Milton Keynes Floodplain Forest Park Techniques: Multiple channel and wet woodland mosaic habitat creation

Project location: Ouse Valley near Cosgrove, Milton Keynes
River: River Great Ouse
County: Buckinghamshire
Project start date: May 2007
Project end date: 2015
Area/length of the site: 50ha/approx. 2000m
Cost: £900,000 (Green infrastructure inclusive of river and floodplain works and landscaping)
Upstream grid reference: SP802420

Site background

Historical forest clearance, past agricultural practices, river

realignment and dregding have eliminated wet woodlands and their associated characteristically rich wildlife from Britain's floodplains. Very few river restoration schemes have delivered biodiversity creation and sustainable flood risk management measures however a feasibility study showed that the removal of alluvial sands and gravels by an aggregate company, Hanson Quarry Products (Europe), at a site adjacent to the River Great Ouse, could provide an fantastic opportunity to do so.

Objectives

- The development of a topographically and ecologically diverse habitat mosaic 'floodplain forest'.
- Floodplain restoration by changing the hydrological regime through lowering the level of the park and thus reconnecting it to the River Great Ouse.
- To create multiple channels and a mosaic of wet woodland, fen, reedbed, wet grassland, marsh, carr and seasonal and permananent pool habitats, some of which are nationally scarce.
- A educational park for Milton Keynes, with full access and interpretation boards.

Design

Hanson are in the process of excavating sand and gravels over a 7-8 year period, which will be completed in phases. For each phase, the new landform will be created by extracting the gravel, followed by the development of the woodland element (35% of the area) through both planting and direct seeding of a patchwork of native mixed tree stands, varied to suit the different soils and hydrology across the site. The mosaic of seasonal, semi-permanent and permanent habitats will ensure that the essential dynamics of the fluvial geomorphic and biological processes that drive the cycle of succession and reversion to maintain and improve the habitat and species diversity in the habitat.

Subsequent performance - RRC's views (2011)

A number of trial pits adjacent to the River Great Ouse demonstrate that the variable nature of the surface and sub-surface hydrogeology and variable soils makes the project challenging logistically. It is hoped that progression in terms of the proposed works at the site will occur in the next few years at a rate which is suited to the conditions of the landscape, leading to the development of the varied habiats.



the River Restoration Centre Case Study Series This site was last visited by RRC staff on 21^{st} January 2011



MAR J HALLAN