

Gaile Community Group (TPPN-1180)

Gaile,

Thurles

Co. Tipperary

Planning Section

Tipperary County Council

Civic Offices, Clonmel

Co. Tipperary

Second Submission: Objection to Planning Application Ref. 25/60019

We, the Gaile Community Group, fully support the necessary actions required to meet the European Union's climate targets for Ireland by 2030. This submission does not oppose renewable energy or biomethane in principle. Rather, it focuses on whether the proposed development at Killough represents a safe, appropriate, and policy-compliant location for infrastructure of this scale and risk profile.

This second submission brings together:(i) key issues raised in earlier submissions which remain unresolved; and (ii) additional matters identified following review of the Further Information submitted by the applicant.

The submission is structured in five parts:

- Section 1 provides a plain-language comparison with a similarly scaled biomethane facility in Germany, to illustrate concerns regarding scale, spatial adequacy, and site fit.
- Section 2 sets out the relevant road safety and Development Plan policy context, explaining why hazardous transport risk remains unresolved.
- Section 3 addresses the single-entrance access constraint in the context of COMAH/Seveso land-use planning and emergency resilience.
- Section 4 summarises the ongoing deficiency in community engagement, including the refusal to facilitate an open town-hall forum.
- Section 5 documents the extent of public opposition, including a petition signed by 433 individuals citing concerns relating to HGV and LNG tanker traffic on unsuitable rural roads, the vulnerability of a karst aquifer beneath the site, the River Suir catchment, nearby biodiversity, and the proximity of a primary school.

Taken together, these matters go to the fundamental question of whether the Killough site is a suitable and appropriate location for the development proposed.

1. A Common-Sense Comparison with a Similar Biomethane Facility in Germany

In trying to understand the proposed Killough Bio-Renewables Facility, it is reasonable for members of the public to look at how similar biomethane plants operate elsewhere in Europe. This section does not seek to challenge engineering detail or regulatory compliance. It simply reflects how a non-expert person might compare two broadly similar facilities and ask whether what is proposed at Killough “looks right” in terms of scale, space and fit.

A useful point of reference is the large biomethane and bio-LNG facility operated by VERBIO at Güstrow, Germany, see fig 3. This facility processes large volumes of organic material and produces biomethane and bio-LNG, making it broadly comparable in operational type to what is proposed at Killough.



Fig 1. BioEnergie Park Güstrow: 17-Hectare German Biomethane Facility with Dedicated Road Infrastructure and Wide Spatial Separation from Housing and Biodiversity (EnviTec Biogas, 2023)

1.1 Overall Size and Space – What an Ordinary Comparison Reveals

The Güstrow facility occupies a site of approximately 17 hectares, located within a purpose-selected industrial area. Publicly available images and descriptions show:

- wide spacing between tanks, buildings and infrastructure;
- generous internal roadways for large vehicles;
- clear separation between industrial activity and surrounding land uses;
- visible room for circulation, storage and contingency.

By contrast, the proposed Killough facility would occupy approximately 6.3 hectares, within an active limestone quarry, bounded by quarry faces, steep topography and ongoing extraction activity.

From a non-technical point of view, the difference is immediately noticeable. The German facility appears spacious and proportionate, while the Killough proposal appears tight and compressed, with little spare room.

This leads to a straightforward and reasonable question: If two facilities are carrying out broadly similar activities, why does one require nearly three times the land area of the other?

1.2 Why Space Matters – What the Research Says (in Simple Terms)

Academic studies on biomethane plant location consistently show that large plants work best when they are placed on large, flexible sites, rather than being fitted into constrained locations.

Research on optimal biomethane plant siting demonstrates that:

- space allows vehicle movements, storage and handling to be spread out;
- risks are managed through layout and distance, not just procedures;
- transport impacts are absorbed across wider areas rather than concentrated locally (O’Shea et al., 2016; Energies, 2023).

In plain terms, these studies confirm what is visually obvious at Güstrow: big plants normally sit on big sites.

This makes the Killough proposal feel counter-intuitive. The plant does not appear to have been designed around a site chosen for its suitability; instead, it appears to have been fitted into the space that happens to be available.

1.3 Layout, Separation and “Room to Breathe”

At Güstrow, the size of the site allows:

- separation between different operational areas;
- space for vehicles to manoeuvre without conflict;
- buffers that reduce reliance on perfect timing or behaviour;
- flexibility to deal with problems or abnormal situations.

At Killough, the same types of activity would need to take place within a much smaller footprint, alongside blasting and quarry operations, and with immediate reliance on local public roads.

From a layperson's perspective, the German plant looks designed around the process, whereas the Killough proposal looks designed around the limits of the site.

1.4 Digestate and Vehicle Movements – Space Changes the Impact

Another difference that stands out relates to how movements are handled.

Large facilities such as Güstrow operate within:

- extensive agricultural regions;
- wide transport networks;
- multiple routes that spread traffic and reduce local pressure.

Research confirms that when digestate and feedstock logistics are spread across large land bases, impacts are diluted and easier to manage (O'Shea et al., 2016; Applied Energy, 2023).

At Killough, digestate and feedstock movements would:

- rely on a limited amount of local farmland;
- be concentrated on a small number of rural roads;
- share space with residents, farm vehicles and school traffic.

Even without technical modelling, it is reasonable to feel that concentration versus dispersion makes a real difference to how a development is experienced locally.

1.5 A Simple Area Comparison

The difference in scale can be expressed very simply:

- Killough site area: 6.3 hectares
- Güstrow site area: 17 hectares

Calculation:

$$6.3 \div 17 = 0.37$$

This means the Killough site is approximately 37% of the size of the Güstrow site.

Put another way, the German facility operates on a site that is about 2.7 times larger than what is being posed at Killough quarry, see fig. 2.

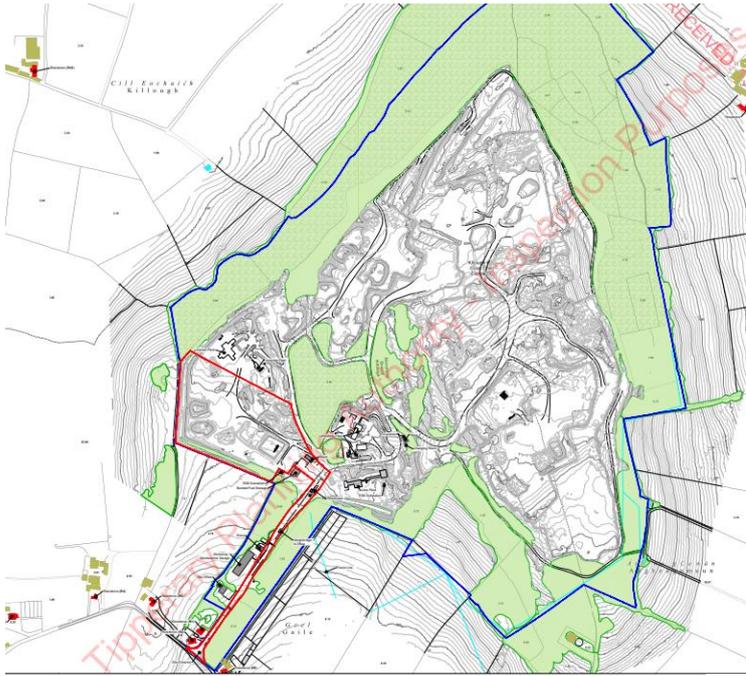


Fig 2. Killough Proposal: Large-Scale Biomethane Facility Compressed into a 6.3-Hectare Area Within an Active Quarry

1.6 Why This Comparison Feels Reasonable

This comparison is not about opposing biomethane or renewable energy. It reflects a natural and reasonable way for people to assess whether a proposal fits its location.

When:

- a large biomethane facility in Germany is spread across a wide industrial site; and
- a similar type of operation is proposed within a much smaller, constrained quarry in Killough,

it does not feel proportionate or intuitive.

The academic literature supports this instinct, showing that poor fit between plant scale and site size is a recognised risk factor, often associated with traffic pressure, local opposition and operational difficulty (O’Shea et al., 2016; Energies, 2023).

From a non-expert perspective, the Killough proposal appears squeezed into place, rather than designed around a site with the space normally associated with facilities of this scale.

This raises a fair and common-sense question: Is the Killough site simply too small for what is being proposed?

2. Road Safety, Hazardous Transport and Community Risk – Policy Conflict and Unresolved Impacts

2.1 Policy Context – Safety as a Prerequisite for Sustainable Communities

The County Assessments underpinning the Tipperary County Development Plan 2022–2028 establish that safety is a prerequisite for sustainable and viable communities, rather than an ancillary consideration. The Assessments state that towns and rural settlements cannot function effectively where people do not feel safe accessing schools, childcare facilities, healthcare services, public spaces and local amenities. Safety is framed as fundamental to quality of life, settlement viability and social cohesion (Tipperary County Council, 2022).

The Assessments further identify schools and community facilities as critical social infrastructure, requiring active protection through planning decisions. Development that increases risk, reduces perceived safety, or discourages everyday movement undermines the core objectives of the Development Plan, even where physical separation distances are maintained (Tipperary County Council, 2022). The road network around Killough quarry are simply too narrow for additional HGV traffic see fig 3 to safely transport hazardous materials.



Fig. 3. Recurrent Blockages on the L1309 from *Current* HGV Movements Serving Killough Quarry, with Photograph Location Marked by Red Star on SLR Site Location Plan (Approx. 1 km from Proposed Site)

2.2 Vision Zero and Safe System Principles – Conflict with County Road Safety Policy

The Tipperary Road Safety Strategy 2022–2030 adopts the *Vision Zero* and *Safe System* approach as its governing framework, with the long-term objective of eliminating deaths and serious injuries on the road network (Tipperary County Council, 2022).

