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Water Biodiversity Action Plan for GORT RIVER and South Galway Rivers - April 2022

Authored by Stefano Sopelza — Gort River Walk and Gort Tidy Town Edited with small additions: Jackie Queally, Author and Guide Earthwise

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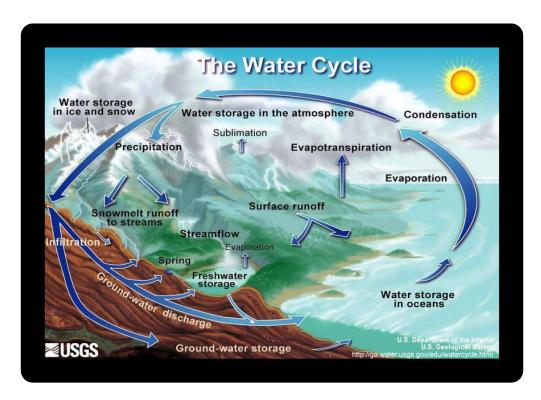




Water is one of the most precious resources which we have on earth. All the biochemical processes which occur in plants and animals, our surroundings, etc, require water to function.

It is required for the existence of life on earth as it is an essential component of all the biological processes.

We cannot imagine our lives without the presence of water: From cooking, drinking, cleaning, and washing to recreational and sports purposes, travel and shipping, water has been part of our daily life since we were born. The rivers and seas we see today are a result of water condensing over 300 million years ago. The water cycle has been going on since earth was formed. The water cycle shows the continuous movement of water within the Earth and atmosphere. It is a complex system that includes many different processes. Liquid water evaporates into water vapor, condenses to form clouds, and precipitates back to earth in the form of rain and snow.



Ancient societies began near water. Our main Irish cities are built near rivers or water streams or seas. Irish tourism, an important aspect of the Irish economy, is based on water from seaside landscapes to inland waterways and water bodies but economic sectors such as the fishery industry and agriculture are those who depend on and impact on water quality most.

Ireland and Europe's rivers, lakes and seas are under pressure from pollution, over-exploitation and climate change. How can we ensure a sustainable use of this vital resource?

Water covers more than 70 % of Earth's surface. It was in water that life on Earth started, so it is not surprising that all living things on our blue planet need water. Water is in fact many things: it is a vital physiological need, a home environment, a local and global resource, a transport corridor and a climate regulator.

And, over the last two centuries, it has become the end of the journey for many pollutants released to nature, alongside a newly discovered mine, rich in minerals to be exploited. To continue enjoying the benefits of clean water and healthy oceans and rivers, we need to fundamentally change the way we use and treat water.

Being a member of Gort River Walk and also Gort Tidy Town committees, I am aware of the role local groups can have in protecting our local waters, and most importantly to protect our biodiversity including water biodiversity. We all are aware IRELAND IS MISSING its chance to protect its dwindling biodiversity with several iconic species of bird, fish and mammals under threat. Globally, the loss of our natural world is proceeding in an unprecedented manner, with a human handprint leaving one million species under the threat of extinction.

Recent surveys state that 91% of protected habitats in Ireland are in poor or inadequate condition and more than 50% are declining. In addition, 14% of species assessed are considered to be endangered.

Biodiversity loss is caused by five primary drivers: habitat loss, invasive species, overexploitation (extreme hunting and fishing pressures), pollution, and climate change associated with global warming. In each case, human beings and their activities play direct and significant roles.

In particular, it's important to point out that the river, flora and fauna of our wetlands are losing their biodiversity. Wetlands around the world and in Ireland are fundamental. Wetlands provide habitat for thousands of species of aquatic and terrestrial plants and animals. Wetlands are valuable for flood protection, water quality improvement, shoreline erosion control, natural products, recreation, and aesthetics.

This is from UN Climate Change News, 01 October 2018:

Wetlands, amongst the world's most economically valuable ecosystems and essential regulators of the global climate, are disappearing three times faster than forests.





Kinincha Swans Lavallysheen Otters



Lavally Grey Heron and crow





Wild horses at the Gort River in Lavall



These pictures taken at the Gort River in Lavally, Gort, Co.Galway, show a varied flora and fauna, sharing a common element: water. We have to pass the message that we need to protect and preserve habitats such as Wetlands as they are important features in the local landscape that provide numerous beneficial services for people and for fish and wildlife. Some of these services, or functions, include protecting and improving water quality, providing fish and wildlife habitats, storing floodwaters and

maintaining surface water flow during dry periods. These valuable functions are the result of the unique natural characteristics of wetlands.





We must realize, but most importantly we need to educate our future generations how to preserve and protect our habitats.



(cover of Gort Area Biodiversity Plan 21-24)

Following the creation of a Biodiversity plan for the town of Gort last year – a joint project between Gort River Walk and Gort Tidy Town with the Support of BurrenBeo Trust and Galway Rural Development I have visited local schools and started little projects with local schools. If water is life, our kids are the future and getting them involved in preserving our biodiversity is so important.

Gort Tidy Towns/Gort River Walk groups published a Gort local area Biodiversity plan. This biodiversity plan is one of six that came about as a result of the 2021 Community Biodiversity Training and Awareness Programme delivered by the Burrenbeo Trust and funded by Galway Rural Development.



