Presentment 20th July 2016

I am Dr Fiona Macdonald, veterinary surgeon with a special interest in fish.

Both the Official Verderer and the Deputy Surveyor will be aware that I expressed my concerns at the recent NFNPA Planning Committee meeting on Wootton Riverine Planning application. I feel that the design of the Wetland Restorations has serious implications for fish and other aquatic creature health and welfare. The Forestry Commission along with the University of Southampton investigated the effects of shallow meanders in streams combined with lack of tree cover and this peer reviewed paper is available on the Forestry Commission website. Basically it stated these effects caused high water temperatures – salmonid fish (which include brown and sea trout) require temperatures between 5°C and 15°C for normal function and above 23°C will be lethal. In addition loss of tree cover results in loss of food source for aquatic creatures, and also allows predators such as herons and egrets good access to fish since they walk into shallow water to stand and wait for their prey.

Despite repeated requests, I also understand that there is no formal provision by the Forestry Commission for frequent detailed monitoring pre- and post-works to see what effects the works have had on the ecosystems. Thus I have decided to carry out some monitoring myself and the results to date are giving me serious cause for concern. Slufters was one of the original formal Planning Applications, and the work was carried out some 2 years ago.

1. The temperature of the water in Slufters on the 5th of July was 25°C in the open and 23.5°C under some tree cover – and this was just after a prolonged period of cool wet weather (tennis fans will remember the adverse weather problems and rain at Wimbledon). In contrast, Latchmore yesterday (18th July) was 19°C while the air temperature was 31.5°C.

2. Forest streams are in general acidic, or even highly acidic, due to the nature of the origins and substrates of the streams as well as the geological influences and pH levels can range between 5.3 to 6.2. The pH of the water in Slufters was 7.3 some 2 years after the work was done and Harvestslade was running at a pH of 7.5 to 8.6, which means that all the aquatic life is having to try to survive in seriously adverse conditions.

3. For gill-breathing creatures such as fish, eels, newts etc, the particle content of water is really critical as a high particulate content will seriously damage delicate gill tissue and cause significant mortalities. High water temperatures will exacerbate this by lowering the oxygen-carrying capacity of water, and slow-moving water will be limited in how it gathers oxygen – that's why ripples and cascades in a stream are so important for fish. The particle content of the water in Slufters was above scientifically accepted levels for these creatures.

All of these factors would explain why I saw no sign of any fish when I walked these streams at various times this year. Latchmore, on the other hand, is teeming with fish and the water chemistry is eminently suitable for fish and other aquatic creatures, with comfortable temperatures even in very hot weather.

Both the Official Verderer and the Deputy Surveyor have repeatedly stated that this work will improve the existing wetlands. I cannot comment about the actual bogs and wetlands, but I have seen no evidence of improvement in the associated streams, but very much the reverse which despite repeated remedial work in some cases are continuing to be devoid of fish life as a result of major water quality issues. How long will it be before the water in these streams returns to normal pre-works levels……if ever?

Also there are two legal issues here –

1. In general, wildlife crime is any action which contravenes current legislation governing the protection of the UK's wild animals and plants – if I had been responsible for what was done to the eels and brook lampreys at Harvestslade I would have been prosecuted.
2. Domestic animals including fish enjoy protection under the Animal Welfare Act and must be kept in conditions appropriate to their species and needs – what a pity this is not enjoyed by their wild relatives in the New Forest.