

# Wiltshire Wildlife Trust

*Advisory report February 2019*

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## Nadder - Tisbury

28 February 2018

Alice Baker and Nick Wilson (Wiltshire Wildlife Trust)

## Location and Owner

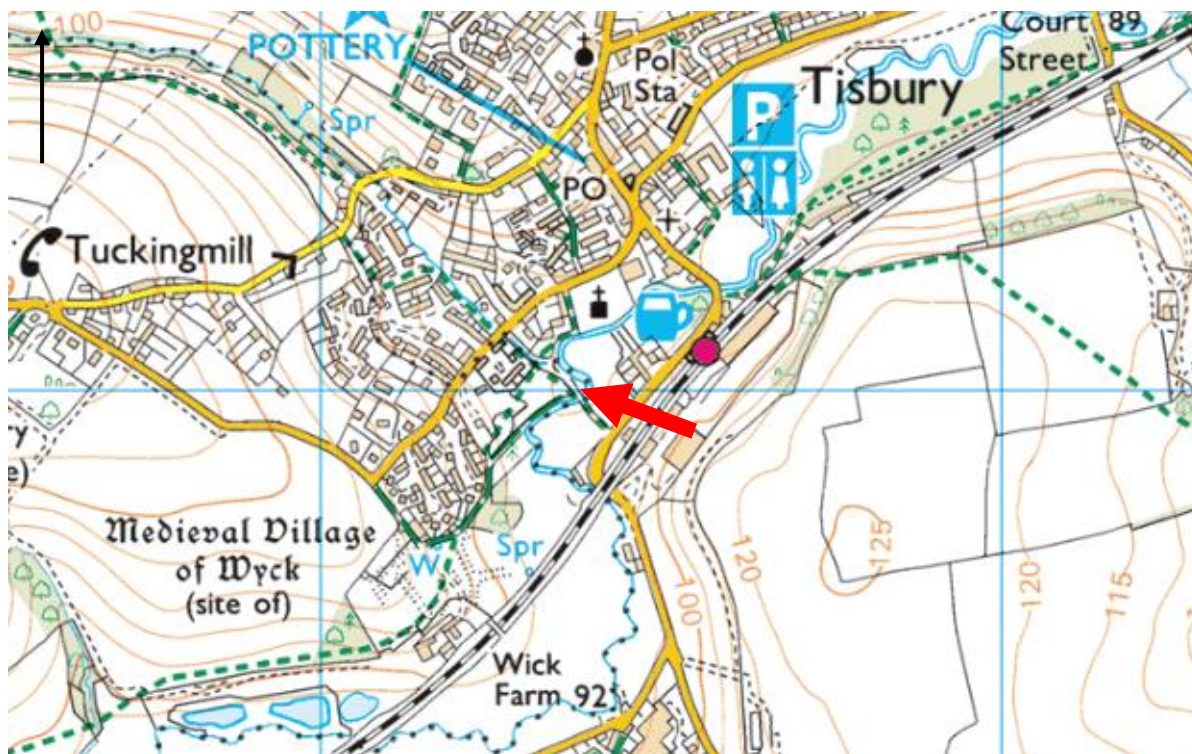


Figure 1: Map showing site location. Contains Ordnance Survey data.

An advisory visit was requested by Bev Ford from West Tisbury Parish Council and Sandra Harry from Tisbury Parish Council to look at a reach of the River Nadder running through a section of council owned public open space (Grid Reference ST9437629015, Figure 1). Wiltshire Wildlife Trust Project Officer, Alice Baker, along with trainee Nick Wilson, attended the site visit to make recommendations on the management and ongoing maintenance of the river.

The visit was requested due to concerns of over-shading along this reach of the Nadder and in relation to proposed works to create a sensory garden along the riverbank.

## Summary of Advice

- Selective removal of trees will improve light in the channel and also let light in to aid in the creation of the garden.
- Riparian planting and preventing dog access to the water will improve the stability of the bank and reduce sediment deposition into the river.

## Site Description

The site is located at the upper end of the River Nadder, a tributary to the Hampshire Avon, in Tisbury. The area visited was approximately 150m of river running through open space owned by Tisbury Parish Council, recently passed over from West Tisbury Parish Council. A pasture field borders the river on the right-hand bank and managed grass and pathways border the river on the left-hand bank (Right and left-hand bank are identified looking downstream).

At the beginning of the reach there are many trees, the majority on the left-hand bank, which are over-shading the channel (Figure 2). There is also dog access to the river from the left-hand bank which has caused erosion. Further down the reach the left-hand bank is a solid concrete revetment (Figure 3) for approximately 80m, the right-hand bank is willows that have been managed and re-grown, forming a dense wall that is shading the channel heavily (Figure 4). Some of these willows are growing into the channel which is creating nice natural woody debris, assisting the natural processes of the river.