Under the Safe System approach:

- human error is inevitable,
- roads must be designed to accommodate mistakes,
- and the system must prevent errors from resulting in death or serious injury.

The Strategy explicitly recognises that rural roads present the highest risk, particularly where narrow carriageways, limited visibility and lack of pedestrian infrastructure coincide with mixed use by vehicles, agricultural machinery and vulnerable road users.

The Further Information (FI) response relies primarily on normal operating conditions, driver compliance and traffic capacity modelling, rather than assessing whether the road environment is sufficiently forgiving to safely accommodate regular HGV, tanker and hazardous goods traffic. This approach is inconsistent with the Safe System principle that infrastructure must remain safe when things go wrong, not only when everything functions as intended (Tipperary County Council, 2022).

2.3 Road Geometry and Collision Consequence – Capacity-Based Assessment Is Insufficient

Both the County Assessments and the Road Safety Strategy emphasise that road design and geometry, rather than traffic volume alone, are the dominant determinants of collision severity on rural roads (Tipperary County Council, 2022).

Key high-risk characteristics identified include:

- narrow carriageways,
- absence of footpaths, verges or hard shoulders,
- shared use by pedestrians, cyclists, agricultural traffic and children.

The FI response focuses on compliance with numerical standards such as traffic volumes and junction performance but does not assess whether the roads serving Killough are intrinsically suitable for sustained heavy and hazardous vehicle movements.

National road safety guidance confirms that collision consequence and vehicle type are critical factors in assessing risk, particularly where heavy vehicles interact with vulnerable road users on rural roads (Road Safety Authority, 2023).

Accordingly, compliance with capacity metrics does not demonstrate compliance with County Road Safety policy.

2.4 Vulnerable Road Users – Exposure Not Assessed

The Road Safety Strategy places specific emphasis on the protection of vulnerable road users, including children, pedestrians, cyclists and older persons, particularly in rural environments and in the vicinity of schools (Tipperary County Council, 2022).

The Strategy recognises that:

- perceived danger deters walking and cycling,
- school-related journeys represent critical exposure periods,
- fear of traffic undermines community wellbeing and accessibility.

The roads serving the proposed development are routinely used by:

- local residents on foot,
- children and families,
- agricultural machinery,
- school-related traffic associated with Gaile National School.

The FI response does not identify vulnerable user locations, assess exposure, consider peak conflict periods, or propose segregation or protective measures. Safety for vulnerable users is therefore assumed rather than demonstrated, contrary to County policy and national guidance (Road Safety Authority, 2023).

2.5 Hazardous and Work-Related Road Use – Escalation of Risk Not Assessed

The Road Safety Strategy identifies Safe Work-Related Road Use as a priority intervention area, recognising that commercial and industrial traffic introduces elevated risk requiring specific controls and scrutiny (Tipperary County Council, 2022).

The proposed development introduces:

- regular HGV and tanker movements,
- transport of hazardous and pressurised substances,
- time-critical logistics linked to plant operation.

Despite this escalation, the FI response does not assess:

- collision consequence severity involving hazardous vehicles,
- breakdown or incident scenarios involving tankers,
- interaction between hazardous transport and vulnerable road users.

This represents a failure to assess the proposal against the County's stated objectives for managing work-related and hazardous road use.

2.6 Single-Route Dependency and Network Resilience – System Failure Not Considered

The Safe System approach requires that no single failure (collision, breakdown, human error) should result in catastrophic outcomes (Tipperary County Council, 2022).

All project-related traffic is concentrated:

- on a limited rural road network,
- accessed via a single site entrance,
- with no alternative routing or redundancy.

The FI response provides no analysis of:

- blockage or disruption scenarios,
- conflict frequency arising from repeated daily movements,
- resilience of the network during incidents or emergencies.

Single-route dependency represents a systemic vulnerability, directly conflicting with Safe System principles.

2.7 Emergency Access and Post-Crash Response – Not Addressed

The Road Safety Strategy identifies post-crash response and emergency access as critical life-saving components of road safety, particularly in rural areas where response times may already be extended (Tipperary County Council, 2022).

The FI response does not examine:

- emergency vehicle clearance on narrow roads,
- off-site tanker incident scenarios,
- interaction between emergency response, quarry traffic and plant operations.

Assessment under normal operating conditions does not address emergency resilience, leaving a critical policy requirement unmet.

2.8 Planning Consequence

Taken together, the Further Information response fails to address core Development Plan and Road Safety Strategy objectives, namely:

- protection of vulnerable road users,
- assessment of collision consequence and hazardous transport risk,
- maintenance of community safety and confidence,
- network resilience under failure and emergency conditions.

As these matters remain unresolved, the Planning Authority cannot reasonably conclude that traffic associated with the proposed development can operate safely or compatibly within the existing rural road environment.

This represents a material policy conflict and planning deficiency that persists following the Further Information response.

3. Access Design, COMAH Compliance and Bottleneck Risk – Failure of the Further Information Response

The suitability of the proposed development cannot be assessed solely on the basis of traffic volume or routine operations. Where hazardous materials and pressurised gas are involved, safe and resilient site access under abnormal and emergency conditions is a fundamental planning consideration.

The Killough site is served by a single, constrained entrance, the design and function of which are critical to assessing overall site safety.

3.1 Site Entrance Designed for Quarry Use Only – COMAH Requirements Not Addressed

The existing site entrance was designed and permitted to serve a quarry operation, characterised by:

- HGV movements transporting inert materials,
- predictable and non-time-critical operational traffic,
- a single-use industrial access associated with extractive activity, a risk profile where collision or delay does not give rise to escalation beyond the immediate incident.

It was not designed, assessed or authorised to accommodate:

- bio-LNG tankers transporting pressurised flammable gas,
- digestate and other potentially hazardous liquid movements,
- time-critical tanker scheduling linked to gas storage and export,
- emergency access and evacuation requirements associated with a COMAH-type installation.

Under the Seveso III / COMAH regulatory framework, access and transport arrangements form an integral part of major accident prevention and land-use planning, and must be demonstrably suitable for hazardous substances transport and emergency intervention (European Parliament and Council, 2012; Health and Safety Authority, 2023).

COMAH guidance makes clear that infrastructure which may be acceptable for conventional industrial use may be inappropriate where hazardous substances are present, particularly where constrained access could impede emergency response or increase accident consequences (HSA, 2023).

The geometry, width, visibility and turning capacity of the existing entrance reflect its historic quarry function only. No evidence has been provided that this entrance is suitable for the altered hazard class and consequence profile now proposed.

Failure of the Further Information response

The Further Information (FI) submission does not:

- reassess the entrance against hazardous goods transport and COMAH land-use planning criteria,
- evaluate swept paths, turning radii or clearance requirements for bio-LNG tankers,
- demonstrate that emergency vehicles can access or egress the site simultaneously with tanker movements,
- provide any redesigned or upgraded entrance layout appropriate to a major accident hazard installation.

Instead, the FI response assumes the continued adequacy of infrastructure designed for a fundamentally different operational and regulatory context, contrary to COMAH precautionary principles (SLR Consulting Ireland Ltd., 2025; PMCE Ltd., 2025).

3.2 Escalation of Risk Profile – COMAH Consequence Not Analysed

Quarry traffic involves the transport of inert materials, where the consequences of delay, collision or breakdown are generally limited to localised disruption.

By contrast, biomethane and bio-LNG operations introduce:

- transport of pressurised flammable gas,
- hazardous liquid movements with pollution and ignition potential,
- time-critical tanker access linked to gas storage limits,
- statutory emergency planning and intervention requirements.

This represents a qualitative escalation of risk, not merely an incremental increase in traffic volume.

Under COMAH, risk assessment must address both likelihood and consequence, including how infrastructure constraints may amplify the severity of an incident or hinder emergency response (European Commission, 2015; HSA, 2023).

Failure of the Further Information response

The FI submission does not:

- assess entrance performance under hazardous load scenarios,
- examine how constrained access increases consequence severity during a tanker incident,
- evaluate emergency response timing where pressurised gas is involved,
- analyse escalation pathways arising from delayed or obstructed access.

While the presence of hazardous materials is acknowledged, it is not translated into infrastructure-specific safety analysis, contrary to COMAH expectations (SLR Consulting Ireland Ltd., 2025).

3.3 Single-Access Bottleneck and Emergency Response Failure Risk – Not Addressed

The site entrance functions as a single point of access and egress for:

- existing quarry operations,
- the proposed biomethane and bio-LNG facility,
- staff, maintenance and service vehicles,
- emergency services.

In the event of:

- a tanker breakdown or collision at or near the entrance,
- an incident involving hazardous substances,
- simultaneous emergency response requirements,
- restricted visibility or adverse weather conditions,

the entrance would operate as a critical bottleneck, with the potential to delay or prevent emergency access or evacuation.

COMAH land-use planning guidance identifies reliance on a single constrained access point as a systemic vulnerability, capable of increasing the probability that an incident escalates into a major accident (European Commission, 2015; HSA, 2023).

Failure of the Further Information response

The FI response does not:

- assess worst-case entrance obstruction scenarios,
- model access failure during a hazardous materials incident,
- evaluate emergency vehicle access under abnormal or degraded conditions,
- demonstrate redundancy, secondary access or contingency arrangements.

Traffic capacity modelling under normal operating conditions is not an acceptable proxy for emergency resilience assessment under COMAH principles (PMCE Ltd., 2025).

3.4 Planning and Regulatory Consequence

Where a development involves hazardous and pressurised substances, the Planning Authority must be satisfied that:

- access infrastructure is suitable for worst-case accident scenarios,
- emergency access can be maintained under abnormal conditions,
- single-access constraints do not materially increase accident consequences or societal risk.

