

Trial of new electric fishing box 2009.

Survey Date 05/06/2009

Survey in upper reaches of Middleton Beck on the River Lune.

Grid Ref SD 63623 88674

Conductivity 56 ms

Temp 11.5 C

Low conductivity beck fishing for Brown Trout.

Started off at 200 volts, 40 duty cycle and 40 hz.

Person on anode reported that he was seeing fish but they were no attracted to the anode.

Then adjusted to 90 on duty cycle and reduced the voltage to 190.

This worked reasonably well, and there were no fish mortalities. The beck was very low after a dry spell and the fish are hard to net out in low water conditions. After the fish were stunned, some of them tended to drift and get caught in the substrate, which then resulted in them having to be hand picked in to the net.

Survey Date 11/06/2009

Further survey on Middleton Beck on River Lune

Grid Ref SD 63860 88749

Conductivity 52 ms

Temp 12.5 C

Started off at 150 volts, 90 duty cycle and 40 Hz.

This worked very well, with no fish mortality and most fish were captured from forced swimming toward the anode.

Also picking up very small fry down to 30 mm in length.

Survey Date 13/07/2009

Salmonid survey on the upper reaches of Hareden Beck a tributary of the River Hodder.

Conductivity 45 ms

Temp 18 C

Started off at 120 volts, 100 duty cycle and 50 Hz.

Noticed that some fish were swimming away form the anode so upped the voltage to 140 v. Again some fish were seen swimming away from close proximity of the anode. So upped the voltage to 160 v and kept the duty cycle and Hz the same. This seemed to work fine. Although an odd fish was seen to get away. Caught in the region of 200 trout fry and parr. No fish were killed on this survey.

The flows were relatively high during this survey after a recent spate. So we feel we did very well under the conditions.

Survey Date 01/07/2009

Salmonid survey on the River Dunsop a tributary on the River Hodder

Conductivity 124
Temp 18.8 C

Started off at 120 volts 80 Duty Cycle and 50 Hz. There was a new member of staff on 1 of the anodes.

Some fish were seen to be swimming away from the anode, so we upped the voltage to 140 v.

There was then a deep section of water at this site and the fish were again seen to be swimming away. We increased the voltage first to 160, 180 and finally 200 v and kept the duty and Hz the same. We did have 14 salmon and 1 trout die on this survey. This was out of approx 165 salmonids in total. Some of this may have been down to the new member of staff training to use the anode. Also the deep section of the site was problematic for effective sampling.

Since this day when we lost quite a few fish, there have been no other instances where we have had a lot of mortality.