(Children from Kiltartan NS helping planting oak trees at Gort River Walk)



(Children from Kiltartan NS designed the Gort River Walk)

The objective of the Gort Biodiversity plan is to promote awareness and develop actions that will help to enhance and protect existing habitats and establish new ones. Several participants from both groups attended Biodiversity workshops and developed an overall plan for the area. The plan includes protecting and enhancing natural habitats, following the all-Ireland Pollinator plan, tackling invasive species, making visual improvements to the town and promoting waste reduction and recycling.

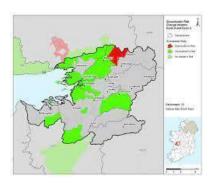
For further information about the plan visit:

Acknowledgements

Our Water Biodiversity Group - Catchment 29 - South / East Galway - was formed after receiving a request from VERI in association with Galway Rural Development and LAWPRO to create a Water Biodiversity Action plan to target water quality issues in South East Galway and water biodiversity loss in our region. Preservation and creation of wetlands habitats are the main point of the group activity. A semester of lessons and sessions along with field and training sessions provided group members with knowledge, tools to focus towards water and biodiversity preservation.

Our main goal is to preserve and monitor water quality of rivers, lakes, streams of catchment 29, impacting local and Galway Bay water biodiversity. Group members were representatives of different South Galway locations and groups. Lessons were run on Zoom and a WhatsApp group was created for communications and support.

Our goal, is to link all our groups and provide actions, solutions and constant quality checks and to monitor actions.













We would like to thank the following institutions, boards, agencies and groups for their support and for the unique opportunity we were offered with this amazing course and in particular we would like to thank our tutor Kieran Cowhig.

A special thanks to

*GALWAY RURAL DEVELOPMENT - https://www.grd.ie/



Galway Rural Development, through the programmes they manage, work along with individuals, community groups and other agencies to improve the quality of life for all in our area. They especially work with those most in need of help and look to create real chances for people to make positive changes for themselves and their communities across rural Galway.

This training project was funded under the LEADER Programme, Rural Environment theme.

*VERI www.veri.ie



Veri is a mobile responsive cloud based dashboard that allows companies to digitally manage training delivery. They work with the public and private sector. An award winning software company specializing in training compliance and analytics.

Dr. Amanda Greer Senior Ecologist and Biodiversity Programme Manager Kieran Cowhig, Ecologist and Water Biodiversity Programme Tutor

LAWPRO - Local Authority Water Programme https://lawaters.ie



The Local Authority Waters Programme (LAWPRO) is working to identify the issues affecting water quality in every county in Ireland.

Conor Ruane, Community Water Officer. Western Region. cruane@lawaters.ie

*GORT RIVER WALK GROUP

https://www.facebook.com/gortriverwalk/

https://gortriverwalk.wordpress.com/gort-river-walk-guide/



GRW group are developing a new walking trail to encourage fitness and give people a way to appreciate the local nature, as well as encouraging conservation of the local environment and biodiversity, and discouraging illegal dumping.

Mr. David Murray murrcoole@gmail.com

*GORT TIDY TOWNS https://gorttidytown.wordpress.com/



Gort Tidy Towns are a formal group setup for the enhancement of the physical, social and cultural environment of Gort with particular reference to: The general improvement, enrichment and development of the environment, The enhancement of community spirit and pride. The promotion of an atmosphere of good neighborliness. The encouragement of greater interaction among residents, Enhancement of the appearance and ecology of Gort and surroundings. The enhancement of the public realm and the improvement of the livability of the town and surroundings.

Mrs Irene Brennan and Mrs Bernice Forde Carolan gorttidytowns@gmail.com

*BURREN BEO TRUST - connecting people and places https://burrenbeo.com



Burrenbeo Trust is a landscape charity dedicated to connecting all of us to our places and our role in caring for them.





Examples of actions, carried on: water littering action and water quality test



River monitoring and check-up









Introduction

Background to the GORT and its Water Biodiversity Action Plan

Gort is a noted heritage town whose Irish name, Gort Inse Guaire, means "The Field of the island of Guaire". It is a name that conjures up images of a place steeped in nature, waterways, literacy and history. In the 7th century Guaire became the King of Connacht, and one of his royal residences was on an island formed by the river in Gort. There are many legends told of King Guaire, who was said to have one arm longer than the other on account of his generosity. The town expanded in the 19th century to become the market town it is still known as, with much of the town planning and architecture still in use today. Gort sits within a landscape of limestone, lakes and turloughs. The River Gort, originating in the Slieve Aughties, runs through the town, and disappears through swallow holes to repeatedly rise again downstream with different names ascribed to it, before it finally reaches the sea at Kinvara. In the environs of Gort you will find Coole Park, Kiltartan Gregory Museum, Thoor Ballylee, KilmacDuagh monastic site, as well as a rich heritage of prehistoric and medieval remains of all types.

