

## **Report 1**

### **Nith District Salmon Fishery Board meeting on 11<sup>th</sup> December 2012**

**By John Miller**

This report is aimed at all anglers having a valid ticket to fish the River Nith. I attended the quarterly meeting of our Fishery Board at Friars Carse on Tuesday 11<sup>th</sup> December at the invitation of the Board with a view to writing this report. It is intended that I attend all future meetings of the Board and to issue to you a report on each such occasion.

Let me introduce myself. I am John Millar, I am a retired solicitor living in Dumfries and I have fished the Nith for over 20 years. I have been a member of Dumfries & Galloway Angling Association for almost all of that period.

I was approached by the Board in response to a perceived lack of communication between the Board and fishermen which the Board recognised and wanted to address. My role would be to attend the meetings of the Board and to prepare a report for the use and benefit of fishermen, which report would be put on the Board's website.

Obviously, there are discussions at the Board which are not of interest to the average fisherman. It is part of my role to identify what is relevant and of interest to fishermen and to keep you informed as to what the Board is discussing and doing.

The matters on which I want to report to you on this occasion are:-

1. Bailiff matters/poaching concerns
2. Signal crayfish
3. Budget/bailiff/assessment rebate
4. Sea lice
5. Aquaculture and Fisheries Bill

1. Bailiff matters/poaching concerns

The Board advertised the post of Senior Bailiff and conducted interviews before a five man committee and has now appointed David McMichael as Senior Bailiff to replace Barry Young who resigned in September. There appeared to be unanimous approval of this appointment among those Board members at the meeting and I got the impression that much is expected of Mr. McMichael. His qualifications for the post are electrofishing certification, chainsaw certification, P6AW spraying certification; in addition David has gained a wealth of experience working in the field of fishery enforcement on the Nith working with Mid Nithsdale Angling Association and the Fishery Board as a volunteer Bailiff. David has completed the Certificate course for the Institute of Fishery Management.

There does not appear to be much solid evidence that poaching is a major problem, but there clearly is a recognition that a lot of people think that it is a problem and the Board will not take such concerns lightly. The Board will make sure that Mr. McMichael and his Bailiffs will deal properly with any poaching threat.

2. Signal Crayfish

The Fishery biologist Deborah Parke issued a paper, a copy of which can be found at the end of this document. She reported that there is ongoing monitoring and that this threat is being taken very seriously indeed. She handed out laminated guidelines on what actions fisheries should take to minimise the risk of spread of signal crayfish to the Nith catchment rivers. So far the presence of signal crayfish has been found in Lochfoot and the burn flowing out of it both of which are at the bottom of the river system. As signal crayfish generally migrate downstream it is hoped that the problem can be contained.

3. Budget/Bailiffs/assessment refund

There was a discussion led by the Clerk and to cut a long story short there was unanimous agreement that (a) the assessments paid to the Board by each fishery in the catchment should increase in the coming season by 4.5%. This was the first increase for three years. (b) the Board would make available the cash to pay the salaries of two seasonal bailiffs. There would also be the usual honorary bailiffs who give their services on a voluntary basis (c) the assessment rebate recently enjoyed by fisheries as a direct result of the Fishery Director's consultancy work would be retained for the coming season at the same amount as the season just past.

4. Sea Lice

Just to report that this problem is being reviewed at Scottish Government level. The Board monitors the situation closely.

5. Aquaculture & Fisheries Bill

Papers were issued briefing on this Bill which is probably unlikely to become law during 2013. The Association of Salmon Fishery Boards has lodged evidence and comments with the Scottish Government. The Board is keeping a close eye on the progress of this Bill.

As a personal comment, and as one of you who has bemoaned the lack of fish in our rivers, especially this last season, I expect that we are all aware that the problem is wide spread and is not something over which the Fishery Board has control. I am aware from many conversations which I have had on the river and from other reports that some of you consider that the bailiffing effort has not been as effective as you would expect. The Board does not accept this but is aware of the criticisms. It remains to be seen if comments and complaints about poaching recede.

