



MANCETTER QUARRY: A Case Study of BAP Implementation Through Mineral Site Restoration

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- Mancetter Quarry Overview
- Key Restoration Issues
- Review of Ecological Restoration Plan
- Outline of Ecological Restoration Trials
- Site BAP Initiative
- Strategic BAP Objectives
- Synopsis

Mancetter Quarry - Overview

Tarmac 



Mancetter Quarry - Overview

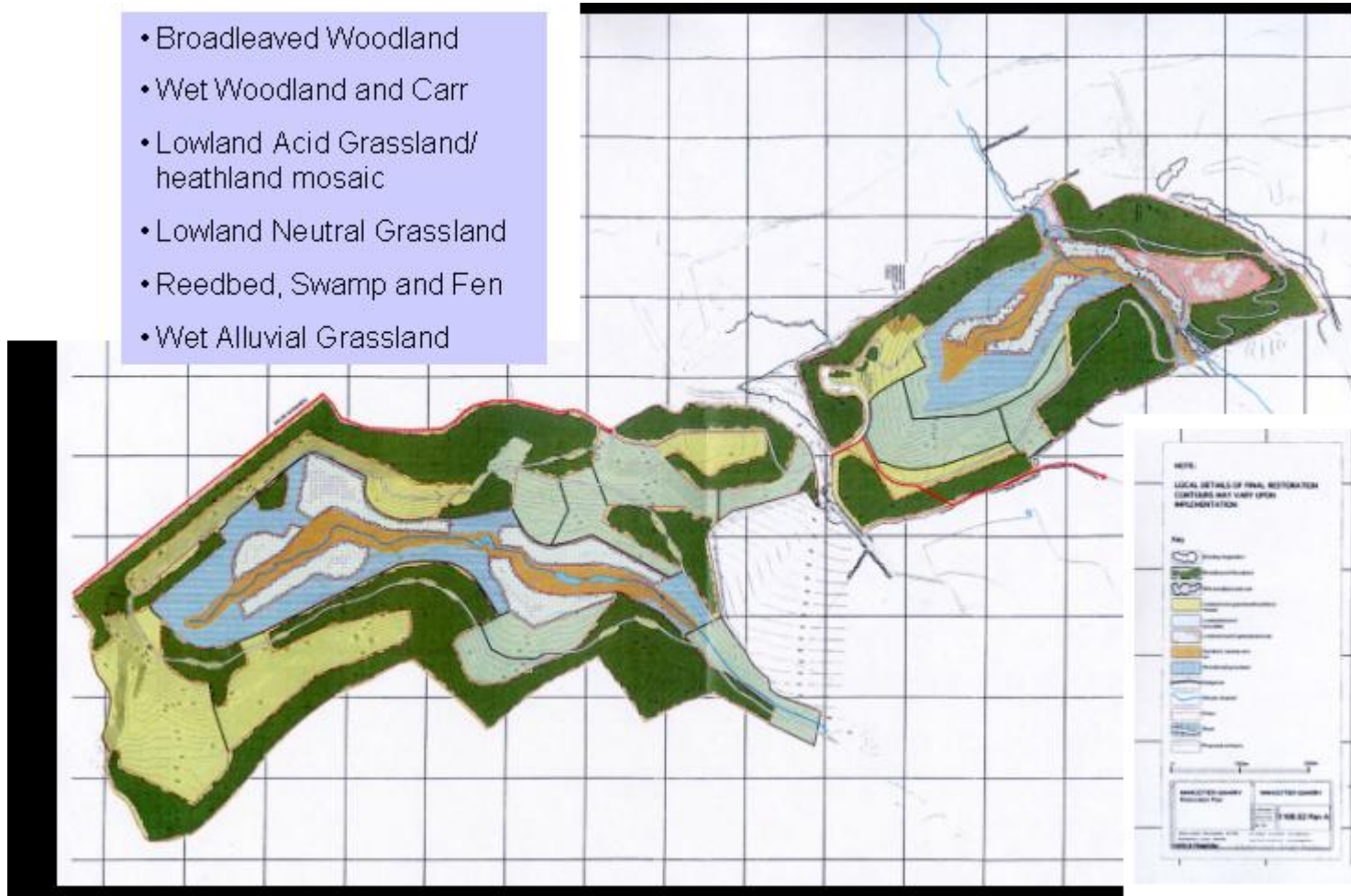
- Restoration Activities



- Amenity Conservation Afteruse
 - Extension to adjacent Country Park
- Acid Groundwater Management
 - Wider environmental management function of restoration plan
- Landscape Ecology Considerations
 - Reduce fragmentation effect of quarry
- Acidic Restoration Substrates
 - Utilise in setting restoration targets
- Site BAP Initiative
 - Rational framework for setting restoration targets

Ecological Restoration Plan

- Broadleaved Woodland
- Wet Woodland and Carr
- Lowland Acid Grassland/
heathland mosaic
- Lowland Neutral Grassland
- Reedbed, Swamp and Fen
- Wet Alluvial Grassland





- Restoration Trials/Demonstration Areas
 - Underpin Tarmac approach to site restoration planning, implementation and performance monitoring
 - Address key issues identified during development of restoration plan
- Restoration Trials and Feasibility Assessment
 - Investigate feasibility of restoration options and treatments
- Sustainability Considerations
 - Use of waste materials in final restoration
- Demonstration Value
 - Extend experience to other sites

Restoration Trials (Cont)



Restoration Trials (Cont)

<i>Nurse seed mix applied</i>	<i>Nurse seed mix not applied</i>		
<i>Nurse seed mix applied</i>	<i>Nurse seed mix not applied</i>	<i>Nurse seed mix applied</i>	<i>Nurse seed mix not applied</i>
		<i>Nurse seed mix applied</i>	<i>Nurse seed mix not applied</i>



- Site BAP protocol developed within Tarmac
 - Natural Diversity Forum
- Corporate Commitment to Biodiversity Conservation
 - Delivery of Policy through Action
 - Involvement of staff at all levels
- Implementation of BAPs for all Tarmac UK Sites