In woodlands such as Coole you might see birds such as tree-creepers and jays, wildfowl such as mute swans, whooper swans and waders including lapwings and the endangered curlew. We also have buzzards, kestrels, peregrine falcons, long eared owls and barn owls. Let us not forget the frogs and the precious bees. Recording these species where they have been spotted can be a fun family activity and can greatly help to provide valuable statistics for the National Biodiversity Data Centre. More information is provided in this link: http://www.biodiversityireland.ie/record-biodiversity/

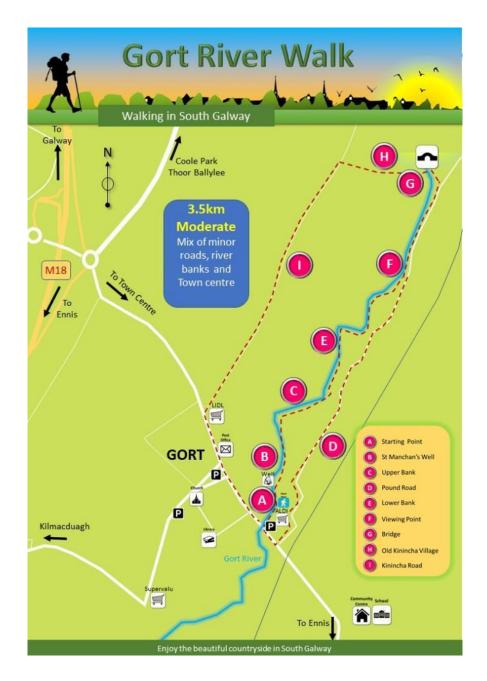
Our most famous tree is the Copper Beech Autograph tree at Coole Park, where we also have Hazel, Alder, Birch, Ash, Oak and many other native tree species. Our wetlands

down at the River Walk are rich in yellow flag iris, marsh marigold, bogbean, speedwell, meadowsweet, butterbur, common violet, primrose, bluebell, herb robert and loosestrife. The rare water violet can be found here too. We also have invasive species that we are working to safely remove such as Old Man's Beard (clematis). In the woods you will find wild garlic, aconites, Irish bluebells and wood anemones, and a variety of ferns.

The hedgerows and the extensive dry stone walls in the area act as essential corridors for our animals, birds, bats and insects, as well as providing food sources. Whitethorn and blackthorn, bramble, elder, holly, guelder rose, gorse and ivy make up some of the local hedgerow species. Recording these wildlife species stating where they have been spotted can be a fun family activity, and can greatly help to provide valuable statistics for the National Biodiversity Data Centre.

Our Gort town Biodiversity plan and Gort River Walk development and related water biodiversity plan came in place as a community effort to "refresh" Gort town under a new environmental concept. The area designated for the Gort River Walk used to be a lovely part of Gort with a water mill and a proper little village. When the Gort Mill was closed, the council turned the area into a council dump. Illegal dumping followed in subsequent years and our vision was to return that area alongside the river to its original glory.

A committed effort against illegal dumping, a constant cleaning brought people together. Our committee chairman David Murray shared his vision, and 5 years ago we started with the Gort River Walk Project under the Gort Tidy Town umbrella. A registered committee, with dedicated roles followed and with support of GRD, public funding, Galway County Council works began. The project was divided in phases and each phase was related to a funding application.



Feasibility studies, environmental Impact Assessments, otter surveys, trail consultations, flora and fauna surveys were carried out in respect of our local biodiversity. Invasive species, stone wall building, heritage sites building recovery and biodiversity courses were all part of the project as part of preservation of endangered species and our heritage.

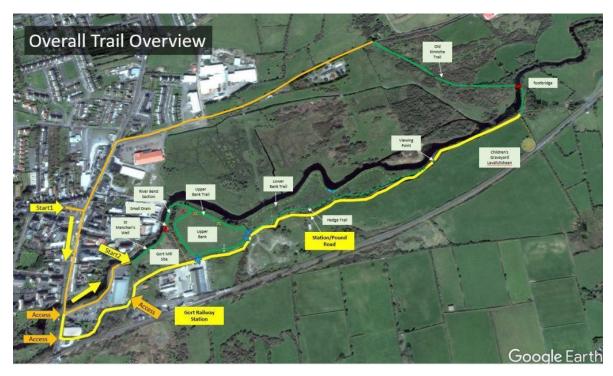
Community groups as schools, scouts for example supported. The committee, with a good number of volunteers, takes care of the trail, the river and its fauna and flora.



The group checked the bed of the river Gort along the proposed loop trail.

We were lucky to benefit from Galway Rural Development with biodiversity courses and also we're lucky still to have the support of LAWPRO and in particular Mr. Conor Ruane.

The Gort River Walk group are developing a new walking trail meant to encourage fitness and give people a way to appreciate the local nature, as well as encouraging conservation of the local environment and biodiversity, and discouraging illegal dumping.





Lots of agencies and institutions were consulted - Galway County Council, Waterways Ireland, Ireland Water Safety, Sports Ireland, Inland Fishery Ireland, OPW, NPWS, Galway Rural Development, private ecologists and trail consultants just to list some.

The purpose of the project, with all its plans, is to provide Gort with an amenity which can be used by everyone, in respect of nature. For these reasons we underwent courses and conferences and lessons online during the lockdown years when lots of courses were available.

We have a particular concern for invasive species and interest in preserving native species.

About Gort River and Galway Bay South East catchment.