The Further Information response does not demonstrate that:

- the existing entrance is suitable for a COMAH-type risk profile,
- emergency access would remain viable during an incident,
- the single-access bottleneck does not materially increase consequence severity.

In the absence of this demonstration, the Planning Authority cannot reasonably conclude that the proposed development complies with COMAH land-use planning principles or represents a safe and suitable development at this location.

This constitutes a material and unresolved regulatory planning deficiency.

4. Persistent Deficiencies in Community Engagement – Failure to Facilitate an Open Town-Hall Forum

Meaningful community engagement is a recognised component of good planning practice, particularly where a proposed development involves an elevated safety and infrastructure risk profile. This is especially relevant where proposals involve hazardous processes, significant HGV and tanker movements, proximity to homes and schools, and interaction with existing industrial activity.

In this case, Roadstone’s approach to community engagement has been procedural, limited in scope, and resistant to collective scrutiny, despite repeated formal requests for an open public forum.

4.1 Formal Requests for a Town-Hall Meeting – Not Facilitated

The Killough Biogas Concern Group formally requested that Roadstone facilitate a public town-hall style meeting, distinct from private or consultant-led “drop-in” consultation formats. This request arose directly from community experience of an independently organised town hall held on 29 January 2025 (see Figure 4), which was well attended by local residents.

Attendees at the town hall reported feeling positive about the openness and free flow of information within the community, noting that the format allowed residents to hear each other’s questions, recognise shared concerns, and engage collectively on issues of common relevance.

However, several attendees also observed that it was unfortunate that Roadstone did not facilitate a comparable open forum. In contrast, the consultant-led drop-in events were perceived as limiting collective engagement, as participants were not able to hear or engage with one another’s questions. This was seen as restricting shared understanding and contributing to fragmented discussion, despite the fact that the potential impacts of the proposed development—if approved—would be common to all affected residents.

For these reasons, the community formally requested a town-hall style meeting to enable transparent, collective discussion of issues including safety, traffic, water, and public health, rather than isolated, individualised consultations.

Written requests dated 2 November 2025 and 14 November 2025 explicitly sought:

- a neutral local venue;

- an open public forum format;
- attendance by Roadstone decision-makers and technical consultants; and
- the ability for residents to hear, question, and discuss issues collectively.

These requests were copied to elected representatives and the Planning Authority and were made in good faith, with specific reference to the scale, complexity, and risk profile of the proposed development. No substantive response was received from Roadstone to either request, and no town-hall style meeting was facilitated.



Fig. 4 - Well-Attended Community Town-Hall Meeting in Littleton allowing open discussion – 29 January 2025

4.2 Failure to Respond Substantively to the Town-Hall Request

Roadstone did not agree to facilitate a town-hall style meeting as requested by the community. Instead, its responses focused on procedural matters rather than addressing the substance or rationale of the request. In particular, Roadstone:

- questioned the standing and representational status of the community group, rather than engaging with the issues raised;

- asserted that its community engagement obligations had already been satisfied through a prior private “drop-in” consultation event; and
- proposed a further “Public Information Drop-In Event”, employing the same consultation format that residents had expressly identified as inadequate.

In correspondence dated 4 December 2025, Roadstone confirmed that any further engagement would again take the form of a drop-in event, explicitly stating that it would be “similar to the last event”, and declined to facilitate an open public forum or town-hall style meeting.

No substantive explanation was provided as to why a town-hall format was considered inappropriate, nor was any alternative mechanism proposed to enable collective, transparent engagement among affected residents. As a result, the concerns raised by the community regarding the limitations of individualised consultation formats remained unaddressed.

4.3 Engagement Deficiency Recorded on the Planning File

The inadequacy of community engagement is formally recorded on the planning file.

In a submission dated 16 February 2025, Cllr. Sean Ryan stated that:

- a second promised community meeting did not take place, and
- the level of engagement by Roadstone was “very poor”.

This submission forms part of the official planning record for Planning Ref. 25/60019 and predates the Further Information response.

4.5 Planning Consequence

Where a proposal involves elevated safety risk, constrained infrastructure and impacts extending across a wide rural area, the refusal or failure to facilitate open, collective engagement is a material planning consideration.

The documented failure to respond substantively to requests for a town-hall meeting:

- undermines confidence in the robustness of the applicant’s assessments,
- prevents shared understanding and scrutiny of risk,
- increases the likelihood that material safety and infrastructure issues remain unresolved.

The Further Information response does not remedy this deficiency. This failure therefore remains an outstanding and material planning issue.

5. Community Opposition Evidenced by Public Petition

A public petition opposing the proposed Killough Bio-Renewables Facility has been signed by 433 individuals. The stated grounds of opposition include concerns regarding heavy HGV and

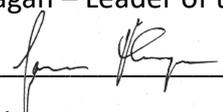
LNG tanker traffic on rural roads not designed for such use, the presence of a vulnerable karst aquifer beneath the site, the location within the River Suir catchment, proximity to natural woodland and protected species, and the close proximity of a primary school (approximately 1.5 km). A list of signatories is provided in Appendix A (Figure A).

This second submission demonstrates that, notwithstanding the Further Information response, fundamental planning concerns remain unresolved. The comparison with a similarly scaled European biomethane facility highlights a clear issue of scale, spatial adequacy and site fit. The assessment of road safety, hazardous transport and network resilience shows continuing conflict with Development Plan objectives and Safe System principles, particularly in relation to vulnerable road users and emergency response. The analysis of site access under COMAH/Seveso land-use planning confirms that the single-entrance constraint and escalated hazard profile have not been adequately assessed or mitigated. Finally, the documented refusal to facilitate open, collective community engagement underscores a procedural deficiency that limits transparency and confidence in the applicant's assessments.

Taken together, these matters are not peripheral or technical in nature. They go to the core question of whether the Killough site is a suitable and appropriate location for a development of this scale, risk profile and transport intensity. As these deficiencies persist following the Further Information response, the Planning Authority cannot reasonably conclude that the proposal complies with Development Plan policy, road safety objectives, COMAH land-use planning principles, or good planning practice.

Yours sincerely

James Flanagan – Leader of the Gaile Community Group (TPPN-01180)

Signed  _____

Date 17/01/2026

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Appendix

Appendix A – Names of the 433 Petition Signatories Expressing Opposition to the Proposed Killough Development

Jax Cornball
Almahdi Awad Elkarim
Eimear Kelly
freyja y
Danielle Parker
Raye Tudor
Kathy Phelan
Brian Loughnane
Paula Loughnane
Denis Kenny
Adam Molloy
Janis Redmond
Mark Dempsey
Andrew Larkin
Brian Hogan
Michael O Dwyer
John Paul Henneberry
Bridget Gleeson
Jackie Cullen
Robert Crowe
John Hoban
Karyn Murray
Patrick Lambe
William Whelan
Kevin Loughnane
georgie mcnulty
Fatemeh Mohebi
Mary Ryan
Claire Ryan
Niall Loughnane
Caoimhe Everard
David Gilbride
William Moore
Miya Hart
Shahab Sajedi
connlach o domhnail
Paul Smith
Ciara Randles
Bill Maher
donna kinsella
John Dolan
Charlie Flynn

Niamh Hennessy
Michael Keehan
Rebecca Gray
Paul Lane
Anne Meaney
Matt Purcell
Diana O'Dwyer
Jemma Jeffers
Jamie Crosse
Steve Anderson
Ciara Marjoram
Simangele Nokwanda Zwane
Dar Sim
Rachel Holmes
Gerard Doyle
Alina Vylka
Aleksandra Sidorenko
Ellie Bourke
Janette Flanagan
Evie Dent
ciaran nugent
Mary Lyons
Valerie Lanphier
Catherine Mockler
Mark Glennon
Niamh O'Leary
Ayesha Ryan
Therese O'Shea
Broin Delaney
Dorothy Pryce
Farid Aatar
Alfie Neal
Michelle Flanagan
Breda Butler
Josephine Quinn
Teresa Power
Aaron Cummins
Noreen Flanagan
Padraig Ryan
Jenny Shields
Dean O'Neill
Ken Lee

Nicholas Hritcy
Abedullah Safi
Christine Quin
Michael Farrelly
VADIM BANTIS
Coco O Dwyer
Jason Roche
Catherine Cullen
rachael hardiman
Wayne Devaney
Louise Kelly
Shannon Core
Paula Ryan
noah Connell
Sienna Odwyer
Bernie Pollock
Laviniu Pop
Gianina Iasmina Elias
Ken Lye
Andrian Casian
Aleksandra Jakubiak
Donna O Gorman
Fiona Bourke
Tara Cashin
Alfie Neal
Adrian Crosse
Rita Chis
Ann Quigley
Larry Doran
John Phelan
Christine Aherne
Samantha Jones
Colm Orr
Maria Luiza Silveira
Paula Reddy
Kayleigh Murphy
Kate O'Donoghue
Craig Sullivan
Teresamaria Mcguinness
Lisa Doyle
Elizabeth Elebiola
Colm Kenny

Ryan Briscoe
Oisín Fleming
Joanie Raftis
gerry donohoe
Gwen Ryan
Clayton Fagan
Nicole Daly
Clodagh Delaney
Fabian Sweeney
Fergal Conway
Ka Smyth
Jamie Hill
Sean Smyth
Emma Shaw
Gary Fitzgerald
Ciaran Walsh
Juliet Edomwonyi
Dagmara Sokółowska
Bill Flanagan
Jade Byrne
Isaac Maughan
Triona Walsh
Joanne Whelan
Aine Geoghegan
Eric Fanning
Lourda Bannon
Jamie Fanning
maeve purcell
Colette sheppard
Jemma Cahill
Suranne Oshaughnessy
Nicola Cahill
Henry Sheppard
Michelle Sheppard
kevin ryan
Paul Gooney
David Maher
Susan daniels
Michelle Tuite
Tommy McGuane
Donna Walsh
Frank Mc Govern
Clare Farrell O'Sullivan
Philip Bulfin
Mary O Sullivan
Zieta Woods
Pauline Berry
Amy Whelan
Kirsty Harris

