Management of Pike in Designated Brown Trout Fisheries Review Group

08 May 2017, Citywest

Attending: Sean Long, Myles Kelly, Josie Mahon, Declan Cooke, Colm Fitzgerald, Paul O'Reilly, Catherine Kerins, Sam Sheppard, Joe Keena, John Connolly, David Hamill, Paul Byrne

Presentations

- Dr. Robert Rosell & Dr. Dennis Ensing (AFBI NI)
- Dr. Debbi Pedreschi (IMI)
- Mr. John Curtis (ESRI)
- Dr. Martin O'Grady

The format for the meetings with the invited experts was not set.

While each expert has their own specialist area, they were circulated the following key questions:

- 1. The benefit of pike management?
- 2. Do wild brown trout populations increase or decrease in designated wild brown trout fisheries where pike management is carried out?
- 3. What is international 'best practice' in the management of both spp.?
- 4. Is pike a native sp.?
- 5. Is the theory that pike prefer to prey upon brown trout rather than other spp. valid?
- 6. What effect does pike predation have on other coarse fish spp. in the designated fisheries?
- 7. What impact do other spp. have on brown trout in the lakes?
- 8. What Irish river systems and lakes now contain pike but did not contain pike when record keeping began?
- 9. Can pike be effectively removed from systems into which they have been introduced?
- 10. Which Irish waters (if any) are more suited to pike than brown trout now- and why?
- 11. What scientific evidence is available to demonstrate what would happen to other spp. populations if IFI stopped managing pike in the designated waters?
- 12. Which waters, if any, should be considered as unique 'brown trout fisheries', and why?
- 13. What, if any, is the optimum level of natural predation to sustain healthy species populations?

Dr Robert Rosell

Q & A

1. JK – is removal of pike necessary to maintain trout populations? (O'Grady 1995) RR -O'Grady '95 pre zebra mussel; need to maintain some cropping to maintain fishery

2. JK- O'Grady / Delanty 2008- some of which is post ZM?

RR- Pike sampled are larger i.e. gone piscivorous; defer to those who have studied specific lakes i.e. IFI in Southern Ireland.

3. DH- have you confidence in available data?

PB- Data that pike prefer trout -

RR- Trout in L. Erne – 2% biomass, far more in SCA than should be

4. SS-I believe seasonality is a factor

RR- More data available in 2018 - acoustic soundings

5. DH- Any SIA carried out?

RR- No. It will tell you trophic level, 6 months limit on use of data; 1999 -2000 Erne study – 63% trout/salmon/smolt

6. JK – time of year an impact?

RR – this is what we have as data.

7. JK – Seasonal closing of areas to protect spawning areas – only gill nets prohibited? RR – fishery is open all year

8. DH- Netting surveys – change in water clarity may be moving sp. away from the margins? RR- Cannot compare Corrib with Erne, though Erne in current state is much more like Corrib; Corrib very clear so ZM didn't have as much impact. Kathleen Maguire has completed zooplankton crop PhD.

Dr Denis Ensing

Q & A

1. JK – regarding pike status as a native sp.?

DE –Post-glacial dispersal is his area of interest; Pedreschi's theory 'not possible'; both views are hypotheses only – needs more sampling, size too small;

Henry Newland - mention of pike in Erne in 1851 before Shannon- Erne canal;

Most recent date is from early Iron Age;

2. DH- Irish Naturalist Journal – Declan Quigley – re 7,500 years ago;

RR- East coast - Normans c. 1000 years ago, moving from east coast

DE- Funding available for more extensive survey pan UK/Europe

RR- Native cut off point – FIL2 dropped the question early on as to whether native / non-native applied based on the sp present; FIL 2 assigns the sp. under influence to ecology

3. DH – have to manage with what you've got?

RR- Would recommend extermination of pike if they got into the Melvin system.

4. DC- Introduction of pike in last 30 years – IFI data of seine nets – Peter O'Reilly – data in our archives

Dr. John Casselman - Bibliography of Pike - no pike before 1600s...?

RR - Is it possible that pike weren't discovered earlier e.g. pollen?

Dr. Debbi Pedreschi

- 1. Re: naturalised or native?
 - Population structure similar to Britain
 - Absence of evidence is not evidence of absence
- 2. Can we tell if pike prefer trout?
 - Not what Pedreschi tested but would be surprised if they did.
- 3. Are pike a threat?
 - Probably, but not in isolation [i.e. environmental impacts on habitat, invasives etc.]
- 4. Pedreschi not biased, advocates precautionary approach
- 5. Current question a political question not biological angling, not species driven [this is]a review of 'fisheries'
- 6. Did not say they are native pike as likely / more likely to be native per available data
- 7. Study not intended to study whether pike preferred trout
- 8. Pike should be viewed as naturalised, question of status shouldn't be considered
- 9. Lake designation is based on angling, not biology
- 10. In her experience, brown trout are not the main prey of pike
- 11. [pike] can have an impact on trout, but not in isolation
- 12. PB- Erne study short period of time vast majority of samples came from a period when trout/pike overlap age is key first 5 years pike don't eat trout
- 13. DH- native v non-native need more evidence but it's not forthcoming/available

Mr John Curtis

- 1. JK The questions were unfair. Impossible to make choices. Respondents needed to know about Lagarosiphon
 - JC 82% response rate. A photo of Lagarosiphon was included

There followed a discussion on the types of questions in the choice experiment. The design of the survey, consultation with stakeholders and the objectives of the work.

Dr Martin O'Grady

- 1. JK- Pedreschi sample size was small not her fault request Chairman to consider inviting genetic specialists mentioned by Dr. O'Grady (Dr. Paolo Prodall QU and Dr. Philip McGinnity UCC)
- DH- Is there a 'fear' that pike might be considered a native species?
 MOG-scientific data and accessibility is getting cheaper and better, so science will improve;
 personal view is that policy shouldn't change until native status is confirmed or otherwise;
- 3. DH- L. Sheelin is not an example of how a fishery should be managed; roach living pelagically
- 4. DH- query re zooplankton sediment core sampling L. Sheelin post 2000 as proposed by R&D

Actions

The following actions were assigned:

• MK to upload presentations to web on receipt