Gort lies within the Galway Bay South East catchment. Data provided by Corine 2018 suggest that agriculture is one of the largest land uses in the catchment with some areas of peat bog and semi natural forestry in the south eastern part. The western side of the catchment drains into Galway bay with some areas of intertidal wetlands. The total population of the area is approximately 74,365 people with a population density of 59 people per km². Underlying this area, the geology is composed of predominantly Limestone. Groundwater and surface water bodies in this catchment are closely linked. In the south east corner of the catchment, below Lough Rea there is an outcrop of old red sandstone. The Gort river is an excellent example of a subterranean river. Two miles S.W. of Lough Cutra the river is swallowed up under a collapsed limestone cave at the Devil's Punchbowl. The river then flows towards Gort, forming an island in the convent grounds and another former island on which the old barracks are situated. In 2010, European divers traversed two miles of water-filled underground caves in the Kiltartan section of the river. This is believed to be the longest subterranean river system in Ireland and Britain. After forming Coole Lake, the river sinks again and eventually emerge in Galway Bay, at Kinvara, having risen and disappeared underground a few times again. Gort lies within the Cannahawna sub-catchment. Notable waterbodies within this sub-catchment the Gort river, Beagh River, Lough Cutra, Lough Bunny.

Other features along the river course are the Blackweir, the Ladle, the Churn and Pollduagh. The latter is a magnificent naturally-formed arch. The river course and related areas of interest to this group project are all found within the Galway Bay South East Catchment (WFD 29) Draining a total area of 1270km². To the far western edge of this catchment lies Galway city. Other notable urban centers include Athenry, Gort, Kinvarra, Oramore and Loughrea.

WATER QUALITY in GORT and SOUTH GALWAY

Water quality in South east Galway is not excellent. Floods, agricultural practices, constant littering and general lack of due action have led to a reduced quality of water. Athenry, Gort, Oranmore, Kinvarra are all towns with below par water quality. The natural action of underground limestone, even though filtering minerals, is not enough in itself for a decent water quality.

GORT RIVER NEAR CANNAHAWNA - Gort



Gort River flows from Lough Cutra as the Beagh River and then sinks into the ground on the south east side of Gort at the Devil's Punchbowl. It flows underground for a mile and then emerges in Cannahowna.



The countryside around the town is of geological interest as it consists of a permeable limestone. The Gort River rather unusually disappears and reappears several times before it goes underground for the last time, just outside the town, in the other direction.



Water has been recently tested and the quality of the water is poor. Agriculture is the main reason for the poor quality of the water. A previous test in November, even when agricultural activity was quiet, reported a mediocre quality of water in the Gort river in Cannahawna.

Testing has been done and catchment.ie lists water quality of Gort River as **Poor**.

CANNAHOWNA 010

• Code: IE_WE_29C010200

Category: RiverStatus: Poor



CLIMATE CHANGE and FLOOD RISK

Ireland is losing its biodiversity and we all realize the threat of climate change. Weather phenomena like Increased heat, drought and insect outbreaks, all linked to climate change, have increased wildfires. Declining water supplies, reduced agricultural yields, health impacts in cities due to heat, and flooding and erosion in coastal areas are additional concerns. We need to focus on our action to bring our biodiversity back, preserving our nature.

Key factors of climate change can be caused by many causes such as

- Heat-trapping Greenhouse Gasses And The Earth's Climate. ...
- Greenhouse Gasses. ...
- Reflectivity or Absorption of the Sun's Energy. ...
- Changes in the Earth's Orbit and Rotation. ...
- Variations in Solar Activity. ...
- Changes in the Earth's Reflectivity. ...
- Volcanic Activity.

In particular, the Earth's climate is influenced and changed through natural causes like volcanic eruptions, ocean currents, the Earth's orbital changes, solar variations and internal variability.

Climate change has a deep impact on many factors but in particular we can list these direct man made climate change

- Rising maximum temperatures.
- Rising minimum temperatures.
- Rising sea levels.
- Higher ocean temperatures.
- An increase in heavy precipitation (heavy rain and hail)
- Increase in the proportion of violent tropical cyclones.
- Increase in aridity and drought.

Climate change and man-made mistakes have impacted South Galway hydrology. Risks of floods in winter months have become a regular threat for this part of catchment 29. Pollutants are carried in the water bodies and they settle in floodable areas or flow into Kinvarra Bay through the underground water system.

SOUTH GALWAY FLOOD RELIEF SOCIETY has been in contact with institutions such as Galway County Council and OPW to resolve the problem in the last years.

Derrybrien wind farm construction, has been identified as an accelerator of water flow from Slieve Aughty Mountain to Gort lowlands, which during heavy rain can become a huge basin/reservoir due to flood. Derrybrien is due to close shortly as a functional wind farm.

Problems to life quality, agriculture, business are consequences of the floods in South Galway.

OPW website and other websites as such as www.geohive.ie and www.catchment.ie can highlight the floodable areas in south Galway. The map below is from catchments.ie map viewer and shows areas in Gort are risk of flooding (low probability is shown in light blue, high probability is highlighted in dark blue)



Water Quality in Gort

Gort River in Lavally, on the North Side of town.

Water quality in the area was identified to be <u>poor</u>. A <u>former Galway County Council dump</u> in the town has been identified as one of the pressures on the river.

People used to swim and fish on the south side of town in Cannahowna where the river emerges on the surface and it was common sense not to go swimming in the north section of the river, after the Gort river flows through town.

