

# Falkirk Council Development Services

## Woodlands In and Around Town

### Introduction

In the spring of 2005 Falkirk Council Development Services and Callendar Estate successfully submitted a joint application to Forestry Commission for funding under the Woodland In and Around Town initiative (WIAT) to develop and implement a strategy for urban woodlands in the Falkirk area.

WIAT aims to increase the development of urban woodlands close to where people live and work. Management of established and newly planted woodlands can bring many benefits, ranging from biodiversity to increased investment.

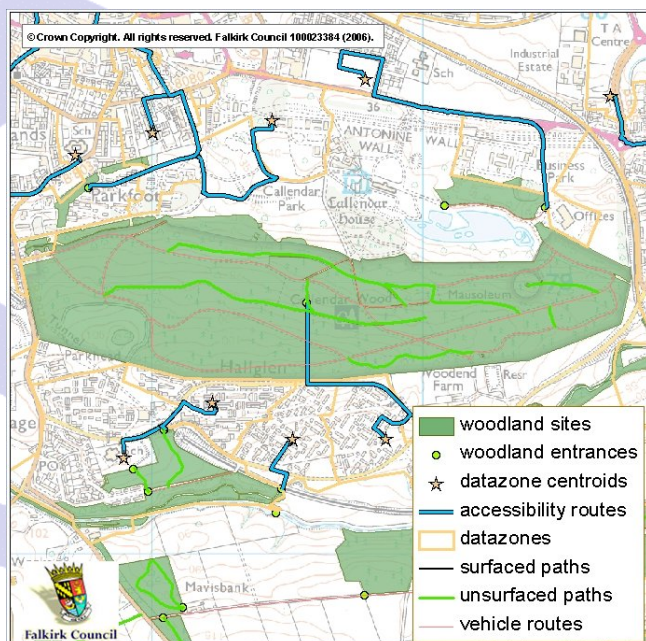
Falkirk Council Development Services requested that FVGIS act as consultants to the Council for the GIS elements of the project.

### Requirements

The project was established to assist in the development of a qualitative model for the assessment of the value of woodland sites to the local community. A number of datasets were created to store information from a woodland audit carried out by Falkirk Council and Callendar Estate. The audit included details of woodland areas, path networks and access points.

The development of an urban woodland strategy is seen as the first step in bringing together an agreed, co-ordinated approach to woodland management. The project supports two out of the three key elements in the Falkirk Council 2020 Development Plan and also supports the Community Area Regeneration Strategy (Social inclusion), the Falkirk Area Biodiversity Charter, and the Falkirk

Greenspace initiative, which proposes to improve the landscape, habitat quality and recreational potential of the urban fringe and urban open space around settlements.



### Solution

The first stage of the project involved identifying and collecting relevant sources of woodland, path, track and entrance data. Field survey data came from the project partners and third party from data sources such as OS MasterMap® and Getmapping Aerial Photography.

Forth Valley GIS then began the digitisation of woodland polygons, linear vehicle routes, surfaced, and unsurfaced paths for woodland sites and woodland entrance points.

When data capture was complete a GIS data maintenance plan was developed. This document identified associated roles and responsibilities for data maintenance, which Falkirk Council and Callendar Estate will subsequently implement.

The five datasets created were loaded into the GIS data warehouse (GeoStore), the information made available in the GIS Portal (GeoLink) and associated metadata was added to the GIS Metadata Catalogue.

An accessibility analysis was carried out by Forth Valley GIS, calculating distances for access to woodland sites for local population bases and from schools within the Falkirk Council area. The results of the accessibility analysis were also made available in GeoStore and published through Geolink.

*“There is a lot of work to do in delivering the emerging Falkirk Urban Woodland Strategy, particularly on targeting work to address the quality and accessibility of these woods. This GIS project gives a fantastic base line to review future progress against.”*

*– Richard Broadley, Environment Co-ordinator, Falkirk Council*

## Data

Woodland areas identified through field surveys were captured using Ordnance Survey MasterMap® data. Polygons covering woodland areas were located and compared with aerial photographs of the sites. The MasterMap polygons were copied to the new dataset and edited where required. Attribute data identified in the field through the woodland audit was then added. Falkirk Council's Adopted Roads data was used to provide details of access routes.

Ordnance Survey Integrated Transport Network® (OS ITN) data provided the route data for the accessibility

analysis. Scottish Neighbourhood Statistics Data Zones polygons were used to define areas of population and schools data was provided by Falkirk Council.

## Results

On completion of the data capture element of the project, Falkirk Council were provided with five datasets containing highly detailed information on woodland sites in the study area. As well as providing accurate and flexible geographic information, data captured includes:

- 280 woodland sites with a total area of more than 1900 hectares. The attribute information associated with the sites includes details on woodland composition, ownership & management information and access provision
- almost 150km of woodland paths & tracks with details, where available, of the nearest council adopted road
- over 370 woodland access points

The final accessibility analysis provided details of routes from 57 schools to their nearest woodland site and from centre points in 197 separate data zones.

**Compared to Glasgow City's 1600 hectares, Falkirk Council has over 1900 hectares of WIAT Woodland... equivalent to an area the size of Motherwell. .... or 2664 Hampden Park football pitches.**

**The total length of woodland routes is longer than a journey from Falkirk to Berwick Upon Tweed.**

Vehicle Routes	60.3 km
Surfaced Paths	25.5km
Unsurfaced Paths	56.4 km
<b>Total</b>	<b>142.2 km</b>

**Of the 197 Datazones in Falkirk Council area 190 are within 1km of a WIAT woodland site. 160 of these contain a WIAT woodland site.**

Of 57 schools in the Falkirk Council area, only 7 are more than 2 km from a WIAT woodland site

## Benefits

The project will help Falkirk Council and Callendar Estate develop a strategy for the management of urban woodlands that will encourage community involvement and help establish educational initiatives, improving links between schools, woodland managers and local woods. The strategy will aim to increase the amount of woodland brought into management, targeting those woodlands in planning and regeneration priority areas.

*“Falkirk is a very important area within our Conservancy area....it is good to see this pro-active approach from the Planning Department to record the information for these woodland sites. This will enable the Council, and others, to plan, and hopefully invest resources, in these woodland areas for their longer term sustainable management.”*

– David Robertson, Woodland Officer,  
Forestry Commission

**Project type:** Data Capture, Spatial Analysis, Data Management

**Software:** ArcGIS®, Oracle® 9i, Routeware

**Customers:** Falkirk Council Development Services  
Callendar Estate

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For further information, visit our web site where you can fill in an on-line request for further information:  
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