



# Ripple News

Rivers Involving People, Places & Leading by Example

Edition 7 Summer 2011

## River Warriors take action at Glenavon

**Students from Holy Trinity College in Cookstown have formed an action group to improve access and create habitats for wildlife along the Ballinderry River, near Cookstown.**

The Holy Trinity River Warriors is a new group of 13-16 year olds which has adopted the river between the Derryloran Bridge, near the Glenavon Hotel and the Kings Bridge, near the Cookstown roundabout. The group's name, thought up by the young enthusiasts, is befitting of the 'warrior-spirit' with which they have taken on the task of litter picking and habitat building along the stretch.

Shea O'Neill, a volunteer with the Holy Trinity River Warriors explains why the group started and what they hope to achieve.

"The river clean-up project is all about trying to make the Ballinderry River, behind the Glenavon Hotel, a nicer and more attractive place to go, as opposed to it being pretty much a rubbish tip where lazy people drop rubbish everywhere, some of which has been there since before I was born.

I became a proud Ballinderry River Warrior through the school. It is a voluntary project and a lot of people have signed up for it. During the hands-on part of the project, we organised a day where people from all sorts of organisations came to help us put up bird and bat boxes, clean up all of the litter and make access easier by clearing the walkways along the river, building steps and clearing dangerous weeds and other hazards.

We went to Ballinderry Fish Hatchery and learned how it helps to maintain all the baby and adult fish. We also saw freshwater pearl mussels which are amazingly interesting because if you can find them in a river it means that the river is clean.



© BFH Ltd.



© BFH Ltd.

We hope to get more people involved in our project because it is rewarding in a personal way as well as getting out of school for an hour. In the near future we hope to get another clean up day organised because unfortunately, the litter is appearing again along the river bank. Organising another clean up day hopefully won't be too much of a challenge for us river warriors; we are going to put up posters and flyers saying where to meet and what we are going to be doing. Hopefully the Ballinderry River Warriors will make leaps and bounds in getting this project off its feet and the river near Glenavon will be a clean and enjoyable place for everyone and the wildlife."

The Glenavon Hotel has shown its support to the group by sponsoring fleeces and providing facilities and refreshments for the participants. Brian Morris, Manager of the hotel said, "We are delighted to be supporting such an enthusiastic group of young people who show a lot of respect for their local environment. What they are doing not only benefits the river but also makes the area more attractive for tourists; it's a win-win situation".

The group is now a member of the Ballinderry River Enhancement Association, which is supporting them in their activities. The clean-up and habitat creation days have also been supported by Tidy NI and RSPB.



© Robert Thompson



To learn more about your river, visit [ballinderryriver.org](http://ballinderryriver.org) or [ni.wwf.org.uk/ripple](http://ni.wwf.org.uk/ripple)



## ON THE RIVER THIS SEASON

After a few days of sunshine in May it seems the summer has deserted us; yet along the river the unmistakable sights and sounds of summer abound. Amongst islands of mossy boulders, dippers bob up and down scouring the riverbed for insects, whilst this year's young trout and salmon fry tussle for territory amongst the cobble-strewn riffles. Above, mayflies and caddis, having grown their wings and taken flight from the river, dance on the air seeking a mate. At the end of the long days, dusk falls and, the dominion of the Daubenton's bat begins. Stealthily sweeping along the river as it skillfully snatches insects from the air to satisfy its hunger. Alas, the summer may have deserted us, but for the creatures of the Ballinderry, there is no better time of year.



© BFH Ltd.

## RIVERFLY PROJECT TAKES FLIGHT ON BALLINDERRY

**The Ballinderry Riverfly Project is the first of its kind on the island of Ireland. Using river insects as indicators of water quality, a group of local volunteers are keeping a close eye on the Ballinderry, able to detect pollution at the earliest opportunity.**

Twenty-four volunteers have been trained to identify key water insects which, by their presence or absence, indicate water quality in our rivers and streams. Mark Horton, Project Coordinator explains, "Some freshwater insects are more sensitive to pollution than others. When we see the most sensitive ones living in the river, such as stoneflies and mayflies, we can be sure that the water is clean and unpolluted. As the variety and

abundance of insects found decreases it is a sure sign that the river is under pressure from pollution."

Each Riverfly volunteer has adopted one or more monitoring points throughout the river system and checks the river insect life on a monthly basis. Trigger levels set by the Northern Ireland Environment Agency (NIEA) are being used to measure the results against. If the insect-life falls below the trigger level for a particular monitoring point, further investigations will be carried out to find out why the water quality has degraded. So far two serious pollution incidents have been reported, both are currently having prosecution cases prepared by NIEA.

The project, funded by the Big Lottery Fund's Awards for All programme and supported by The Riverfly Partnership and NIEA, has been established by the Ballinderry River Enhancement Association (BREA) as part of the on-going implementation of the RIPPLE river action plan. Leo Cassidy, chairman of BREA said, "It is hoped that by setting up this monitoring network, we will gain a better understanding of water quality throughout the river system and detect more quickly when water quality is reduced. Good water quality means good wildlife and good fish."

In the next RIPPLE News we will find out how the volunteers are getting on with their river-watching and how the project is helping to improve water quality in the catchment.

To find out more about this and other projects you could get involved in contact Mark on 028 867 61515 or e-mail [brea@ballinderryriver.org](mailto:brea@ballinderryriver.org)



© R Irvine



© BFH Ltd.