Ireland now has just 20 pristine river water bodies - <u>less than 1% of all the river sections</u> examined by the Environmental Protection Agency.

<u>Sewage fungus was identified near the convent bridge</u>, and sewer pollution was also identified and reported to LAWPRO and Galway County Council for further investigation in December 2021.

Our area catchment: Galway Bay South East

Code: 29

Area(km²): 1267.9

Catchment Profile:

This catchment includes the area drained by all streams entering tidal water in Galway Bay between Black Head and Renmore Point, Galway, draining a total area of 1,270km². The largest urban centre in the catchment is the eastern part of Galway City. The other main urban centres in this catchment are Athenry, Louyghrea, Gort, and Oranmore. The total population of the catchment is approximately 74,365 with a population density of 59 people per km². This catchment is predominantly underlain by karstified limestone, including the northern part of the Burren in County Clare, and the groundwater and surface water systems in the area are closely interlinked. Only the southeastern part of the catchment, which is underlain by old red sandstones, does not contain karst and the associated assemblage of springs, swallow holes and numerous caves that dominate the majority of the catchment. There is essentially no natural connected surface drainage network in this catchment west of a line running from Athenry to Craughwell to Gort. Surface drainage is entirely absent in the north Clare part of the catchment. In this area virtually all rainfall in the area enters the bedrock aquifer and makes its way underground a number of groundwater flow routes towards the coast at Ballyvaughan or Kinvara.

For further information about the quality of this catchment please refer to

https://catchments.ie/wpcontent/files/catchmentassessments/29%20Galway%20Bay%20South%20East%20Catchment%20Summary%20WFD%20Cycle%203.pdf

Some example of sub catchment qualities in south Galway

KILCOLGAN_040

• Code: IE_WE_29K010600

Category: RiverStatus: Poor

GWDTE-Caherglassaun Turlough (SAC000238)

Code: IE_WE_G_0091Category: GroundwaterStatus: Poor (GW)

CLARINBRIDGE_010

• Code: IE_WE_29C020040

Category: RiverStatus: Good

BOLEYNEENDORRISH_010

• Code: IE_WE_29B040100

Category: RiverStatus: High

Biodiversity in GORT

Gort Tidy Towns and Gort River Walk groups joined together and developed a Gort Area Biodiversity Plan 2021-22.

The objective of the Gort Biodiversity plan is **to promote awareness and develop actions that will help to enhance and protect existing habitats and establish new ones**. We also aim to provide information and advice for community groups, schools, businesses and individuals within Gort and the surrounding area.

This biodiversity plan is one of six that came about as a result of the 2021 Community Biodiversity Training and Awareness Programme delivered by the Burrenbeo Trust and funded by Galway Rural Development. Up to eight participants from each community attended a place-based Biodiversity Training course, which included 10 hours of initial activity-based learning covering all aspects of heritage but focusing on Biodiversity. This culminated in each community creating a Biodiversity plan. Workshops on various topics were provided to the communities in order to give them the skills necessary to put their plans into action. Creating their own plan gives each community a strong sense of ownership and agency. Each of the six plans is unique and reflects the interests, skills and needs of the local community. Introduction to Biodiversity relates to the variety and richness of habitats and species in any given area. Greater species diversity ensures natural sustainability for all life forms and provides essential ecosystem services that are important to our economy such as pollination and flood prevention. Even at a local level biodiversity can benefit our communities greatly. We are facing a massive loss of biodiversity across the world, through habitat loss, invasive species, pollution, climate change and over exploitation. However, there are ways to protect and conserve our local area and this plan hopes to address some of these. The objective of the Gort Biodiversity plan is to promote awareness and develop actions that will help to enhance and protect existing habitats and establish new ones. We also aim to provide information and advice for community groups, schools, businesses and individuals within Gort and the surrounding area.

Gort is a noted heritage town whose Irish name, Gort Inse Guaire, means "The Field of the island of Guaire". It is a name that conjures up images of a place steeped in nature, waterways, literacy and history. In the 7th century Guaire became the King of Connacht, and one of his royal residences was on an island formed by the river in Gort. There are many legends told of King Guaire, who was said to have one arm longer than the other on account of his generosity. The town expanded in the 19th century to become the market town it is still known as, with much of the town planning and architecture still in use today. Gort sits within a landscape of limestone, lakes and turloughs. The River Gort, which runs through the town, originates in the Slieve Aughties, disappearing through

swallow holes to repeatedly rise again further downstream with different names before reaching the sea at Kinvara. In the environs of Gort you will find Coole Park, Kiltartan Gregory Museum, Thoor Ballylee, KilmacDuagh monastic site, as well as a rich heritage of prehistoric and medieval remains of all types.

We have many species of mammals in Gort. Otters have been seen down at the Riverwalk and we also have red squirrels, hares, badgers, hedgehogs, pine martens, rabbits and foxes. Fish species include trout, pike and perch. Eight of the nine Irish bat species reside at Coole Park, including the rare lesser horseshoe bat. Many of the birds you see around Gort are birds of the countryside including wood pigeons, blackbirds, robins, song thrushes, wrens, chaffinches and blue, great, coal and long tailed tits. They rely on hedgerows, scrub and gardens to provide their habitat.