Margaret Sheppard
Joe Byrne
Helen O Dwyer
Michael and Deborah Harty
Laurence Cormack
Eddie Moloney
Shane Minnock
South Kildare biomethane Concern
group
Eva Ralph
Daniel Quirke
Helen Quinlan
Samantha Irwin
anne o brien
Ciaran O'Donnell
Niamh Hayes
Valerie O' Malley
Tammy Ryan
Neasa Johnston
margaret noonan
Mary Guinan Darmody
Noreen Fitzpatrick
Denise Dillon Shanahan
Shauna Noonan
Maura Ralph-Fennessy
Anne Hayes
Marese O'Connell
MT Mockler
Orla Cooke
Chanel Stapleton
Majella Norbury
Laura Vahey
Ann Maher
Catherine Doran
Emily Liston
Alan Sheridan
Philip Brett
Sean Ryan
Ann Walsh
bernadette hickman
Carmel Kelleher
Anne-Marie Dixon
Emma Sweeney
Karen Maher
Pat Owen
Sarah Ryan
Moira Philbin
Marie Maher
laura Ryan

Rachel Hyland McCaffrey
eddie simmons
Jacqui Clohessy
Michelle Fitzgerald
Jenny Kiersey
Kevin McCarthy
Shirley Ann Butler
John McBride
Kate Okeeffe
Catherine Sheppard
Michaela Delaney
Tina Fitzgerald
AnneMarie Dixon
Proinsias Greene
Jean Dunne
Connie Dunne
Andrew Dunne
Katie Fanning
Teresa Shanahan
Gina Oberoi
Eric Leahy
Lorraine Mackey
Florineae Odonnell
Sophie Harris
Rianne Fanning
Annie Loughnane
Liam Shanahan
Bernie Crosse
Sandra Jordan
Mary Caesar
Paddy Byrne
Denis Cronin
John Coughlan
michael byron
Katie Norbury
Pat Noonan
Mark Ahearne
Yvonne Browne
Brian Lanphier
Deirdre Flanagan
Laura Ralph
Marian Burke
Patricia Flanagan
Margaret Shanahan
Ciara Mernagh
Denis Fahey
Christine Gleeson
John Leahy
Rachel O Callaghan

Fearghal O'Driscoll
Patricia Dwan
Kate Ralph
Gavin King
Kellie Byrne
Caroline Hennessy
Alexa Wall
Brian Hennessy
Nicola Butler
Aaron Ryan
Calum O'Connor
bridget cullen
Patrick Ralph
Stephen Dwan
Gill Coburn
Kaylin Osullivan
Cora Hackett
Thomas O'Dwyer
Niamh Butler
Katlyn Mackey
Niall Quinn
Sue Coppinger
Tracy Byrne
Marie Flanagan
Albi Schultz
Tiziana Dordoni
Marina O Reilly
Leigh Slattery
Brenda O Toole
Ailish Cody
Brian Heffernan
Marianne & john Cleary
Fiona Flanagan
Liam Flanagan
LynnMeta Williams
diana kolaski
Steve Osowecki
Margaret Dwyer
Mirjana Neskovich
Michael Kennedy
P.N. Maher
Rosa Cabrerizo
Michelle Austin
Robin Kavanagh
Djamila Grouci
Oliver Spillane
Paula Ralph
Anne McCarthy
Consuelo Serena Velasco

joyce alexander
Lisbet Stahrenberg
Ann Butler
Eve Kent
Lucy O Keeffe
Lynn Mccarthy
Orlaith Deasy
Orla Moroney
Amy Kent
Lesley Crawshaw
Roxana Moya
JAMES ALLISTER
Jude Crawshaw
Renata Cheferrino
Nelly PRESTAT
CHENEVAL CATHERINE
Aoife Dineen
celine duburg anchen
Nicola murphy
Louise Kent
atilla demir
Catriona Heffernan
Lorna Dunne
Margaret Murphy
Siobhan Kelly
Eileen Noonan
James Butler
Una Butler
ANDREW LOW
Donna Rainey
Katie Groarke
Jeremiah O Brien
James Norbury
Amanda Fahey
Brendan Cahill
Mark Fahey
Philip Walsh
Edel Shanahan
Ray Ralph
Robert Collins
Annette Flanagan
Alice Coman
Peggy Coman
Kay Ryan
trish lee
April Byrne
Claire Hannigan
Claire Hally
Norah Kennedy

LAURENCE O SULLIVAN
Michael O Sullivan
John Fogarty
Mary Frances Darmody
Cyril Stapleton
Ann Marie Looby
Catriona Byrne
George Willoughby
Joan Cummins
Liam Harrington
June Doherty
Laura B
Christine Gleeson
Mary Dwyer
Brian Butler
Jim SNR Flanagan
Simoni kapa
Kevin Maher
Aoife Whelan
Andréa Branco
armer teufel reger
Maria van Geel.
Éric Hittra
Andrea Wilson
Orla Gleeson
Gonny Stevens
Anne Smyth
Órla Heffernan
Ciara Heffernan
stephen weir
Mary Gleeson
Eoin Bourke
Francis Ryall
Catriona Kennedy
Eithne Kennedy
Ciara Gleeson
John Carignan
Analía Caiazza
Yolanda Schultes
Alix Noonan
Thomas Gleeson
susan devereaux
Anne Lavin
Shane O dwyer
Tracy Lenihan
Darren Reidy
Victor Conroy
Séverine SORDET
Laura Hassett

Kathleen Donnelly
Cherlayn Dempsey
Catherine Sheehan
Helen Hammersley
Esther Cogan
Niamh Quinn
Hannah Spillane
Kevin O'Brien
Teresa Ralph
Kieran Ryan
sarika arora
Albert Heffernan
Killough Hill Tipperary
Laura Flanagan
Jennifer Costello

Gaile Community Group
Gaile,

Thurles
Co. Tipperary

(TPPN-01180)

Planning Section
Tipperary County Council
Civic Offices, Clonmel
Co. Tipperary

Tipperary County Council

Planning Section by email

Received 16/02/2025

Subject: Objection to Planning Application Ref: 2560019 Tipperary County Council

A Chara,

We, the Gaile community group, fully support the necessary actions to meet the EU's climate targets for Ireland by 2030. However, this site is entirely unsuitable for several reasons, including high groundwater vulnerability, geological instability, traffic hazards, and threats to biodiversity. Additionally, the applicant has failed to adequately engage with the communities that will be directly affected. Given the unacceptable environmental, public safety, and infrastructure impacts, the Gaile Community Group wish to formally object to the proposed biomethane plant at Killough Quarry.

1. Inadequate Community Engagement

The proposed biomethane plant is situated at the intersection of three parishes—Moycarkey, Botherlahan, and Holycross—the applicant's community engagement efforts were wholly inadequate in reaching all affected residents. The single consultation meeting was held at the Horse and Jockey Hotel in Moycarkey, a location not central to all impacted communities. The parish of Botherlahan, which is directly opposite the site entrance and will be significantly affected, was notably overlooked in this process.

Moreover, the applicant failed to engage those most impacted by the heavy goods vehicle (HGV) traffic as evidenced by the letter drop map which only covered a 1,500-meter radius —primarily encompassing the unpopulated hill of Killough area, rather than the areas most affected by increased HGV movements. At a minimum letter should have been distributed to residents along all local roads leading from the proposed site to the R639 and to the board of management at Gaile National School, where traffic impacts will be very severe. Further evidence of the poor attempt to engage the community can be seen on review of the Public Consultation Report shows that only 55 people attended the applicant's meeting, highlighting the extremely limited reach of their engagement efforts.

When a request was made to the applicant through our local county councilor for a second engagement event, the applicant refused our request. In contrast, the Killough Community Group (supported by the Gaile Community Group) organised two well-attended public meetings at Muintir Na Tíre, Littleton— the first in October 2024, with over 60 attendees and a second on January 29th 2025, with 150 people present, see figure 1.



Fig 1 - Community information meeting held in Littleton, Tipperary on the 29th of Jan 2025 informing the local residents of the plans the applicant has submitted to construct a biogas plant at Killough quarry.

These community-led meetings provided a proper platform for discussion, allowing attendees to voice concerns and receive responses in a group setting, unlike the applicant's consultation, which only addressed individuals in isolation. Additionally, workshops were held on two dates, 8th and 15th February, at Gaile National School from 10 AM to 2 PM, see figure 2. Over the course of each day, more than 100 residents attended, further highlighting the depth of local concern regarding the proposed biomethane plant.



Fig 2 – Community workshops supported by the Gaile Community Group and held in Gaile National School on the 8th & 15th of February 2025.

During these workshops, residents repeatedly stated that they had not been informed about the proposal. Additionally, those who attended the applicant's public consultation meeting in June 2024 reported that many of their questions went unanswered, despite the applicant's commitment to following up with the attendees. The lack of response from the applicant raises serious concerns about transparency and meaningful public consultation in the planning process.

It is evident that the applicant's approach to community engagement was a mere box-ticking exercise rather than a genuine effort to inform and consult the affected residents. Given the significant deficiencies in their outreach, the planning application should be rejected at the very least until meaningful, inclusive community engagement is conducted.