 - Reflect existing BAP Targets
 - Identify site BAP objectives and priorities



- Site BAP process
 - Survey – Desk study and site review
 - Analysis – BAP compartments
 - Business Case Assessment – Defensible commitment level
 - Prescription – BAP project schedules
 - Implementation – annual project plan
- Development of Site BAP at Mancetter
 - Ecological restoration plan reflecting local and national BAP targets

Site BAP Initiative (Cont)

- Delivery of Site BAP at Mancetter
 - Community involvement



- Habitat BAP Targets at Mancetter Quarry
 - Broadleaved Woodland
 - Wet Woodland and Carr
 - Lowland Acid Grassland/Heathland Mosaic
 - Lowland Neutral Grassland
 - Reedbed, Swamp and Fen
 - Wet Alluvial Grassland
 - Hedgerows
- Species BAP Targets – e.g. Dingy Skipper
 - Larval Foodplants
 - Adult Nectar Plants
 - Breeding Biotopes – Restoration Plan and Enhancement Areas

Site BAP Initiative (Cont)



- Regional Scale Context for Ecological Restoration
 - Regional level administration of BAP sites
 - Sub-regional landscape-scale BAP targets – Metapopulation and landscape ecology aspects
- Cumulative Effect of Site BAP Initiatives
 - Aggregation of BAP achievements for site clusters
- Basis for Mitigation Banking
 - Impact offsetting
- Relevance to Minerals Development Frameworks
 - Strategic context to setting ecological restoration targets and measuring performance

- Tarmac Site BAP Initiative
 - Rational Framework for setting ecological restoration targets at local, regional and national levels
 - Effective mechanism for integration of wider environmental management functions
- Restoration trials and demonstration plots
 - Transparency in assessing feasibility and efficacy of ecological restoration treatments
 - Supports dissemination of information and experience
- Site BAP implementation
 - Framework for performance measurement
 - Identify achievements against local and national BAP targets
 - Powerful mechanism for community involvement



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 A member of the Anglo American plc group