In Woodlands such as Coole you might see birds such as tree creepers and jays, wildfowl such as mute swan, whooper swan and waders including lapwing and the endangered curlew. We also have buzzards, kestrels, peregrine falcons, long eared owls and barn owls. Let us not forget the frogs and the precious bees. Recording these species and where they have been spotted can be a fun family activity and can greatly help to provide valuable statistics for the National Biodiversity Data Centre. More information is provided in this link: http://www.biodiversityireland.ie/record-biodiversity/



Our most famous tree is the Copper Beech Autograph tree at Coole Park, where we also have Hazel, Alder, Birch, Ash, Oak and many other native tree species. Our wetlands down at the River Walk are rich in yellow flag, marsh marigold, bogbean, speedwell, meadowsweet, butterbur, common violet, primrose, bluebell, herb robert and loosestrife. We also have invasive species that we are working to safely remove such as Old Man's Beard (clematis). In the woods you will find Irish bluebells and wood anemones, and a variety of ferns. The hedgerows and the extensive dry stone walls act as essential corridors for our animals, birds, bats and insects, as well as providing food sources. Whitethorn and blackthorn, bramble, elder, holly, guelder rose, gorse and ivy make up some of the local hedgerow species. Recording these species and where they have been spotted can be a fun family activity and can greatly help to provide valuable statistics for the National Biodiversity Data Centre. More information is provided in this link: http://www.biodiversityireland.ie/record-biodiversity.

Gort has a wealth of built heritage. Examples from the town itself include Bolands Lane from the 1830s, the Fever hospital from 1839, the Weigh house (locally known as 'The Crane') from 1760 and the Forge from 1912 (which stands on the site of an earlier forge). These and many more historical buildings in Gort are described on the National Inventory of Architectural Heritage Database (www. buildingsofIreland.ie). Older monuments nearby include Kilmacduagh Monastery.

Please Visit the NPWS website to explore these areas.— www.npws.ie and also visit https://maps.biodiversityireland.ie/Map/Terrestrial/Dataset/66 for the invasive species dataset to map what invasive species are in our areas

Also visit these websites for further information and research.

All Ireland Pollinator plan (remember what is good for pollinators is good for nature) https://pollinators.ie/

Burrenbeo - https://burrenbeo.com/ Wildflowers in Ireland:

http://www.wildflowersofireland.net/ Heritage maps – What is protected in my area?

https://www.heritagemaps.ie/ Conservation areas, site synopsis, protected habitat data

https://www.npws.ie/protected-sites Ireland's Citizen Science Portal and lots more

https://www.biodiversityireland.ie/ Invasive species list

https://www.biodiversityireland.ie/projects/invasive-species/

Planned Actions

These are some of the actions already taking place at Gort river where a dedicated group of volunteers from Gort River Walk and Gort Tidy Towns put their Biodiversity plan in action.

Consultations and meetings and decision making developed these ideas and plans. Most of them have already been put into action in the Gort River.

Litter removal, signage, feasibility study for tree planting for whole catchment, rehab and release of otters, pollinator stations, bugs hotel, trails, installation of ring buoys, water quality check and monitoring, creation of a wildflower area, bird houses, easy access to water, fencing, banks monitoring

Conservation, protection and enhancement of existing green\wild areas. All planting in or around the town to follow the All Ireland Pollinator plan.

Carry out a habitat survey of the Gort area to identify wild habitats that should be protected. Work with the community to promote awareness of Biodiversity.

Ensure the footpaths/river walks are fully accessible to all users e.g. Wheelchairs, Elderly people, developing a natural amenity for the people of Gort and surrounding areas.

Protect and enhance our wetlands and waterways, setup of a River Walk Trust, Citizen science, engage with the wider community to set up projects and workshops to encourage involvement in exploring biodiversity.

Promote the creation of wildlife corridors and pocket forests., Dense planting of trees on any space (big or small) to give shelter pockets to animals and insects.

Join up wild areas along the Gort River to give wildlife a connected corridor to migrate along. Maintenance of dry stone walls, vital for insects, small mammals and plants

Planned Action 1 "CLEAR AS WATER, CLEAN AS WATER"

This action plan focuses on the need rural Ireland has to fix the illegal dumping problem which has escalated in recent years. Water bodies have been affected and water quality has decreased. EPA surveys show how irresponsible people behavior has been – from illegal dumping to irresponsible farming activity, just to list some examples.

We all are aware that when walking in the countryside we will encounter illegal dumping cases. It is a sore eye sight. Flora and fauna in particular can struggle and as citizens it's our duty to take care of the problem.

The project will have a weekly frequency, supported by Gort Tidy Towns and Gort River Walk with the help of Galway Co. Co., for the use of their facilities.

We'll create a team of litter pickers to check river banks, a team of volunteers also to go in the water to remove any litter or material, a team of volunteers to promote awareness among local schools so children and secondary students can support the project.

Weekly water tests and weekly maintenance and reports will be carried out.

This action is a "motivator" and a "sense of belonging" booster, but it shows community engagement. The bottom line is that water is life and we all need water. When we think of water, we must also RESPECT the WATER.

Tidy Towns can provide litter grabbers and bags so in terms of costs it's a very small but effective investment and commitment.

