#### CONSERVATION WORK IN THE CENTRAL REGION

## Angela K. Turner

The Central Region has a wide variety of habitats ranging from montane communities through woodlands, heathland, lochs and bogs to mudflats which are of value for wildlife and human activities alike. There are also many interesting historical buildings and sites in the area such as Bronze Age standing stones and Iron Age and Roman forts. These sites provide a number of practical conservation problems particularly where public pressure is high. The Trossachs and Loch Lomond areas are especially popular with tourists and are also within easy reach of the Strathclyde urban area, although there is a relatively low 'people pressure' in the region as a whole, (Timms, 1974). Nevertheless, much practical work needs to be done to improve and maintain the few reserves and other sites in the area for wildlife and public use.

The Forth Valley Conservation Volunteers (FVCV) is one of many local groups in the U.K., with members from the local community, which are affiliated to the British Trust for Conservation Volunteers, a Limited Company and registered charity. The Trust has its own 'group' the National Conservation Corps with members from all over the U.K. The NCC, whose Scottish office is at Doune, organises tasks for its general membership, training courses for national and local group leaders and advises affiliated groups on such matters as equipment purchasing and where to find work.

Several tasks have been undertaken by the FVCV at Palacerigg, the country park of Cumbernauld. Its proximity to the town gives urban dwellers the opportunity of experiencing and learning about the countryside. Such an amenity area can provide valuable local habitats for wildlife as well as recreational facilities for people, but disturbance is easily and often unintentionally done. A recurrent problem is erosion caused by excessive trampling which gets steadily worse as people avoid the muddiest parts of a path, walking to one side and thus extending the eroded area. Peat, as at Palacerigg, is especially sensitive; once the top vegetation has been worn off the peat dries out to a fibrous powder which then blows away leaving a wet hollow. To prevent this happening a path was made by putting down a layer of ballast from a railway line built over the peat at one time, which will keep the soil in place.

A well-laid path keeps people to one small area and can divert them from more sensitive areas which can be kept for wildlife or for their scenic value as at Ben Lomond. There, several different organisations including a mountain rescue team, mountaineers, boy scouts and the FVCV improve and maintain a footpath some 6 km long up the mountain, each group looking after a 500m stretch. The work is mainly on drainage as water tends to run down the path forcing people off onto drier parts.

Another visitor problem in forested areas is the risk of fire. At Aberfoyle 200,000 people visited the David Marshall Lodge in 1975. To alleviate erosion and fire problems presented by such large numbers the FVCV constructed a barbecue site where visitors can light fires safely and at the same time minimized pressure on the area as a whole by building a footpath to this site, avoiding the steepest parts of the slope which are most susceptible to erosion.

These amenity tasks are indirectly important to wildlife by reducing disturbance and damage but the FVCV also work on projects directly involved with wildlife. In recent years Common Terns (Sterna hirundo), have attempted to nest on disused mooring platforms at Grangemouth Docks; but with little success as their eggs tended to roll about on the smooth surface of the platform. Moreover this tern is threatened in a more general way in the Forth area by industrial development so, with the aid of a grant from the Nature Conservancy Council, the FVCV covered two of the platforms with gravel to provide a more stable surface for the eggs and to provide a camouflage background for improved protection of the eggs from marauding crows (Corvus corone) and gulls (Larus sp.).

A preliminary tree survey of Abbey Craig has been carried out by the FVCV. Sycamore (*Acer pseudoplatanus*) and Wych Elm (*Ulmus glabra*) dating from about 1900 are the dominant species present. The Elm is affected by Dutch Elm disease (Greenshill, 1977). The FVCV plans to plant Oak (*Quercus sp.*) and Scots Pine (*Pinus sylvestris*) from their tree nursery to increase the diversity of the woodland. Some trees have already been planted but Roe Deer (*Capreolus capreolus*) and rabbits (*Oryctolagus cuniculus*) have caused considerable damage to them so in future the trees will have to be protected with wire netting. Some thinning will also be done in thickly regenerated areas of Sycamore.

The FVCV has only been in existence for three years and, although they have already achieved a lot, practical conservation work is a continuing necessity. Mr. Stuart Kennedy, 4 Easter Cornton, Road Stirling, is the organiser of the group and would welcome enquiries from people of all ages who are interested in helping.

### REFERENCES:

GREENSILL, E. N., 1977. Dutch Elm Disease in Central Scotland. Forth Naturalist and Historian 2.

TIMMS, D. W. G., ed. 1974. The Stirling Region. University of Stirling.