2 Traffic Hazards & Infrastructure Deficiencies

The EIA acknowledges that the biogas plant will generate 30-37 HGV movements per day (EIA, 2024). However, this does not account for the cumulative impact of existing quarry operations, which already permit 235 HGV movements daily. The L1309 road which connects the site to the R369 is unsuitable for the current traffic without this additional traffic.



*Fig 3 – Typical HGV traffic on the L1039 as a result of the current operation of the limestone quarry
(Location per Google maps - Aughnagomaun Co. Tipperary 52.596590, -7.827962)*

How is it fair to expect residents to live like this? Would you let your child cycle to school on these roads? These roads are already unsafe for cycling, walking, etc. We have almost no recreational use of the roads. It is entirely unreasonable to expect residents to accept such a diminished quality of life. The increased volume of HGV traffic will only worsen congestion, accelerate road deterioration and heighten the risk of accidents. Furthermore, due to the Wildlife Act, hedgerows cannot be cut from March 1st to August 31st, making the already narrow roads even more hazardous during these months. This issue is further compounded by the significant increase in agricultural traffic during the summer harvest (May to September), leading to even greater congestion and safety risks for local road users.

3 Risk of Flyrock from Quarry Blasting

Blasting is a regular occurrence on Killough Hill. Information obtained under the Freedom of Information Act confirms that over 450 tonnes of explosives have been used at Killough Quarry over a short period 2021 - 2023, with seismic data confirming this blasting activity provided by Irish National Seismic Network (www.insn.ie). Flyrock incidents result from these blasts and have been reported by residents, raising concerns about the risk to the biogas facility's highly flammable methane storage tanks. A study carried out by Sevelka (2020) found that flyrock can travel over 1,900 meters, see table 1. Any flyrock impact on methane containment infrastructure could lead to a catastrophic explosion, threatening workers, residents, and the environment (Sevelka, 2020).

Quarry Site	Flyrock Distance (meters)
Conklin Quarry	933.8
Sibley Quarry	353.3
Roberta Quarry	1,236.60
Falling Springs Quarry	1,539.50
Okalona Quarry	1,236.60
Oglesby Quarry	1,918.00

Table 1 – examples of flyrock incidences created by blasting rock and the distance the projectiles travelled from the blast site (Sevelka, 2020)

The proposed plant appears less than 600 meters, see figure 4, from blasting operations, an inadequate setback distance as reported by the Mine Safety and Health Administration standards (U.S. Mine Safety and Health Administration, 2013). According to the academic peer reviewed research presented above the site is clearly at risk of being damaged from flyrock.



Fig 4 - Aerial view of Killough Hill illustrating a distance of 594 meters between blasting location and location of access road whereby biogas will be transported from the proposed site (Google Maps)

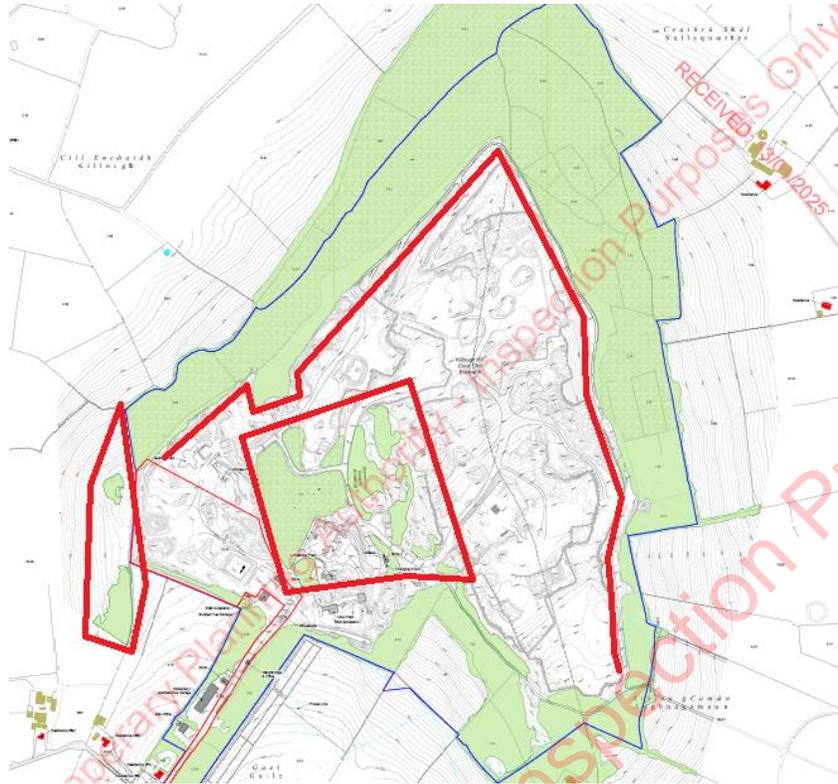
Obviously where highly flammable compressed gas is being stored and transported, flyrock damage could cause a catastrophic chain of events that will endanger personnel as the local residents. This type of event would almost certainly lead to an environmental disaster damaging water supplied and habitats of the protected species that inhabit the surrounding woodlands. Most concerning, the dangers of flyrock and the potential to impact the proposed biogas plant have not been studied or even discussed in this application by the applicant.

3. Groundwater Contamination Risk

The Environmental Protection Agency (EPA, 2022) classifies karst limestone aquifers as extremely vulnerable to pollution. Killough Quarry is situated over such an aquifer, which supplies public water systems in Ashhill and Graigue (GSI, 2024). Research has shown that spillages in karst environments can travel rapidly and contaminate drinking water sources (Misstear & Brown, 2002). Given that the proposed plant will handle hazardous materials, any accidental leakage could have catastrophic consequences for public and private water supplies.

4. Ecological and Biodiversity Destruction

- The proposed site is designated as a proposed Natural Heritage Area (pNHA 000959) by the National Parks and Wildlife Service (NPWS) due to the presence of oak, ash, and hazel woodlands supporting a large bird population and varied mammals. Historical reports have long warned that quarrying would devastate this fragile ecosystem (Fahy & Goodwille, 1974). Indeed that has come to pass and we believe the addition of a biogas plant will only accelerate this destruction.
- All bat species are strictly protected by EU directives as their populations have declined throughout Europe. Killough Hill is home to several species of endangered and protected bats as per National Biodiversity Data Centre. Numerous bat sightings have also been reported by local farmers that border the Killough Hill woodlands. Habitat fragmentation and disturbance are key drivers of bat species decline (Barlow et al., 2021). The proposed location for this site is within the proposed National Heritage Area on Killough Hill. Its construction will lead to further disruption and fragmentation of the woodland which houses these protected bat species, see figure 5. This will lead to a further decline in bat populations.



- The Cabragh Wetlands Trust Habitat Study (2020) confirms that the Killough Stream is a critical hydrological component of the Cabragh Wetlands SAC, and any pollution from the plant would irreversibly damage protected species. Additionally, Killough Hill contains one of only four limestone pavement exposures in Ireland, a non-recreatable habitat (Ratcliffe, 1977). Once lost, this ecosystem cannot be restored.

5. Air Quality, Public Health Risks & Abatement Measures

- The EIA admits odour issues and proposes ineffective mitigation measures such as sniff surveys in response to complaints (EIA, 2024). The absence of a thermal oxidiser contradicts the EU Industrial Emissions Directive (2010/75/EU), which requires Best Available Techniques (BAT) for odour and VOC control (European Commission, 2017).
- The Irish Ambient Air Quality Regulations (2022) set strict limits on NO₂, SO₂, PM₁₀, and VOC emissions. Given the existing exceedances in rural Ireland, the failure to implement thermal oxidation increases the risk of regulatory violations and fines (EPA, 2022).

Conclusion

The proposed biogas plant at Killough Quarry is entirely unsuitable due to its environmental, geological, and public safety risks. The site presents significant traffic hazards, dangerous flyrock risks, threats to groundwater contamination, irreversible biodiversity loss, unacceptable air pollution risks, and inadequate community engagement. This is understood by our community overwhelming opposed by the local residents and the results of the petition (see appendices Table 2) are further evidence of this.

We urge Tipperary County Council to reject this planning application in the interest of public safety, environmental conservation and responsible planning.

Signed _____

James Flanagan

Gaile Community Group (TPPN-01180)

Chairperson

Date: 15th Feb 2025

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Tipperary Planning Authority - Inspection Purposes Only!