It's also a motivation for the community to be active and do something for the community.

Our local biodiversity will benefit and monthly held lessons on biodiversity and water biodiversity could be organized at the River walk to raise awareness.

The action plan will go under Gort Tidy Town and Gort River Walk.

There is no particular need to ask permission to any particular agency, as the designated area is owned by the council.

Planned Action 2 "WECO 2022 - Wetland Conservation"

Wetlands are important habitats for Irish biodiversity. The project will focus on the conservation, protection and enhancement of existing green/wild areas and water bodies, to prevent any further habitat loss and targeting of invasive species, with removal or invasive species and planting of native species. Planting trees at river banks, creating and maintaining wetlands to create a habitat for mammals, birds. Installation of bird houses for river birds and common birds. Installation of little areas for any animal to gain easy access to the water - swans, otters, ducks, etc....

Conduct an animal and fish survey to monitor possible migration, increase and decrease in the populations. Gort river has a decent variety of animals and birds - cormorants, herons, otters, hen harriers, badgers, foxes, dippers, kingfishers

Support and maintain the further development of the Gort River Walk and its natural habitat. Developing a natural amenity for the people of Gort and surrounding areas. To protect and enhance our wetlands and waterways.

Eliminate invasive species - <u>Invasive species are the second largest cause of Biodiversity</u> loss.

The project will be followed by Gort River, Coole Park Gort River Walk, NPWS, Landowners as water and wetlands develops around the town of Gort and covers public and public areas. Animal surveys may have a cost of approximately €500, material for bugs hotel and bird houses have a cost, and I can quote about €2,000 for the project as most of the labour will be carried by the volunteers.

Planned Action 3 - Educational Work

This project would look at increasing awareness within the local community about issues facing biodiversity and the health of waterbodies in the area. The group proposes to do this by:

- Talks to primary schools in catchment area, particularly Educate Together Schools who are strongly connected with environmental education
- Talks to shooting clubs to raise awareness of importance of improving water quality
- Talks to Irish Farmers Association at local club level-contacts to be researched suggest presenting in pairs a formatted presentation on the benefits of using nature-friendly farming methods- research into the Farming for Nature methods to give them concrete examples of how things can be done for a Win-Win situation and the wider benefits of responsible farming that leads to better water, improved nature, wellbeing etc
- Encourage the formation of a local angling society on the Gort River to raise awareness of the importance of clean water
- Write articles to local press stressing the poor quality of the water in the area and how there are remedial measures that would revert this
- Encourage schoolchildren to become water monitors by teaching them the counting method learnt in Phase 1 of the water biodiversity in East Galway training course

Project	Location	Permissions Req?	Reports Req?	Consultation Req?	Est. Cost	Funding Stream	Time Frame
CLEAR	GORT RIVER Anywhere in Galway	NO	NO	NO	NO	Gort Tidy Town	Every weekend for 5 years
WECO	GORT RIVER Anywhere in Galway	NO	NO	YES	€2,000	ORIS	Every weekend for 5 years

Sources of Funding

- LEADER Funding. Galway Rural Development 091 844335 <u>leader@gdr.ie</u>
- LAWPRO Community Development Fund
- The Wheel https://www.wheel.ie/funding
- Inland Fisheries Ireland https://www.fisheriesireland.ie/services/funding
- Environment and Nature Fund https://www.communityfoundation.ie/about-us
- Development of Biodiversity Action Plans, Sustainable Communities through the circular economy
- The Ireland Funds: https://irelandfunds.org/
- Department of Rural and Community Development schemes (funded by DRCD; administered by LAs)
- CLÁR small scale targeted measures in rural areas (eg. sensory gardens)
- Town and Village Renewal Scheme
- Funding for Outdoor Recreation Facilities
- <u>Social Enterprise Development Fund 2020 Rethink Ireland</u>

 DRCD provides match funding for all philanthropic funds raised by Social Innovation Fund (through dormant accounts)
- <u>Community Environment Action Fund</u> Local Agenda 21 (DID not advertise in 2020; expected to open in Q1, 2021)
- Community Enhancement Programme
- LA Sports Grants (e.g. Sports Club Grants, Coaching and development Grants)
- Heritage / Conservation Grants
- Community Facilities Remedial Works Scheme
- Arts Grant Scheme
- Festivals and Events Schemes
- Scheme of Capital Grants
- TidyTowns Grant Scheme/Burial Grounds Grants
- Local Improvement Scheme
- Creative Ireland Community Grant Scheme
- Municipal District Grants
- Anti litter/ Anti Graffiti Schemes
- Mens' Shed
- Creative Ireland Community Grant Scheme 2020 Creative Ireland Programme
- Oscar (sportscapitalprogramme.ie) open from 11 Dec 2020 to 12 Feb 2021
- LA Sports Partnerships Grants (e.g. Sports Club Grants, Coaching and development Grants)
- Go for Life Grants Scheme Sports Ireland
- Coca-Cola Thank You Fund Encouraging young people to become more active
- Dormant Accounts Fund
- Healthy Ireland Fund (edible landscape case study)
- Tesco Community Fund

- Windfarm Community Fund
- Available funding | The Arts Council
- Community Employment: Community Services Programme;
- Rural Social Scheme; Tús Community Work Placement Initiative





