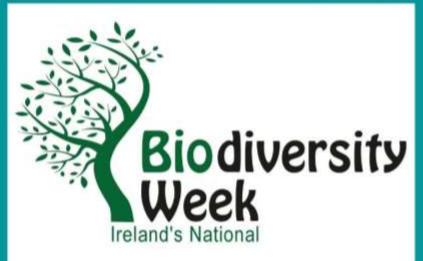
Our Wicklow Biodiversity



Wicklow Rivers - Ecology
and Connectivity



Deirdre Burns, Heritage Officer Wicklow County Council

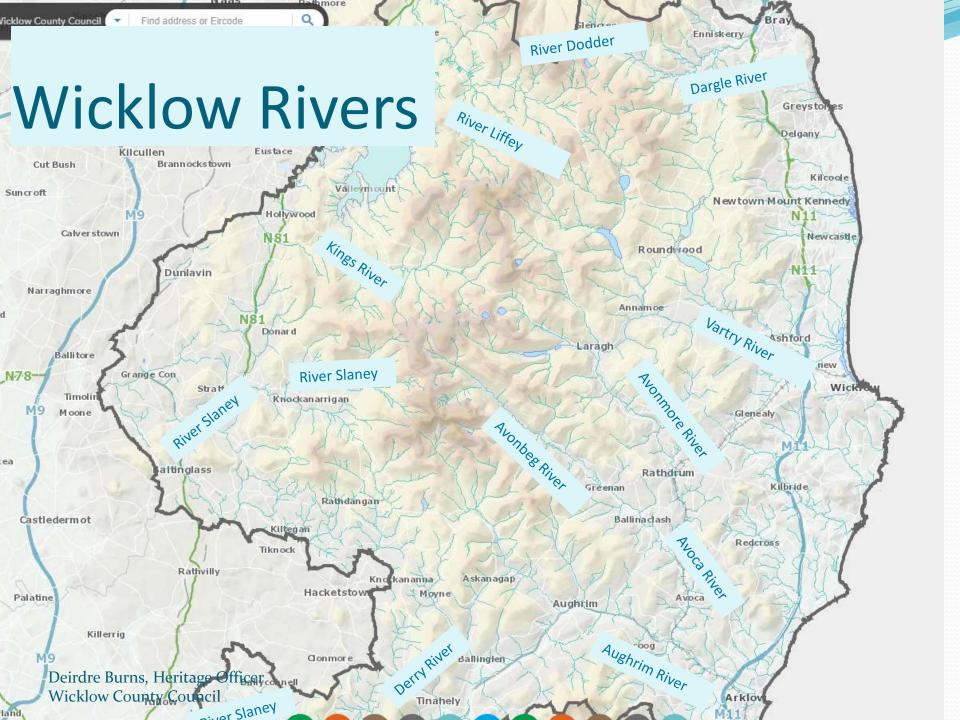




Running order

- 1. Overview of Wicklow Rivers Deirdre Burns
- Wicklow Fish Barriers Audit Brian Beckett, Inland Fisheries Ireland
- East Wicklow Rivers Trust (EWRT)
 Partnership and upcoming projects Luke Drea
 Fish barriers and remediation Prof Ken Whelan

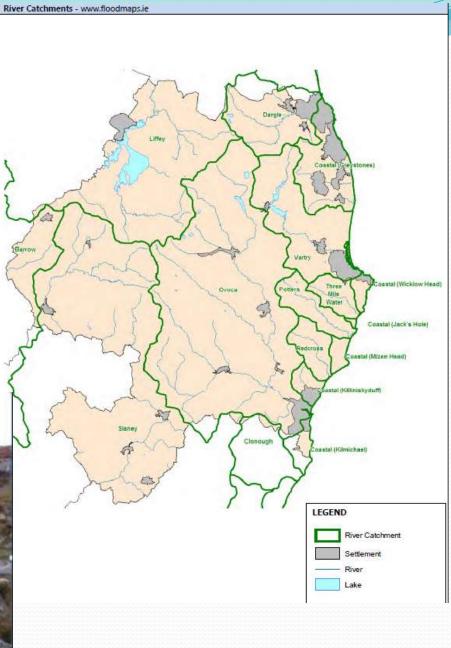
4. **Discussion** – Q &A and comments to chat box please