# OVERCOMING OBSTACLES TO FISH MIGRATION



**Each year, thousands of migratory fish, such as salmon, dollaghan trout, eel and lamprey, travel to and from important spawning and feeding areas along the Ballinderry River. However, it's not that easy for them to make these journeys as they must negotiate a series of barriers en route.**

Supported by the Northern Ireland Environment Agency (NIEA), BREA's Ballinderry Fish Hatchery Ltd have been undertaking a 'first of its kind' survey in the Ballinderry River system to identify in-river structures which may be causing an obstruction to fish migration. The information gathered will be used by NIEA as part of a detailed assessment of barriers to fish migration, which can ultimately help inform plans designed to make the fishes' journeys easier.

Mark Horton explains, "The Ballinderry, like many other rivers across Ireland, has a long and rich history of water-driven industry. In the past, linen, cotton, corn and even butter mills were all sited along the river, utilising the power of the water to drive machinery. These mills required weirs and dams to be built, holding water back and diverting it to mill wheels. With the exception of The National Trust's Wellbrook Beetling Mill the mills have fallen silent but many of the weirs and associated structures remain in the Ballinderry today. Most of these are redundant but some are still being used to supply water to, for example, fish farms, fish hatcheries and small hydro-electric power schemes.

The survey was designed to assess how much of a barrier, if any, these structures pose to fish migration. The flow requirements of fish species differ as an obstacle which can be easily negotiated by a salmon may be an impassable to a lamprey. By preventing each type of fish reaching available habitat, we limit the conservation value of the river and put at risk the wider ecology dependant on fish, such as otters and kingfishers.

For many years, scientists and river managers have debated the pros and cons of removing redundant weirs. On the one hand, removal would go some way to reverting the river back to a more natural state and allow free passage for fish, however, removing the structure could also release deadly amounts of pollutants, such as heavy metals and chemicals, which build up over time in the silt trapped behind such structures, potentially causing decades of ecological damage downstream – and this doesn't resolve the issue of structures which are still in use.

Respectful of the fact that rivers are there to be used and enjoyed by everyone and everything in the river system, BREA propose that perhaps a more amicable and practical solution is to provide some form of fish passage easement. This has already been done very successfully by BREA in 2004, when a Denil type fish pass was added to Dunman Weir on the Lissan Water. The pass allows dollaghan and salmon to get up to several kilometres of very good spawning and nursery habitats upstream of Lissan House Demesne, which was previously grossly underutilised.

Mindful that different fish require different types of fish passes, this survey, which will now be followed up by NIEA in a detailed assessment, will provide us with the opportunity to make informed decisions on fish passage easement, allowing every reach of the river to flourish with fish and the wildlife dependant on them"

If you would like to find out more about fish and their migration and passage on the Ballinderry River please contact Ballinderry Fish Hatchery Ltd on 028 867 61515 or e-mail [brea@ballinderryriver.org](mailto:brea@ballinderryriver.org)

## GETTING INVOLVED COULDN'T BE EASIER

If you would like to get involved in the RIPPLE project or find out what is happening on the river in your area then please contact us.

**Mark Horton – RIPPLE Coordinator**  
RIPPLE, Ballinderry Fish Hatchery Ltd,  
Orritor Road, Cookstown, Co. Tyrone BT80 9ND  
**Telephone:** 028 8676 1515  
**E-mail:** [ripple@wwf.org.uk](mailto:ripple@wwf.org.uk)  
**Web:** [www.wwf.org.uk/ripple](http://www.wwf.org.uk/ripple)



## BALLINDERRY WINS COMMUNITY WATER AWARD

**The Northern Ireland Environment Agency's (NIEA) WATER Environment Community Awards are designed to provide up to £1000 funding for activities which inspire people to help protect our precious rivers and loughs. Fighting off strong competition the Ballinderry secured the funds for its river clean-ups.**

The Ballinderry Clean Stream Initiative, funded by the NIEA award, will see the Ballinderry River Enhancement Association (BREA), Clean Up the River Environment (CURE) and the Holy Trinity River Warriors working together and using the money to purchase equipment such as litter grabbers, high-visibility vests, nature identification charts, binoculars and sweep nets.

This 'equipment bank' will be used to allow the groups and any other individuals in the area to carry out clean-ups and nature surveys along the river. Mark Horton explains, "there are lots of willing volunteers out there who give up their time to do

litter picking and wildlife watching along the river, but often a lack of tools limits what can be achieved. By securing these funds, a store of equipment can now be created which can be used by groups who want to help clean-up and learn more about the Ballinderry River. By working together and sharing resources we can all achieve a lot more on our local river".

Speaking at the Water Environment Community Awards Ceremony on 26th May 2011 Dave Foster, NIEA Director of Environmental Protection explained, "the awards recognise the efforts of local communities in protecting our water environment and inspiring others to do the same".

Both CURE and the Holy Trinity River Warriors are planning a series of events for later this summer. If you would like to find out how you or your group can get involved in the Ballinderry Clean Stream Initiative call Mark on 028 867 61515 or e-mail [brea@ballinderryriver.org](mailto:brea@ballinderryriver.org)



[www.wwf.org.uk/ripple](http://www.wwf.org.uk/ripple)

[twitter](#) BallinderryNews

**Ballinderry Fish Hatchery**  
Orritor Road  
Cookstown BT80 9ND  
t. 028 8676 1515

**WWF Northern Ireland**  
2nd Floor, 7 Exchange Place  
Belfast BT1 2NA  
t. 028 9033 2869