Match Funding Ideas

- Partnerships for example with Local Businesses
- Corporate Sponsorship; Community Engagement Funds
- · Voluntary labour
- Traditional Fundraising
- Sponsored Events
- Community loan <u>home Community Finance Ireland</u>. <u>Clann Credo Community Loan Finance</u>
- Crowdfunding

Links to Additional Resources

River Basin Management Plan-

https://www.gov.ie/en/publication/429a79-river-basin-management-plan-2018-2021/

Protected sites

https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004098.pdf

https://www.npws.ie/protected-sites

A resource for communities working for water, biodiversity, and climate action. Local Authority Waters Programme

(watersandcommunities.ie)

https://moytrust.files.wordpress.com/2018/11/guidelines-for-groups-working-on-rivers-in-county-mayo_final.pdf

https://www.npws.ie/farmers-and-landowners/activities-requiring-consent

Useful Contacts

- EPA National Environmental Complaints Line (NECL) 1850 365 121
- NPWS ; Coole Park Nature Reserve, Gort, <u>coolepark@housing.gov.ie</u> (091)
 631 804
- LAWPRO Conor Ruane Community Water Officer · Western Region cruane@lawaters.ie
- Local Authority Planning Section Áras an Chontae Prospect Hill, Galway (091) 509043
- Inland Fisheries Ireland Fisheries Inspector Kevin Crowley, 091 563118
- Biodiversity Officer Paula Kearney, Galway City Co. (091) 509 309
- Galway Water & Environment Section (091) 509510
 Environment@galwaycoco.ie
- Shane Coogan. scoogan@galwaycoco.ie (091) 509089
- Galway PPN Tel: (091) 509 9130 administrator@galwaycountyppn.ie

Community/environmental groups operating in Gort local area

GORT RIVER WALK	-	David Murray	0868097223
GORT TIDY TOWN	-	Brian Brennan	0863831297
BURREN LOWLANDS	-	Karen O'Neil	0860853629
GORGEOUS GORT	-	Justin McDermot	0879123794
GORT PLAYGROUND	-	Stefano Sopelza	0862478170
BURRENBEO TRUST		Mary Dillon	+353 (0) 91 638096







Useful Resources

All Ireland Pollinator plan (remember what is good for pollinators is good for nature)

https://pollinators.ie/ Community actions to help pollinators

https://pollinators.ie/wordpress/wpcontent/uploads/2018/04/Local-Communities actions-to-help-pollinators-2018- WEB.pdf Burrenbeo - https://burrenbeo.com/ Wildflowers in Ireland:

http://www.wildflowersofireland.net/ Heritage maps - What is protected in my area?

https://www.heritagemaps.ie/ Conservation areas, site synopsis, protected habitat data (like above)

https://www.npws.ie/protected-sites Ireland's Citizen Science Portal and lots more

https://www.biodiversityireland.ie/ Invasive species list

https://www.biodiversityireland.ie/projects/invasive-species/

Some Websites with Information and Advice on Biodiversity and Wildlife

Vincent Wildlife Trust https://www.vincentwildlife.ie/

Irish Peatland Conservation Council http://www.ipcc.ie/

Irish Wildlife Trust https://iwt.ie/

Birdwatch Ireland https://birdwatchireland.ie/

Bat Conservation Ireland https://www.batconservationireland.org/

Gort River Walk https://gortriverwalk.wordpress.com

https://burrenbeo.com

gortgreenways@gmail.com

Examples of Possible Projects

Some of the following projects are included in Gort Biodiversity Plan 2021-24 and there is a deep interest in implementing some of the following projects as they are very relevant to our biodiversity and water biodiversity approach and plans. **Some of the projects are already part of our biodiversity plan and also Gort River Walk vision**

- Adopt a Hedgerow
- Seed saving
- Create local walkway through biodiverse areas
- Retain Ivy and moss important for biodiversity!
- Log piles
- Create a pond/wetland
- Control Invasive Species or commission control
- Community Training Events Note* Training is 100% funded through the LEADER programme
- Green roofs
- Bug hotels
- 'Wildlife Garden' to show people what they can do in their own gardens

•	Installing walkways over sensitive habitats (e.g. sand dune, bogs)
•	Planting of marram grass for dune restoration
•	Bat boxes
•	Bat sensitive lighting
•	Wildflower planting
•	Reduced mowing regime
•	Installing signage
•	Installing bird boxes
•	Connect habitats
•	Create new habitat
•	Pollinator friendly planting
•	Dead wood retention
•	Citizen Science
•	Edible planting

Fencing off of sensitive habitat

Outdoor Classroom

Hedgehog Highways

- Riverbank RevetmentRainwater Harvesting
- Use of harvested water for public toilets
- Lake Nature safari and stewardship project
- Tree Planting
- Improving spawning beds
- Fixing river flows
- Silt Traps
- Sustainable Urban Drainage Systems (SuDS)
- Community Training
- Fish Passage project
- Otter boxes
- Biosecurity Stations
- Wetland restoration
- Constructed wetland (large scale project)

- Reconnection with flood plain
- Yellow fish drain projects.
- Beach clean
- River/lake/coastal walk
- Amenity area/picnic area
- Bird watching facilities/amenities associated with water bodies
- Information campaigns