# SOURCES FOR THE HISTORY OF STIRLING AND DISTRICT SINCE 1800

## Finlay McKichan

Perhaps the greatest fascination in the study of local history is to find a report or letter which, in a few words, casts a vivid light on life as it was lived a century or more ago. One such is a satirical handbill which appeared in Stirling at the town council election of 1821 and asked for "a few young men not of great penetration to serve in council under the command of the following celebrated commanders - viz. - Colonel Thomas Stirk, Lieut. Col. William Bullock, Major Robert Soap and John Salmon, paymaster ... Rump steaks will be given them, salmon and kipper with plenty of drink". This is an entertaining morsel, but is it possible to work out exactly what it means? How were councillors elected in 1821? Who are the characters referred to? (In fact they were members of a council faction led by two butchers and a spirit dealer and fishmonger).

It may also be interesting to learn that the sloop "Bell", loaded with grain and en route from Stirling to Alloa ran aground on a stormy night in December 1832 and that "the unfortunate crew, three in all, were exposed to the pitiless storm for 'fully five hours. About seven, an experienced crew of fifteen manned the lifeboat, and with great difficulty succeeded in boarding the vessel, and took off the men, who were lashed to the rigging; but one of them, named William Bain, was so debilitated from cold, that he died almost when landed. He has left a wife and six children in very destitute circumstances". This is certainly a dramatic incident, but is it possible to discover how dangerous was the navigation of the Forth and how there came to be sufficient traffic on the river to justify a lifeboat? And how much can be discovered about the circumstances of individual citizens of Stirling whose names are found in official records? What sort of life, for example, had George Grant, who lived with his family of six in a single room in St. John Street in 1861 and described himself to the Census enumerator as a "Chelsea Pensioner and town drummer"? In how many ways did his circumstances differ from those of John Murray, who lived with five relatives and dependants in a 21 room mansion in Melville Place and described himself as a "proprietor of houses"?

To answer these sorts of questions and to understand the fragments of information he unearths, the local historian has to be able

to fit them into a general picture. The most convenient way to get this is by background reading in what historians call "secondary works", (whose authors did not have first hand knowledge of the events described and were probably writing many years later). A secondary work is likely to be painted on a broader canvas than a "primary source" (whose author was either involved personally in the situation described or got reliable information from people who had been). luck. the secondary work may dispassionate. The ideal secondary work for the local historian to read first is a general history of the period in which he is interested. This will show him what was happening in business, politics or the church throughout Scotland and will enable him to see how far Stirling was typical. A good general history of modern Scotland is W. Ferguson, Scotland 1689 to the Present (Edinburgh: Oliver and Boyd, 1968). For economic and social history the best synthesis is still R. H. Campbell, Scotland Since 1707 (Oxford: Basil Blackwell, 1965).

Secondary works are an important source of information, not only on the national, but also on the local background. For example, a student of local politics must know about the business and religious life of the town to explain the behaviour of the town councillors. There are a considerable number of secondary works on the history of Stirling and district since 1800 which give background information on the local scene. Among the most useful are:

- Andrew Bain, Education in Stirlingshire from the Reformation to the Act of 1872 (London: University of London Press, 1965)
- W. B. Cook, *The Stirling Antiquary* (3 vols, Stirling, 1893-1904—assorted notes, reprinted from the *Stirling Sentinel* on the history of Stirling and district, ancient and modern)
- William Drysdale, Auld Biggins of Stirling, Its Closes, Wynds and Neebour Villages (Stirling, 1904) William Drysdale, Old Faces, Old Places and Old Stories of Stirling (2 vols, Stirling, 1898-9)
- A. F. Hutchison, History of the High School of Stirling (Stirling, 1904)
- J. Lothian, Stirling and its Environs, a descriptive and historical sketch (Alloa, 1846) William Nimmo, General History of Stirlingshire (1777 – 3rd edition by R. Gillespie, 1880)