*Figure 2: Area of Alder trees shading the channel at the start of the reach visited.*

Water levels were relatively high at the time of the visit and the water was coloured meaning the bed was not visible. This is not unexpected at this point on the Nadder as it rises in limestone and greensand, slowing primarily through agricultural land before reaching Tisbury. The flow appeared relatively sluggish at the beginning of the reach visited, indicating a deeper channel however it sped up towards the end, with natural riffles revealing gravels on the river bed (Figure 3).

Overall, the river would benefit from some tree clearance to allow more light into the channel. This would also be beneficial for the creation of the sensory garden as the proposed site is currently heavily shaded. In this area there is a small section of erosion where it appears dogs are entering the water, this would benefit from dog exclusion to allow riparian vegetation to re-grow.

In general it would be advisable to install small woody structures alongside the hard revetment, to trap sediment, softening the bank and providing marginal habitat for wildlife and plants. However, in this location these would not be recommended as they would be exposed to flows on the outside of the bend and have the potential to fail over time. The majority of sediment will be deposited on the inside of the bend and this is where marginal vegetation should be encouraged to grow.

Consequently it is recommended that the right-hand bank is closely monitored and this is not allowed to become too over shaded.



*Figure 3: Natural riffles towards the end of the reach visited. This figure also shows the concrete revetment.*



*Figure 4: Willow over shading the channel in summer but also providing wood debris into the channel.*

## Management Recommendations

### Tree Removal

The river is in relatively good condition but would benefit from the removal of some trees along the reach visited. These are marked up on figure 5, please note this is just advisory and further tree surveys, including bat surveys, would be required before any action is taken. The trees recommended for removal are alder trees (*Alnus glutinosa*), currently they are shading both the channel and site for the sensory garden. The removal of some limbs on the right-hand bank that are leaning over and shading the river, including the line of willows, is also recommended.

Any work such as this should be undertaken between the months of August and November to prevent disturbance to breeding birds and downstream impacts on spawning fish.

### Reducing Erosion

There is a small area of erosion on the left-bank in the area marked for the sensory garden. This appears to be caused by dogs entering the channel. This would benefit from fencing or reinforcement to allow marginal vegetation to stabilise the bank and prevent further erosion and sediment deposition into the channel. It is recommended that the vegetation up to the bank top and 1m away is left unmanaged. The only exception to this would be the removal of the invasive non-native plant Himalayan balsam which is known to be present in this area.

### Be vigilant for invasive species

Invasive species did not appear to be a big problem, but vigilance is important as these species can take hold very quickly. Species to be aware of include Himalayan balsam, Japanese knotweed, giant hogweed, floating pennywort, New Zealand pygmyweed, water primrose and parrot's feather (appendix 1). Ensure plants used along the river are native with UK provenance. Be vigilant for American signal crayfish. It is illegal to catch or trap American signal crayfish without a licence from the Environment Agency as it may affect the species' population dynamics, additionally it is easy to confuse the invasive crayfish with the native white-clawed crayfish.



Figure 5: Map of locations proposed works

## Permissions and Legal Considerations

Where any tree works are being undertaken, protected species surveys should be carried out, particularly where there are mature trees with cracks or ivy that may be used by bats as roost sites. If planning to do any work within 8m of the river it may be necessary to apply for an Environmental Permit. This can be done via <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>. There is a £170 fee for this application (please note this will be revised on 1<sup>st</sup> April each year). Due to being outside of the Avon System SSSI however, a local exemption may be applicable. It is important to consult with the Environment Agency to discuss all consenting requirements.

If you require any further advice or assistance with applying an environmental permit, please contact a member of the Wiltshire Wildlife Trust Water Team (details below). Please feel free to contact us with any further queries or questions.

### Disclaimer

This advice has been put together with as much diligence as possible. However, as it is only based on one site visit – not involving any water quality measurements – we cannot guarantee that implementing our recommendations will lead to the desired enhancements.

Images in this report have been taken by staff undertaking the visit. They may be subject to copyright.

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**Wiltshire Wildlife Trust**

The Wiltshire Wildlife Trust works with members, volunteers, supporters, the community, landowners, schools, businesses, local authorities and central government to ensure that we continue to support and improve natural habitats, conserve the countryside and its wildlife and help develop thinking that enables everyone to understand how to make a valuable contribution towards creating a sustainable future.



# Appendix

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## Invasive species to be aware of

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**Japanese knotweed**



**New Zealand pygmyweed**



**Giant hogweed**



**Floating pennywort**  
Image courtesy of GBNSS  
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**Himalayan balsam**



**Water primrose** Image courtesy of GBNSS  
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**Parrot's feather**  
Image courtesy of GBNSS  
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**American signal crayfish**