## RIVERS, STREAMS AND PONDS FOR GREATER HORSESHOE BATS





## **Photo: S. Williams**

Greater horseshoe bats echolocate at a high frequency, using a very directional call. This means that it disappears rapidly if it has nothing to bounce back from. Rivers and streams help them to navigate through the landscape by providing linear features that they can travel along. Greater horseshoes are rarely found more than a few metres from a navigational feature such as a hedge, woodland edge, river or stream.

As well as being of benefit to commuting greater horseshoes, many other bat species will use rivers, streams and ponds for feeding and navigating such as Daubenton's and soprano pipistrelles. A whole range of other mammals, birds and invertebrates will also take advantage of healthy water habitats. Whilst ponds are not vital habitats for greater horseshoes, the marshy areas around them often provide a vital source of insect prey, creating diversity in the landscape. Bats also need to drink, so rivers, streams and ponds are important resources, providing the water is clean.







Photo: © Kevin Durose/www.bats.org.uk

## Managing water courses and ponds for bats

- Maintain tree cover along river banks this not only provides dark corridors and navigational features for greater horseshoes, it also provides sheltered areas for insects to congregate.
- Restrict livestock access into watercourses to maintain water quality fence the livestock out and provide water troughs if possible, or create an area of hardstanding with a cattle drink.
- Prevent over poaching of fields adjacent to watercourses or ponds, this will stop excess soil run-off into the river.
- Graze with livestock in fields close to waterways this helps to provide good structure and lots of insects for bats to eat - including dung beetles.
- Controll non-native invasive species such as Himalayan balsam this plant leaves bare soil prone to erosion as it dies back in the autumn and winter. Control by hand pulling is ideal.
- Leave large margins adjacent to watercourses in arable fields ideally
  planted up with a diverse mix of wildflowers and grasses to provide
  space and food for insects. This will also slow the flow of water into
  the river or stream. Avoid spraying pesticides close to the margins to
  prevent run-off and drift.

## **Creating ponds for bats**



- Although greater horseshoes are not often associated with ponds, many other bat species are.
- Create as big a pond as you can, ideally lining it with clay to prevent drying out.
- Create marshy areas leading into the pond this will help to attract more insects.
- Allow pond plants to colonise naturally introducing plants can bring in pests that can spread rapidly.
- Try to restrict livestock access into the pond.





