and Restoring Cavan's Boglands funded by Creative Ireland's Climate Action fund.

Hydrologist Francis Mackin was the main speaker in a panel, which also included ecologist Heather Bothwell, who is one of the key drivers behind highlighting the local bogs as a resource for biodiversity, and Belfast composer lan Wilson, who is the project lead and intends to write a piece of music inspired by his research of these West Cavan habitats.

Francis Mackin of the consultancy company RPS Group is the 'go to' person when it comes to bog restoration across Ireland. Much of his talk focussed on the conditions necessary for spagnum moss - that ancient driver of healthy boglands - to grow, and the technical aspects of measuring water levels. Essentially the water level needs to reach certain thresholds and the rising gradient of the peat towards the centre of the bog must be very gradual to provide the exacting conditions required.

Considering both the location of the talk and the topic, in a lively Q&A session afterwards it was no surprise that farmers' concerns were uppermost in people's minds.

Asked by one gentleman asked if there is an incentive in the pipeline for farmers who own bogs to allow rewetting to occur, Francis said schemes are currently limited to those in designated sites, such as those in special areas of conservation. He did however give his personal opinion: "At the minute I don't think there is anything in place for non-designated sites, but I would imagine that will change fairly quickly. There could be very significant targets in terms of restoring these areas of bogs and there's EU Restoration law still under debate, and whatever comes out of that I think there will be significant targets that will have to be met - meeting those targets by rewetting grasslands where there are peat soils currently in use - that's going to be really expensive, so it's going to be much more cost effective targetting these smaller peatland areas that currently aren't being used. But at the minute I don't think there is any significant funding available, but I think it will come available in the next couple of years."

Another gentleman asked if people with land surrounding bogs have anything to fear from "rewetting and raising the water level".

Francis began by saying it was a valid question. "A lot of my job is about making sure that people in the surrounding areas aren't affected. Probably the biggest part in designing a restoration is making sure that it is done in a way that doesn't impact on the surrounding lands. One of the things we always do is carry out a drainage management plan. We look at the site, we look at where the restoration measures could go and then we look at the drains surrounding the site - between the bogs we want to restore and the adjacent agricultural land, making sure that those drains - or hydraulic break as we would call it are effective and up to standard. At this stage I've probably been involved in about 25,00ha of peatland restoration and there isn't a single case that I know of where someone has been able to say there's been an impact from flooding."

"That's very important," the man from the audience emphasised.

Speaking after the event Francis explained that originally, Ireland had approximately 310,000ha of bogs.

"Turf cutting really only kicked off about 400 years ago," said Francis. "Once all the woodlands were gone, they moved onto the bogs. Most of the raised bogs that we've lost have been taken out by hand extraction - so about 160,000ha from hand extraction," he said before it became industrialised by Bord na Móna in the mid 20th Century and then the mechanised commercial operations began.

"We have about 50,000ha of what we call high bog - so bog that hasn't physically been cut away in any shape or form - that's about 16% [of the original 310K Ha]. But of that, only 0.5% of the original area is what we call peat forming - that's active raised bog with a high water table with lots of spagnum moss, really good condition."

Some Irish peatlands are too depleted to ever support an active raised bog, however Francis says these too should be appreciated.

"It's still a significant carbon store, it's still really important to biodiversity, it still contributes in terms of preventing flood risks down stream," he explains.

West Cavan Bog Association are affiliated with the Community Wetlands Forum, and it was through them that they made contact with Francis. Having visited the few sites in West Cavan about their potential for restoration, he's optimistic.

"Because there's not many bogs designated in this particular part of the country, we're at the extent othe range of where they occur, they're actually really important bogs. "A lot of the midlands bogs have suffered from drainage in the surrounding areas, whereas these bogs are a little more sheltered than that because they are in drumlins - so the ones in this particular area are in really good condition, and with very light touch restoration could support quite significant areas of active raised bog," he said.

Francis discusses bogs with a quiet, measured authority that's very pursuasive, yet he still conveys his passion for bogs.

"For me we have this really unique habitat that just doesn't occur in other areas - Europe has lost pretty much all of its active raised bog - they're spending millions to preserve single raised hectares, whereas we still have a really god resource and really good potential to restore."