Appendices

Table 2 - Change org petition results 25th Jan – 10 Feb 2025 -presenting 282 signatures (of mostly Killough & Gaile residents) opposing the proposed biogas plant at Killough Quarry in the planning applicant reference number 2560019 –

<https://www.change.org/p/say-no-to-killough-hill-biomethane-plant-hazards>

Name	City	Country	Signed On
Killough Hill Tipperary		Ireland	25/01/2025
Laura Flanagan		Ireland	25/01/2025
Jennifer Costello	Dublin	Ireland	25/01/2025
Robert Collins	Tipperary	Ireland	26/01/2025
Annette Flanagan	Thurles	Ireland	26/01/2025
Alice Coman	Dublin	Ireland	26/01/2025
Peggy Coman		Ireland	26/01/2025
Kay Ryan	tipperary	Ireland	26/01/2025
trish lee		Ireland	26/01/2025
April Byrne	Dublin	Ireland	26/01/2025
Claire Hannigan		Ireland	26/01/2025
Claire Hally		Ireland	26/01/2025
Norah Kennedy	Thurles	Ireland	26/01/2025
LAURENCE O SULLIVAN		Ireland	26/01/2025
Michael O Sullivan		Ireland	26/01/2025
John Fogarty	Thurles	Ireland	26/01/2025
Mary Frances Darmody		Ireland	26/01/2025
Cyril Stapleton	Thurles	Ireland	26/01/2025
Ann Marie Looby		Ireland	26/01/2025
Catriona Byrne		Ireland	26/01/2025
George Willoughby	Thurles	Ireland	26/01/2025
Joan Cummins		Ireland	26/01/2025
Liam Harrington		Ireland	26/01/2025
June Doherty		Ireland	26/01/2025
Laura B		Romania	26/01/2025
Christine Gleeson	Bray	Ireland	26/01/2025
Mary Dwyer	Killough, Thurles, co Tipperary	Ireland	26/01/2025
Brian Butler		Ireland	26/01/2025
Jim SNR Flanagan	Thurles	Ireland	26/01/2025
Simoni kapa	Athens	Greece	26/01/2025
Kevin Maher		Ireland	26/01/2025
Aoife Whelan	Brussels	Ireland	26/01/2025
Andréa Branco	Sao Paulo	Brazil	26/01/2025
armer teufel reger	Nurnberg	Germany	26/01/2025
Maria van Geel.	Poznan	Poland	26/01/2025
Éric Hitra	Strasbourg	France	26/01/2025
Andrea Wilson		Ireland	26/01/2025

Orla Gleeson		Ireland	26/01/2025
Gonny Stevens	Lanaken	Belgium	26/01/2025
Anne Smyth	Dublin	Ireland	26/01/2025
Órla Heffernan	Laois	Ireland	26/01/2025
Ciara Heffernan		Ireland	26/01/2025
stephen weir	Bideford	United Kingdom	26/01/2025
Mary Gleeson		Ireland	26/01/2025
Eoin Bourke		Ireland	26/01/2025
Francis Ryall		Ireland	26/01/2025
Catriona Kennedy		Ireland	26/01/2025
Eithne Kennedy		Ireland	26/01/2025
Ciara Gleeson	Tipperary	Ireland	26/01/2025
John Carignan		Ireland	26/01/2025
Analía Caiazza	Rosario. Santa Fe	Argentina	26/01/2025
Yolanda Schultes	Wittenbach	Sweden	26/01/2025
Alix Noonan	Cashel	Ireland	26/01/2025
Thomas Gleeson		Ireland	26/01/2025
susan devereaux	new castle	United States	26/01/2025
Anne Lavin	Ilford	United Kingdom	26/01/2025
Shane O dwyer		Ireland	26/01/2025
Tracy Lenihan	Limerick	Ireland	26/01/2025
Darren Reidy		Ireland	26/01/2025
Victor Conroy		Ireland	26/01/2025
S��verine SORDET	Dijon	France	26/01/2025
Laura Hassett	Thurles	Ireland	26/01/2025
Kathleen Donnelly		Ireland	26/01/2025
Cherlayn Dempsey	Cahir	Ireland	26/01/2025
Catherine Sheehan	Portlaoise	Ireland	26/01/2025
Helen Hammersley	Cashel	Ireland	26/01/2025
Esther Cogan	Dublin	Ireland	26/01/2025
Niamh Quinn		Ireland	26/01/2025
Hannah Spillane	Thurles	Ireland	26/01/2025
Kevin O'Brien	Colne	Ireland	26/01/2025
Teresa Ralph		Ireland	26/01/2025
Kieran Ryan	Wanstead	United Kingdom	26/01/2025
sarika arora	Alpharetta	United States	26/01/2025
Albert Heffernan		Ireland	26/01/2025
LynnMeta Williams	Wakefield	United States	27/01/2025
diana kolaski	Chicago	United States	27/01/2025
Steve Osowecki	Meriden	United States	27/01/2025
Margaret Dwyer	Oklahoma City	United States	27/01/2025
Mirjana Neskovich	Perth	Australia	27/01/2025
Michael Kennedy		Qatar	27/01/2025

P.N. Maher	Moycarkey	Ireland	27/01/2025
Rosa Cabrerizo	Hospitalet de Llobregat	Spain	27/01/2025
Michelle Austin	Athens	Greece	27/01/2025
Robin Kavanagh	Dublin	Ireland	27/01/2025
Djamila Grouci	Nanteuil les meaux	France	27/01/2025
Oliver Spillane		Ireland	27/01/2025
Paula Ralph	Thurles	Ireland	27/01/2025
Anne McCarthy	Dublin	Ireland	27/01/2025
Consuelo Serena Velasco	Strambino Fr Cerone	Italy	27/01/2025
joyce alexander	Edinburgh	United Kingdom	27/01/2025
Lisbet Stahrenberg		Denmark	27/01/2025
Ann Butler	Dublin	Ireland	27/01/2025
Eve Kent	Drogheda	Ireland	27/01/2025
Lucy O Keeffe	Dublin	Ireland	27/01/2025
Lynn Mccarthy		Ireland	27/01/2025
Orlaith Deasy	Cork	Ireland	27/01/2025
Orla Moroney		Ireland	27/01/2025
Amy Kent	Thurles	Ireland	27/01/2025
Lesley Crawshaw	Waltham Forest	United Kingdom	27/01/2025
Roxana Moya	Santiago	Chile	27/01/2025
JAMES ALLISTER	Bangor	United Kingdom	27/01/2025
Jude Crawshaw	Dudley	United Kingdom	27/01/2025
Renata Cheferrino	Rio de Janeiro	Brazil	27/01/2025
Nelly PRESTAT	Mouroux	France	27/01/2025
CHENEVAL CATHERINE	Aix-les-Bains	France	27/01/2025
Aoife Dineen		Ireland	27/01/2025
celine duburg anchen	montevideo	Uruguay	27/01/2025
Nicola murphy		Ireland	27/01/2025
Louise Kent	Cork	Ireland	27/01/2025
atilla demir	muğla	Türkiye	27/01/2025
Catriona Heffernan		Ireland	27/01/2025
Lorna Dunne		Ireland	27/01/2025
Margaret Murphy		Ireland	27/01/2025
Siobhan Kelly	Thurles	Ireland	27/01/2025
Eileen Noonan		Ireland	27/01/2025
James Butler	Dublin	Ireland	27/01/2025
Una Butler		Ireland	27/01/2025
ANDREW LOW	LIVINGSTON	United Kingdom	27/01/2025
Donna Rainey	Antrim	United Kingdom	27/01/2025
Katie Groarke	Tullow	Ireland	27/01/2025
Jeremiah O Brien	Dublin	Ireland	27/01/2025

James Norbury		Ireland	27/01/2025
Amanda Fahey	tipperary	Ireland	27/01/2025
Brendan Cahill		Ireland	27/01/2025
Mark Fahey		Ireland	27/01/2025
Philip Walsh	Thurles	Ireland	27/01/2025
Edel Shanahan		Ireland	27/01/2025
Ray Ralph		Ireland	27/01/2025
Marie Flanagan		Ireland	28/01/2025
Albi Schultz		Ireland	28/01/2025
Tiziana Dordoni	Corsico	Italy	28/01/2025
Marina O Reilly		Ireland	28/01/2025
Leigh Slattery	Thurles	Ireland	28/01/2025
Brenda O Toole	Mountmellick	Ireland	28/01/2025
Ailish Cody		Ireland	28/01/2025
Brian Heffernan		Ireland	28/01/2025
Marianne & john Cleary	Dublin	Ireland	28/01/2025
Fiona Flanagan	Tipperary	Ireland	28/01/2025
Liam Flanagan		Ireland	28/01/2025
Mark Ahearne		Ireland	29/01/2025
Yvonne Browne		Ireland	29/01/2025
Brian Lanphier		Ireland	29/01/2025
Deirdre Flanagan		Ireland	29/01/2025
Laura Ralph	Tipperary	Ireland	29/01/2025
Marian Burke		Ireland	29/01/2025
Patricia Flanagan		Ireland	29/01/2025
Margaret Shanahan		Ireland	29/01/2025
Ciara Mernagh		Ireland	29/01/2025
Denis Fahey		Ireland	29/01/2025
Christine Gleeson		Ireland	29/01/2025
John Leahy		Ireland	29/01/2025
Rachel O Callaghan		Ireland	29/01/2025
Fearghal O'Driscoll		Ireland	29/01/2025
Patricia Dwan		Ireland	29/01/2025
Kate Ralph		Ireland	29/01/2025
Gavin King	Columbus	United States	29/01/2025
Kellie Byrne	Dundalk	Ireland	29/01/2025
Caroline Hennessy	Cork	Ireland	29/01/2025
Alexa Wall	Barnstable	United States	29/01/2025
Brian Hennessy	Cork	Switzerland	29/01/2025
Nicola Butler	Limerick	Ireland	29/01/2025
Aaron Ryan		Ireland	29/01/2025
Calum O'Connor		Ireland	29/01/2025
bridget cullen		Ireland	29/01/2025
Patrick Ralph		Ireland	29/01/2025
Stephen Dwan		Ireland	29/01/2025