Characteristics of mountain streams

Peaty
Flashy
Oxygen rich
Naturally acidic – soft water
Specialised invertebrate life
Fast & Clean





Glens & Glaciers



Corrie Lakes - Scooped out by Glaciers

- Lough Ouler (Iolar)
- Lough Nahanaghan (Loch na hOnchon)
- Cleevaun Lough
- Lough Firrib
- Arts & Kelly's Lough
- Upper & Lower Lough Bray



Deirdre Burns, Heritage Officer Wicklow County Council

Waterfalls & Valleys





River Biodiversity

Clean River Bed- perfect for insects

















Key Riparian birds - Dipper



- Unique Irish sub species
- Dependant on invertebrates in fast flowing, oxygen rich water
- Nests Early stays in uplands all year round



Fig 1.1 Dipper nest in bridge cavity (pipe) 230 Old Bridge (Lough Dan), Upper Avonmore



Fig 1.3 Dipper nest on protruding stone 222 Meetings Bridge, Avonbeg



Fig 1.2 Dipper nest on pipe
324 Sheeanabeg Bridge, Ballycreen



Fig 1.4 Dipper nest in Ivy 299 Ballinglen Bridge, Moyne

Table 5.1	Priority list of bridges for provision		n of Dipper nest bo
ID	GridRef	Bridge Name	Bridge Group
056	T093815	Ballymanus Bridge	Ow River
060	T075750	Drummin Bridge	Derry Water
165	T034797	Rathcot Bridge	Moyne
168	T081725	Toberpatrick Bridge	Derry Water
169	T068742	Killaveny Bridge	Derry Water
177	T110775	Killballyowen Bridge	Derry Water
201	T221992	Annagolan Bridge	Lower Vartry
208	T105908	Drumgoff Bridge	Avonbeg
209	T108911	Coolalingo Bridge	Avonbeg
212	T031803	Moyne Bridge	Moyne
220	T172850	Ballinaclash Bridge	Avonbeg
229	T173993	Annamoe Bridge	Upper Avonmore
260	T115770	Kilpipe Bridge (1822)	Derry Water
262	T101748	Gilbert's Bridge (1837)	Derry Water
263	T075730	Coolalug Bridge	Derry Water
301	T037793	Sandy Ford Bridge	Moyne
321	T245978	Ballycullen Bridge	Lower Vartry
322	T126760	Coolbawn Bridge	Derry Water
327	T153873	Greenane More Bridge	Avonbeg
332	T107908	Glenmalure Bridge	Avonbeg



2012: Of 90 bridges surveyed 45% suitable for Dippers.

61% occupancy rate for suitable bridges

Artificial nesting boxes at 20 locations

2019: Survey on Avonmore catchment Dippers occur in 82 % of 1km squares in the area of the catchment north of IFI.

Grey Wagtail



Most widespread in range – occurring from upper reaches to sea.

Not solely dependant on waterborne insects, will also feed on spiders, caterpillars in the catchment

Red – listed due to vulnerability to harsh weather conditions

The 2019 survey recorded Grey Wagtails in 66% or 39 of the 59 1km squares surveyed

Kingfisher



Breed in taller riverbanks and under overhanging vegetation

Excavate a nesting tunnel complete with raised chamber.

Fast-flowing nature of large areas of the Avonmore catchment, not ideal. 2019 survey Kingfisher was the scarcest / most localised of the four species. Recorded in 19% or 11 of the 59 1km squares surveyed.

7 of these were in the mid-section of the Avonmore with 3 in the section of the Avoca river between Avoca and the site of the old IFI factory. One was recorded in the lowest section of the Avonbeg

Goosander



Avonmore River is stronghold for this species in Ireland

First recorded in 1993 – as range expanded from Britain and Europe

2011 Bird Atlas records 3 confirmed breeding records

Currently there are likely 3-4 breeding pairs (2019 survey found goosander in 27% or 16 out of 59 1 km squares surveyed – however they are mobile species therefore individuals may be recorded more than once)

NPWS - Nest box scheme

What puts pressure on our waters



Final comments...

- Wicklow Rivers very distinct
- Rivers are more than just drainage channels dynamic, living systems
- Importance of small streams (<2m wide) make up to 75% of our river network in Ireland
- Aquatic organisms/ macroinvertebrates essential to provide clean water, functioning river ecosystems
- Riparian vegetation very important
- Land uses in wider catchment impacts