If proof were needed of the impact a restored bog can have it's in the return to the Irish landscape of cranes - a majestic bird absent from Irish skies for centuries. The cranes are breeding on a site - undisclosed to protect the birds - where Bord na Mona are currently undertaking a phased restoration of bog.

"It is a direct consequence of that rewetting," Francis insists. "The reason why rewetting is important for bringing cranes back is that they are really vulnerable to predators - things like foxes or even aerial predators coming in and predating on the chicks.

"Once you rewet it, you create this island where the cranes will go, and around them you have this safe zone where predators can't get to them. So the rewetting of the bogs has allowed them to identify locations they think are suitable to breed - I think it's two years now they have successfully bred, that's a direct consequence.

The curlew is another bird which has suffered in Ireland - while we host a strong migrant curlew population over wintering in Ireland, our own native population has plummeted since the 1980s. Francis is hopeful that a National Parks and Wildlife bog restoration project in County Westmeath, on which Francis worked alongside Bord na Móna will have good news for curlew soon.

"We carried out some simple drain blocking on an area of high bog and the curlew has returned to that bog within three years of that restoration work taking place."

The curlew appeared this summer - and Francis is "not 100% certain" if they successfully bred, but a pair has been spotted several times throughout the summer period.

"It's a good sign, it could mean this time next year they could return and start breeding there, if they didn't breed this year," he says.

### Turf cutters' rights

Can he see a time when people who would have rights to cut bogs might say, let's make a different use of this resource?

"People have to see something in it for them. Maybe initially a lot has been focussed on the financial incentive - let's pay these landowners off, get in and do restoration," he says. Francis suggests that another approach might be more effective - that if landowners visit a restored bog they will naturally be persuaded.

"I think once you see a restored bog it opens your eyes - it's not this big scary thing of flooding land or completely changing the land use. You can do restoration and farm right up next to it if it is done properly, and you can get the spagnum coming back in really quickly if you get the hydrological conditions right. When people see that, they become a lot less afraid of it, but can also see this is actually worthwhile."

Biodiversity

Climate change

Damian McCarney

Published: Sun 5 Nov 2023, 9:05 PM

### 'Restoring Cavan's Boglands', to be launched later today

OCT 24, 2023 10:50



Share this article

The boglands project aims to encourage landowners to restore their boglands.

A new 10-month project 'Restoring Cavan's

Boglands', which is a Creative Climate Action

project, will launch this evening at Kildallan

Community Centre near Ballyconnell.



Northern Sound FM

https://www.northernsound.ie/news/restoring-cavans-boglands-to-be-launched-later-today-224604

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OCT 24, 2023 10:50

BY NEWS NORTHERN SOUND

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A new 10-month project 'Restoring Cavan's Boglands', which is a Creative Climate Action project, will launch this evening at Kildallan Community Centre near Ballyconnell.

An introductory talk and Q&A will get underway at 8:30pm.

Project leader, composer Ian Wilson, is seeking to engage with communities, landowners, and interested individuals through three social information events and three educational field trips to restored boglands across Ireland.

### Advertisement

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## 

the field recordings he has captured so far in Cavan boglands. These recordings will form part of a new music composition that the contemporary classical composer is working on. The piece will be ready for public dissemination in

September 2024 with a concert planned for West Cavan.

1st Social Outing on Northern Sound FM

**NEWS** 

Group aimed at restoring Cavan boglands launched

NOV 11, 2023 09:12

BY NEWS NORTHERN SOUND

Share this article

Led by Arva man, Ian Wilson, the Restoring Cavan's Boglands group have organised three information evenings in Cavan

A new group aimed at encouraging Cavan landowners to restore local boglands has been set up.

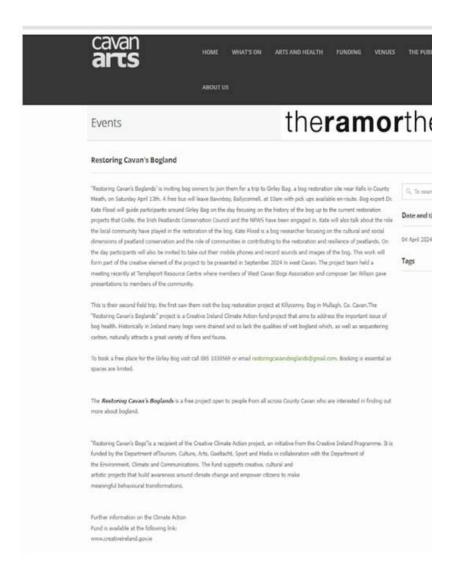
Led by Arva man, Ian Wilson, the Restoring Cavan's Boglands group have organised three information evenings in Cavan. Anyone can go along to learn how to restore bogs on their land and the benefits this relatively simple action can have for the local and nationa lenvironment. Those unable to attend the information sessions can talk to an expert on zoom or even visit a restored bogland in Cavan to see for themselves how bogin its natural state