I have to tell you that I was taken aback at the amount and range of work which our Fishery Director undertakes on our behalf. If I was unaware of the extent of his work I expect that many of you would be very surprised to learn just what is involved. Apart from the day to day work that he does on the river system and his extensive consultancy work for which the Board is paid large fees, his work involves meetings concerning invasive species, the Aquaculture Bill; meetings of the Association of Salmon Fishery Boards and delivering lectures as a recognised expert to such as the

Agricultural College at Auchencruive to name just a few. Did you know that we are at the forefront of the investigations into what has happened to our sea trout? Jim Henderson is the Chairman of the Celtic Sea Trout Project working out of Bangor University and funded by huge European Community grant funds.

I mention this so that when we are complaining we keep in mind that our Fishery Director does a wide ranging job representing our Board and therefore often has to wear a suit rather than a pair of wellies in the pursuance of his duties.

The Board hopes that I can fulfil the role of liaison between the Board and you. I certainly think these reports will help. I am obviously not aware of what response, if any, is likely to come from this and later reports. I look forward, with interest, to finding out!



## **An overview of North American Signal Crayfish and their potential impact to the Nith catchment**

North American Signal crayfish (NASC) are an invasive non-native aquatic species that was introduced into Great Britain in the 1970's to be farmed for food. Since then it has quickly spread throughout the country and can have a serious impact on our native biodiversity, economy and recreational sports such as angling. The Nith Catchment Fishery Trust has been monitoring for NASC on an annual basis since 2010 and surveying has taken place in areas that have been identified as high risk entry points within the Nith catchment. In summer 2012 the presence of NASC was confirmed in Lochrutton on the lower western edge of the Nith catchment. Lochrutton is located at the top of the Cargen Water, which flows into the River Nith approximately 1.5 km downstream of Kingholm Quay. Recently there has been a reported sighting of NASC at Kingholm Quay although this has not been confirmed and surveying is being carried out by the Nith Catchment Fishery Trust.



### **General Facts:**

- Introduced from North America
- Females carry 200-400 eggs on the underside of their tails
- Adults burrow into river banks, where they hibernate over winter
- Live in lochs, rivers, burns and ponds and also able to survive in brackish water
- They are predated on by otters, mink and some predatory fish such as pike and eel
- Can live for up to 20 years

### **Pathways for spread/ introduction**

- Upstream/downstream migration of NASC
- Inter-catchment movement through drainage ditches and across land
- Deliberate introduction for wild harvest, fish food or weed control
- Accidental introduction with stocked fish
- Use of recreational equipment between water bodies without being disinfected

### **Ecological impacts**

- Preys on native species i.e. fish eggs and fry, aquatic invertebrates, amphibians and plants
- Competes for habitat and food with native species
- NASC spread crayfish plague which kills native white claw crayfish (white claws are not known to be present in D&G)
- Their burrowing can cause erosion of riverbanks, potentially destabilising bankside structures
- Large populations of NASC can negatively impact on fish populations

### **Economic impact**

- NASC can have a negative impact on economically important fish species i.e. salmon and sea trout
- At high densities can become a nuisance to anglers through loss of bait
- Cause income loss for businesses that rely on angling
- Increased cost of biosecurity measures i.e. disinfection stations
- Restrictions on the movements of fish i.e. fish farms in proximity to crayfish
- Restrictions of the movement of water i.e. cross catchment piping of water to reservoirs
- The estimated annual cost of NSAC to Scotland is £576,000 (Williams *et al.* 2010).

### **Control**

- NASC are very difficult to eradicate in large water bodies
- Control methods include
  - Manual removal - time consuming and ineffective as only removes large crayfish
  - Chemical control – pyrethrum based biocide can be used in small water bodies but this results in killing all fish and invertebrates also present in the watercourse. This method is not considered suitable for large lochs or flowing water.

### **Recommended management**

- Increased awareness of threat posed by crayfish and promote the Scottish Governments Check, Clean, Dry campaign to all water users by:
  - Issuing anglers with biosecurity information with permit
  - Putting up signs/information in areas used by anglers and canoeists
- It is illegal to trap crayfish without a licence in Scotland. It is also illegal to be in possession of a live crayfish or to release crayfish into the wild. If one is accidentally caught it should be killed on site.
- Any sighting should be reported to either the Nith catchment Fishery Trust, the Scottish Environment Protection Agency or to Scottish Natural Heritage.

### **References**

Williams F, Eschan R, Harris D, Djeddour D, Pratt C, Shaw RS, Varia S, Lamontagne-Godwin J, Thomas SE, Murphy ST (2012) The Economic Cost of Invasive Non-Native Species on Great Brittan. CABI.