Gill Coburn	Coleraine	United Kingdom	29/01/2025
Kaylin Osullivan		Ireland	29/01/2025
Cora Hackett	tipperary	Ireland	29/01/2025
Thomas O'Dwyer	Dublin	Ireland	29/01/2025
Niamh Butler		Ireland	29/01/2025
Katlyn Mackey		Ireland	29/01/2025
Niall Quinn	Dublin	Ireland	29/01/2025
Sue Coppinger		Ireland	29/01/2025
Tracy Byrne	Adelaide	Australia	29/01/2025
Florineae Odonnell		Ireland	30/01/2025
Sophie Harris		Ireland	30/01/2025
Rianne Fanning		Ireland	30/01/2025
Annie Loughnane		Ireland	30/01/2025
Liam Shanahan		Ireland	30/01/2025
Bernie Crosse		Ireland	30/01/2025
Sandra Jordan		Ireland	30/01/2025
Mary Caesar		Ireland	30/01/2025
Paddy Byrne		Ireland	30/01/2025
Denis Cronin	Athlone	Ireland	30/01/2025
John Coughlan	Monasterevin	Ireland	30/01/2025
michael byron	Dublin	Ireland	30/01/2025
Katie Norbury	Cashel	Ireland	30/01/2025
Pat Noonan		Ireland	30/01/2025
Jacqui Clohessy	Dublin	Ireland	31/01/2025
Michelle Fitzgerald	Dublin	Ireland	31/01/2025
Jenny Kiersey	Dublin	Ireland	31/01/2025
Kevin McCarthy	cavan	Ireland	31/01/2025
Shirley Ann Butler	Cork	Ireland	31/01/2025
John Mcbride		Ireland	31/01/2025
Kate Okeeffe	Cork	Ireland	31/01/2025
Catherine Sheppard		Ireland	31/01/2025
Michaela Delaney		Ireland	31/01/2025
Tina Fitzgerald		Ireland	31/01/2025
AnneMarie Dixon		Ireland	31/01/2025
Proinsias Greene		Ireland	31/01/2025
Jean Dunne		Singapore	31/01/2025
Connie Dunne		Ireland	31/01/2025
Andrew Dunne		Ireland	31/01/2025
Katie Fanning		Ireland	31/01/2025
Teresa Shanahan	Tipperary	Ireland	31/01/2025
Gina Oberoi	Dublin	Ireland	31/01/2025
Eric Leahy		Ireland	31/01/2025
Lorraine Mackey		Ireland	31/01/2025
Anne-Marie Dixon		Ireland	01/02/2025
Emma Sweeney		Ireland	01/02/2025

Karen Maher		Ireland	01/02/2025
Pat Owen	Annascaul,Tralee	Ireland	01/02/2025
Sarah Ryan		Ireland	01/02/2025
Moira Philbin	Dublin	Ireland	01/02/2025
Marie Maher	Dublin	Ireland	01/02/2025
laura Ryan		Ireland	01/02/2025
Rachel Hyland McCaffrey	Dublin	Ireland	01/02/2025
eddie simmons	Cashel	Ireland	01/02/2025
Emily Liston	Waterford	Ireland	02/02/2025
Alan Sheridan		Ireland	02/02/2025
Philip Brett		Ireland	02/02/2025
Sean Ryan	Northampton	United Kingdom	02/02/2025
Ann Walsh		Ireland	02/02/2025
bernadette hickman		Ireland	02/02/2025
Carmel Kelleher	Cork	Ireland	02/02/2025
MT Mockler		Ireland	03/02/2025
Orla Cooke	Cork	Ireland	03/02/2025
Chanel Stapleton		Ireland	03/02/2025
Majella Norbury		Ireland	03/02/2025
Laura Vahey		Ireland	03/02/2025
Ann Maher		Ireland	03/02/2025
Catherine Doran	Dublin	Ireland	03/02/2025
Denise Dillon Shanahan		Ireland	04/02/2025
Shauna Noonan	Dublin	Ireland	04/02/2025
Maura Ralph-Fennessy		Ireland	04/02/2025
Anne Hayes	Cashel	Ireland	04/02/2025
Marese O'Connell	Tipperary	Ireland	04/02/2025
Ciaran O'Donnell	Roscommon	Ireland	05/02/2025
Niamh Hayes	Tipperary	Ireland	05/02/2025
Valerie O' Malley	Tipperary	Ireland	05/02/2025
Tammy Ryan	Tipperary	Ireland	05/02/2025
Neasa Johnston		Ireland	05/02/2025
margaret noonan		Ireland	05/02/2025
Mary Guinan Darmody	Thurles	Ireland	05/02/2025
Noreen Fitzpatrick		Ireland	05/02/2025
Daniel Quirke	Thurles	Ireland	06/02/2025
Helen Quinlan		Ireland	06/02/2025
Samantha Irwin		Ireland	06/02/2025
anne o brien	limerick	Ireland	06/02/2025
Eddie Moloney		Ireland	07/02/2025
Shane Minnock		Ireland	07/02/2025
South Kildare biomethane Concern group		Ireland	07/02/2025
Eva Ralph		Ireland	07/02/2025
Helen O Dwyer	Cashel	Ireland	08/02/2025
Michael and Deborah Harty		Ireland	08/02/2025

Laurence Cormack		Ireland	08/02/2025
Kirsty Harris	Tipperary	Ireland	09/02/2025
Margaret Sheppard	Dublin	Ireland	09/02/2025
Joe Byrne		Ireland	09/02/2025
Pauline Berry	Co Mayo	Ireland	10/02/2025
Amy Whelan		Ireland	10/02/2025
Clare Farrell O'Sullivan	Dublin	Ireland	11/02/2025
Philip Bulfin		Ireland	11/02/2025
Mary O Sullivan	Thurles	Ireland	11/02/2025
Zieta Woods		Ireland	11/02/2025
Michelle Tuite		Ireland	12/02/2025
Tommy McGuane		Ireland	12/02/2025
Donna Walsh	Tipperary	Ireland	12/02/2025
Frank Mc Govern		Ireland	12/02/2025
Henry Sheppard		Ireland	13/02/2025
Michelle Sheppard	Tipperary	Ireland	13/02/2025
kevin ryan	Thurles	Ireland	13/02/2025
Paul Gooney		Ireland	13/02/2025
David Maher		Ireland	13/02/2025
Susan daniels		Ireland	13/02/2025
Nicola Cahill		Ireland	14/02/2025
Jemma Cahill	Thurles	Ireland	15/02/2025
Suranne Oshaughnessy		Ireland	15/02/2025
Jamie Fanning	Thurles	Ireland	16/02/2025
maeve purcell		Ireland	16/02/2025
Colette sheppard		Ireland	16/02/2025

Killough Hill Woods

Co Tipperary

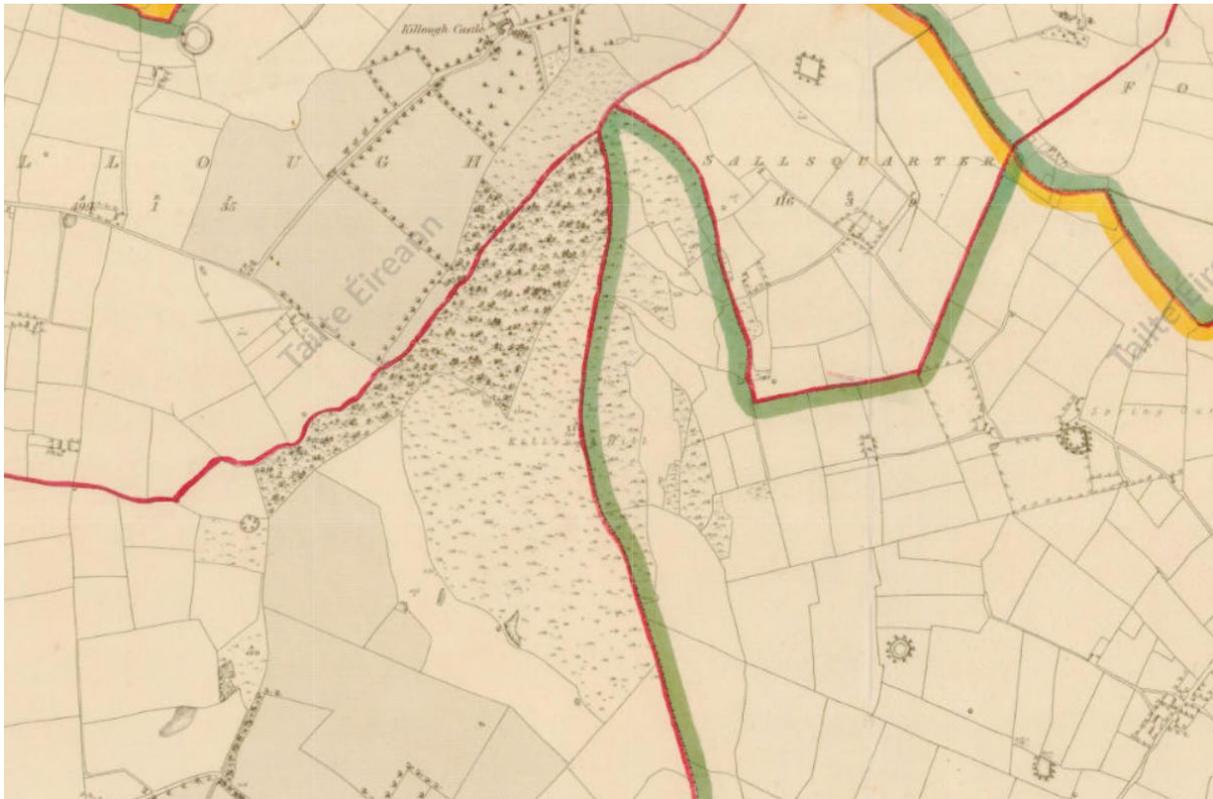
Ecology

Report prepared for Alice Coman

October 2025

1. INTRODUCTION

Killough Hill is divided into three townlands, Killough to the west, Gaile to the south and Aughnagomaun to the east (see below). In the field, townlands are usually separated by a bank which in agricultural country is often planted with a hedge but can be a simple bank and ditch in woodland. The first (1840's) map shows that the woodland established at that time was a plantation on the NW side of the hill and mostly in Gaile. The SW tail of this remains as a beechwood today but much of the rest has been planted with spruce. North and south of the wood outcropping rock is shown with a trace of 'brushwood' or hazel scrub at the northern end, behind the walled garden of Killough Castle.