improves biodiversity, sequesters carbon and attracts indigenous flora and fauna. A field trip to see a the restored Killyconny bog in Mullagh, Co. Cavan takes place today with a bus leaving Ballyconnell at 10am.

lan Wilson from the Restoring Cavan's Boglands group says the benefits will be felt in Cavan and beyond.

Cavan Arts Website 2024

### Cavan Arts Website



Also featured in local news articles as we moved around from venue to venue

### 'we have no prairies' by Ian Wilson

### CD digi pack



CD Track Listing (for back page of booklet and middle-back panel of digipress pack) we have no prairies for contrabass flute, contra-alto clarinet and soundtrack (2024)

Introduction 1:08

Birds 1 6:58

Interlude 1 0:59

Big Water 4:19

Interlude 2 1:19

Little Water 7:00

Interlude 3 1:03

Moss 3:44

Interlude 4 1:02

Birds 2 4:21

TT: 31:53

PART 1 - DEAD BOG

i. INTRODUCTION: combination of birds, waterfall & small stream.

A. BIRDS 1: Different birds mixed with low hums heard from car traffic and, later, aircraft. The bog is dead, only the birds are singing. There's water running in small rills because the bog cannot retain any of it.

a1. INTERLUDE 1: birds, waterfall, stream.

B. BIG WATER: Waterfall, using both in-air mics & hydrophone. Notice the sounds recorded IN the water with the hydrophones – clacky, gurgly... What might a WATERLOGGED melody sound like?

b1. INTERLUDE 2: birds, waterfall, stream [processed].

C. LITTLE WATER: A little rill on Altbrean bog. How can the response to the sound of this tiny stream be different from the response to the sounds of the waterfall? Lightness, fairies & elves, something hidden, underground almost. Listen out for the many repetitions in the soundtrack here – little ideas have been caught and repeated.

PART 2 - LIVE BOG

ii. INTERLUDE 3: combination of birds, waterfall & small stream.

D. MOSS: mix of two recordings made with v. sensitive contact mics. This, believe it or not, is where the life is! These are sounds of moss – tiny little happenings going on, lots of activity under the surface, even though very small scale.

d1. INTERLUDE 4: combination of (processed) moss sounds & birds from Girley Bog.

E. BIRDS 2: recorded on Girley Bog. Resist the temptation to think that the birdsong is where all the activity is. These are the sounds of a live bog (admittedly not much different from the sounds of a dead bog from afar) but you need to remember all the plants, insects and other fauna that have come back to the live bog – the place is teeming! The composed music will reflect this. Also the wind – this is an important feature of the soundtrack motivically as it represents change and energy.

Lina Andonovska, contrabass flute

Cathal Roche, contra-alto clarinet

David Stalling, sound engineering, editing, mixing

Produced by Ian Wilson

Recorded at Hilltown House, County Westmeath, 16th September 2024

CD art and design by Miloš Tomić and Vasilijes

# 08. FINDINGS

### What we learned:

- Early on in the project we became aware that a section of the raised bog at Aughaweena was for sale.
- We liaised with NPWS and Irish Peatlands Council and facilitated and raised their awareness of the delicate situation at the bog there.
- We learned that a planning application for a quarry had been lodged beside one of the raised bogs in Aughaweena.
- The projects presence supported a new group that was set up to actively oppose the quarry who have so far as we had been advertising and positively promoting bogs and the importance of healthy and rewetted bogs.
- The planning application was withdrawn but a new application is in progress and will be submitted again shortly
- We learned that bogs are owned by a large number of people and to encourage substantial behavioural change the government might need to incentivise farmers to buy in.
- We learned that farners are not as opposed to rewetting for reasons of turf cutting in West Cavan but rather the fear of flooding on their land or an adjacent farms land
- We learned that farmers were not aware that a rewetted bog can hold 20-30 times its weight in water and so is a barrier to flooding
- We learned that rewetted bog filters flooded water out more slowly and cleans the water

