

Case Study: River Ivel Walk, Biggleswade

RIGS leaflet *Ice Age Gravels: Ivel Walk, Biggleswade*

Introduction

The River Ivel walk takes you over the old flood meadows of Biggleswade Common along the present course of the River Ivel, all of which would have been a braided river valley during the Ice Age. Several public and permissive paths allow access to the area, including the Kingfisher Way that follows the route of the Ivel from near its source to its confluence with the Ouse.

Geological History

The River Ivel flows in an over-widened valley formed during the Ice Age. During the last 2.6 million years the Ivel has at times been a torrent of glacial meltwater. The force and volume of its flow allowed this Ice Age Ivel to cut down through the Greensand ridge to form terraces (one of which can be seen from the walk). This ridge is Lower Greensand which was deposited around 100 million years ago on the bed of a warm shallow seaway, some of the sand came from as far away as Yorkshire, carried by rivers. The harder sandstone rocks have been left standing above the surrounding clay landscape by erosion. The gravel beneath the topsoil that can be seen exposed in some places along the river banks are coarse and angular indicating rapid flows, although there are also a number of smoother more rounded pebbles that originate in the Midlands and were carried here by the glacier.

The River Ivel Today

Today the River Ivel is relatively small and tends (with human assistance) to stay in its course, although there are a few gentle meanders where erosion and deposition can be seen at work. The flat land adjacent to the river is rich in nutrients that have been deposited here each time the river floods over it. Biggleswade Common is grazed and has some areas of interesting flora and a dense population of moles. Much of the land to the west of the Ivel has been worked for the gravel beneath and many lakes can be seen alongside the river. Some of these are fishing lakes whilst others are managed for wildlife and attract large numbers of wildfowl each year. Kingfishers and moorhens can often be seen along the river whilst skylarks can be heard singing over the Common. If you are very lucky you may see an otter, or at least its footprints or droppings.

Fieldwork and further study ideas

- Local geology and the ice age
- Local geology and the Greensand Ridge
- River processes
- Wildlife and human uses on the floodplain
- Management of the river and surrounding areas
- Processes of erosion and deposition
- Investigate visitor pressure and management
- Investigate local habitats