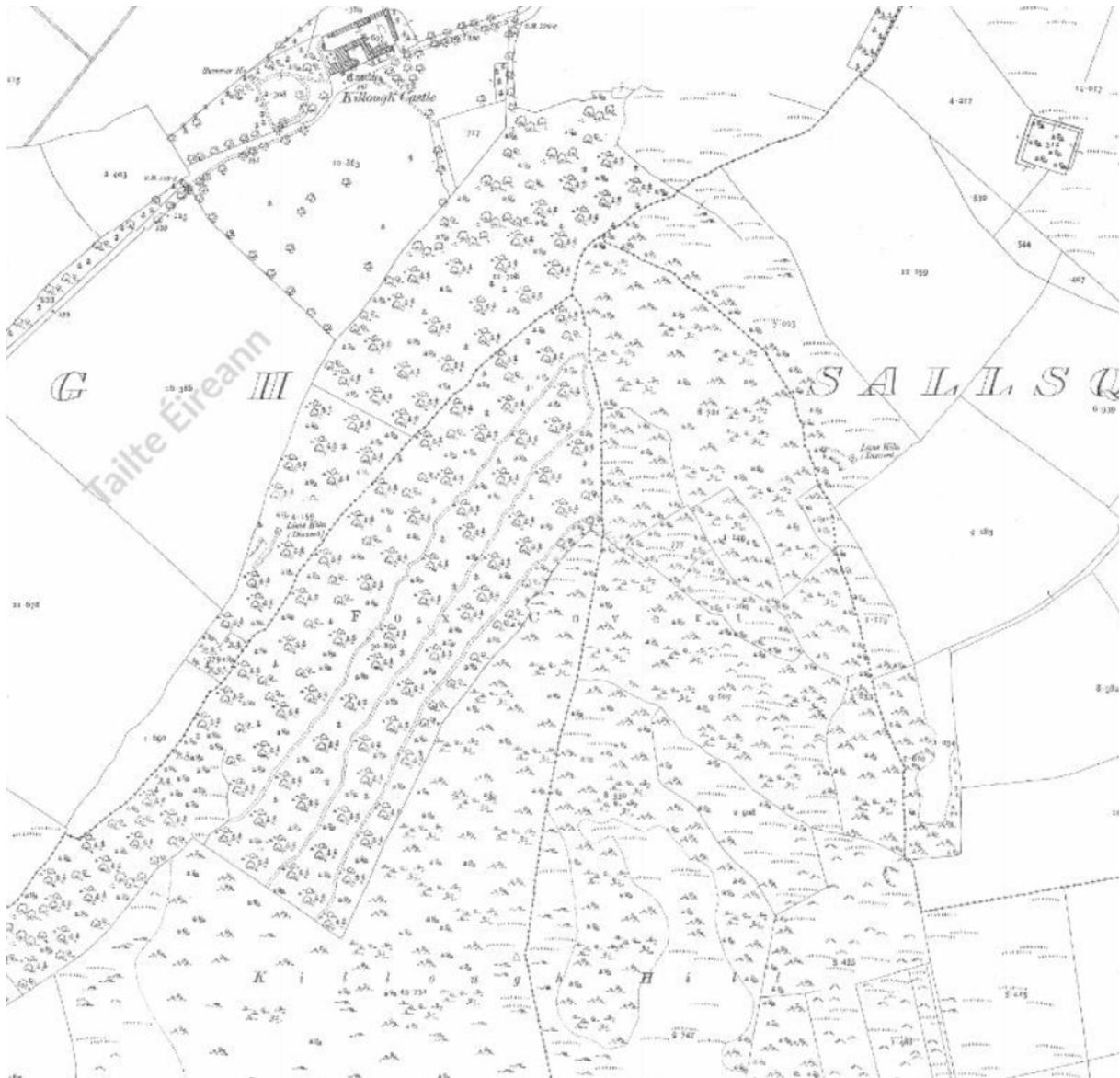


First O.S. sheet of Killough Hill, pre-Famine in the 1840's. Townland boundaries coloured

Substantial changes had taken place by the second survey reflecting the huge decline in local population and, consequently, the natural spread of scrub and trees to land that was formerly open. Also some additional planting was done, of sycamore, oak, ash and

elm with occasional Scot's pine and other conifers. Many estates put in silver firs, which today overtop other trees.

As seen below in the early 1900's woodland now covered a swathe of land on the western side of the hill including new trees to the east of Killough Castle. The wood is represented as mixed, i.e with some conifers, and a series of parallel rides or paths existed along the contours of the upper part, probably for management.



Killough Hill as it was in the second OS survey (1910)

Scrub (brushwood) and rough pasture covered the rest of the hill at this stage, most likely a mix of hazel and hawthorn as would be found in many parts of the Burren today. A small cliff is noted at the northern point of the hill – a reflection of ice movement from the north during one of the ice advances – and outcropping limestone occurs just south

of the highest point. Later changes have seen a consolidation of the conifers into a block on the middle part of the SW wood, a continuation of the re-wilding of the upper ground as a stand dominated by hazel, ash and goat willow *Salix caprea*. Latterly (starting in the 1950's) a quarry has removed most of the central hill and woodland.

An aerial photo of the current situation is shown at the end of this account.

Flora

Above the boundary bank, the Gaile part of the wood supports this community, categorised as FH (Ash-ivy) in Cross *et al* (2010) and most likely FH3 (hazel-wood sorrel) though the latter species is not everywhere abundant. The trees mentioned are augmented by a little wych elm *Ulmus glabra* and rowan *Sorbus aucuparia*, while guelder rose *Viburnum opulus* and spindle *Euonymus europaeus* are also scattered. Ivy is abundant on the ground and brambles form large patches because of treefall and ash dieback. The full list of herbs and ferns is extensive, including

Bluebell	<i>Hyacinthoides non-scriptus</i>
Wood sedge	<i>Carex sylvatica</i>
Common violet	<i>Viola riviniana</i>
Herb Robert	<i>Geranium robertianum</i>
Lesser celandine	<i>Ficaria verna</i>
Yellow pimpernel	<i>Lysimachia nemorum</i>
Wood dock	<i>Rumex sanguineus</i>
Enchanter's nightshade	<i>Circaea lutetiana</i>
Wild strawberry	<i>Fragaria vesca</i>
Barren strawberry	<i>Potentilla sterilis</i>
Wood false-brome	<i>Brachypodium sylvaticum</i>
Wood sorrel	<i>Oxalis acetosella</i>
Primrose	<i>Primula vulgaris</i>
Germander speedwell	<i>Veronica chamaedrys</i>
Woodruff	<i>Galium odoratum</i>
Hedge woundwort	<i>Stachys sylvatica</i>
Ground ivy	<i>Glechoma hederacea</i>
Broad-leaved willowherb	<i>Epilobium montanum</i>
Short-fruited willowherb	<i>Epilobium obscurum</i>
Lords-and-ladies	<i>Arum maculatum</i>
Tutsan	<i>Hypericum androsaemum</i>
Slender St John's wort	<i>Hypericum pulchrum</i>
Glaucous sedge	<i>Carex flacca</i>
Broad-leaved helleborine	<i>Epipactis helleborine</i>
Male fern	<i>Dryopteris filix-mas</i>
Soft shield-fern	<i>Polystichum setiferum</i>

Lady fern
Hartstongue

Athyrium filix-femina
Asplenium scolopendrium

West of the bank, in Killough townland, the wood is distinctly different with a smaller variety of herbs and different trees. Probably based on deeper soil, sycamore *Acer pseudoplatanus* becomes abundant and is spreading, there are isolated oaks *Quercus robur*, some small-leaved elm *Ulmus ?minor* and holly *Ilex aquifolium* and a few conifers – Scot’s pine *Pinus sylvestris*, larch *Larix decidua* and spruce *Picea sitchensis*. These join the prevailing ash (many with disease) and goat willow, some of large size, and they create an open stand with more brambles, blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna* and frequent spindle in the understorey. At the southern end there is a band of bracken *Pteridium aquilinum*, with some wild raspberry *Rubus idaeus*, field rose *Rosa arvensis* and figwort *Scrophularia nodosa* nearby. Damp ground also features in a few places with remote sedge *Carex remota*, soft rush *Juncus effusus*, compact rush *J. conglomeratus* and square-stemmed St John’s wort *Hypericum terapterum*.

This part of the wood is poorer in small herbs than the upper wood; they are shaded out by the vigorous growth of brambles and ivy (and sycamore). Apart from the ferns and bluebells, and woodruff in one place, one looks in vain for many of those on the list above. This seems likely to be the result of the more recent establishment of trees on this lower ground and their historic management for timber by Killough Castle. It is also caused by the richer soils and the lack of a stable tree canopy.

Fauna

Coming to the wood in late summer makes an assessment of its birdlife impossible as most species have stopped singing by then. However a full range of species is very likely to occur including blackcap and chiffchaff, treecreeper, goldcrest, long-tailed tit and all the more common ‘garden’ species. Raven, magpie, hooded crow, sparrowhawk, kestrel, buzzard, woodpigeon and stock dove, represent the larger species while the great spotted woodpecker is likely also.

In terms of mammals, all expected species are also found in some part of the woodland, not necessarily in Killough townland. Records of badger, fox, pine marten, stoat, red and grey squirrel and hare are in the NBDC database as well as hedgehog and wood mouse. There are no bat records as yet but seven of the main Irish species were recorded on adjacent ground during a study for a contiguous solar farm (soprano pipistrelle, common pipistrelle, Leisler’s, brown long-eared, Natterer’s, whiskered and Daubenton’s bats). It is likely that most of these use the woodland as the size and

structure of the wood and the possibilities of roosting in Killough Castle buildings make the habitat very favourable.



Aerial photo taken in 2020