Findings for the Project: Restoring Cavan's Boglands

### Major Successes

The "Restoring Cavan's Boglands" project, in collaboration with the West Cavan Bogs Association, has achieved significant milestones in the restoration of local boglands, particularly the Fartrin/Aughaweena bog near Ballyconnell. With special funding secured through the Local Authorities Water Program and the Community Water Development Fund, a professional restoration plan has been initiated, marking a major breakthrough for bog conservation in West Cavan.

Community Engagement and Farmer Participation

One of the project's outstanding achievements is the engagement of thirteen farmers and bog owners, surpassing the initial target of 6 to 8 participants. This represents a substantial commitment from the local community towards sustainable bog management. Additionally, the project has engaged with another 6 to 7 bog owners from different parts of Cavan, with noticeable behavioral changes observed in three of these participants.

Scientific Contributions and Climate Literacy

The collection of a year's worth of hydrological data has provided valuable insights into the health of the Fartrin/Aughaweena Bog, contributing to a broader national assessment. The inclusion of hydrologist Francis Mackin has elevated climate literacy and provided evidence-based insights, showcasing best practices in bog restoration from Ireland and the UK. The project's field trips and public meetings have further educated the community on climate change and the importance of rewetting bogs.

### **Empowerment and Capacity Building**

Through training and demonstrations, local stakeholders have been empowered to adopt sustainable practices. The training of West Cavan Bogs Association members in using piezometers to monitor bog health exemplifies the project's commitment to building local capacity. Field trips have illustrated the positive impacts of rewetting on biodiversity, enriching participants' understanding of the relationship between healthy bogs and increased flora and fauna.

### Collaborative Efforts and Public Engagement

The project fostered a collaborative environment by partnering with various organizations, including the Community Wetlands Forum and Cavan Communities 4 Climate Action. Public engagement was facilitated through three public meetings, four field trips, and events such as the bog cinema at The Cottage Market Seasonal festival. These initiatives have raised awareness and inspired community action toward bog restoration.

### Challenges and Future Plans

Despite the project's successes, engagement with local authority climate teams has been less proactive than anticipated. Moving forward, the project plans to present the findings from the year-long hydrology study of Aughaweena Bog to Cavan County Council, aiming to secure further support and collaboration. The upcoming presentation during Science Week in Cavan and partnerships with institutions like Queen University Belfast and The Cuilcagh Lakelands UNESCO Geo Park demonstrate the project's ongoing commitment to promoting sustainable bogland management and climate action.

Overall, the "Restoring Cavan's Boglands" project has laid a strong foundation for future conservation efforts, fostering community involvement and advancing climate literacy, with the potential to significantly improve local ecosystems and biodiversity.

## THANK YOU TO ...

With thanks to: Creative Ireland, Tania Binotti, Anne-Marie Bell, Karina Charles Lynch, Heather Bothwell, Francis Mackin, Emmeline Cosnett, Paddy Gilroy, Aisling Blackburn at West Cavan Bogs Association, Dr Kate Flood, Patrick Byrne at Teeboy Bog, Dimitry Germanov of Jago Studio, Anna Wiercioch of Kaniuta Art Services and Wharton Bus Cavan; and to all at Killyconny Bog Mullagh Committee, Kildallan Hall, Templeport Resource Centre, Tom Regan Hall, Cuilcagh Lakelands Geopark, Hilltown House, Belturbet Railway Station, and the some 200 people we engaged from all across Cavan and neighbouring counties - the farmers, landowners and bog owners we spoke to and visited. As part of the project we invited individuals to record sounds so thanks to artist Eimear Crowe for her bird sounds from Girley Bog. Thanks also to Catriona O'Reilly, Rhonda Tidy, Marina Harten and Annetta Brides of Cavan Arts Office; Adele Mealey and all at Creative Ireland; and of course Lina Andonovska and Cathal Roche, also to sound engineer David Stalling. Thank you to artist Miloš Tomić and designer Vasilijes. And a big thank you to Ann Lawlor for her invaluable advice.