The nineteenth century was a particularly prolific period for the publication of works of this type, and a glance at the catalogue of tlir local collection in Stirling Central Library will show many other examples. The Central Library is also likely to be the easiest place to find another excellent source of information on the local background in the last two centuries. The Statistical Account of Scotland (now usually called the "Old Statistical Account") was published in 21 volumes between 1791 and 1799. It comprises reports written by each parish minister describing the population, industry, agriculture, religious state, health, antiquities and many and varied other aspects of the parish. It combines factual and statistical material with highly personal judgements on the local scene. For example, the Rev. James Sommerville, author of the Stirling report (Vol. VIII, 271-96) had very harsh words for the way in which the burgesses of Stirling still tried at the turn of the nineteenth century to prevent any but themselves from trading in the burgh. He wrote that "the jealous and contracted spirit of incorporation, ever tenacious of ancient customs, and hostile to all novelty and invention, nay, expulsive of the enterprising stranger, has kept the inhabitants of Stirling trudging on in the their great-great-grandfathers". This unique combination of fact and opinion provides an irreplaceable source of background material for local history studies. Those looking for the accounts of other parishes will find an index of parishes at the end of Volume 20 of the Old Statistical Account. Since the 1790s there have been two further statistical accounts. The New Statistical Account of Scotland was published in 1845 in a collected edition of 15 volumes, each covering two or three counties. The Stirlingshire reports are in Volume VIII, and may be found also in a separate volume called The Statistical Account of Stirlingshire (1842). The Third Statistical Account of Scotland appeared gradually in the 1950s and -60s. Volume XVIII (Edinburgh, 1966) covers the counties of Stirling and Clackmannan. The statistical accounts can, therefore, be used to compare conditions in the late eighteenth, mid-nineteenth and mid-twentieth centuries.

Background reading is like an aperitif which enables the local historian to savour fully the real meat of his study — the account written by someone who was actually there at the time or had first hand knowledge of the situation. Parts of the statistical accounts are a "primary source" of this sort, and there are many other primary sources in print. Among the best sources for the history of modern Stirling are the files of the local newspapers. Those of the *Stirling Journal* cover the longer period (1820-1970) and are more accessible, being in the reference room of Stirling Central Library. An almost complete set is

also available in the University of Stirling library, where, under the auspices of the Job Creation Programme, a graduate history teacher and six young people have been engaged, since February, 1977, on producing an index. At the time of writing (1 June 1977) they have covered 1820-1866. The Stirling Observer files (1836-date) are in the Observer Office, Craigs, Stirling, and may be made available to bona fide researchers. The nineteenth century newspaper did not contain the same mix as its modern successor. It did not give as full or as varied a coverage of local activities. For example, town council meetings were often reported only briefly and matters of considerable importance, on which there was general agreement, tended to be given only a few lines. On the other hand, controversy was newsworthy and when there was a row in council, the local papers gave a much fuller and infinitely more colourful account than the official minute. In January 1834, for instance, the Journal an acrimonious council debate on the municipally owned slaughterhouse, from which blood ran down Spittal Street. Various speakers were quoted at length, including Mr Dick, who claimed that "it was owing to this nuisance that Stirling, though occupying the most delightful spot in the country, was called a dirty town. The nuisance of blood being allowed to run down one of the public streets was a very great injury to the town". Such reports give a useful insight into the "savour" of life in nineteenth century Stirling. The local newspaper at that time carried also national news and gave a much more uninhibited expression of at least one section of local opinion on matters of politics, religion and business. example will suffice to show how uninhibited (and therefore revealing) this could be. The Journal was staunchly Tory and bitterly opposed to the Liberal group which controlled the town council for many years after municipal reform in 1833. In 1845 the Journal complimented Dr William Forrest (a leading advocate of a proper water reservoir) for having aroused the water question " from the slumber to which the leaders in the council had, in their patriotic nurturing of the public weal, resigned it". And when one of the leading Liberal councillors (and opponent of the water scheme) was defeated in the subsequent election, the Journal commented with great piety and complete shamelessness that "there was not the least shade of political or religious feeling mixed up with the contest ... There is now the happy prospect ... of the affairs of the Burgh being managed without being mixed up with politics, its parties, and their

crooked ways". There are few sources which give a better insight than the local newspapers into the political and religious rivalries of nineteenth century Stirling.

Among the many other printed primary sources, two categories deserve particular mention. In the happy days when printing and paper were cheap, it was common in many Scottish burghs to have various types of burgh records edited and printed. One example of this genre is Extracts from the Records of the Merchant Guild of Stirling, A.D. 1592-1846, edited by W. B. Cook and D.B, Morris (Stirling, 1916). This gives interesting information on town council affairs and on the trade of the burgh (which the guildry until 1846 claimed to control). A much wider range of material on business and society may be found in the Parliamentary Papers. These are mostly reports of Royal Commissions, Parliamentary Select Committees amid other government bodies, and in the nineteenth century gave in detail in most cases the evidence on which their general conclusions were based. This is of great value for local historians. For example, the Report of the Central Board of H.M. Commissioners appointed to collect information in the manufacturing districts as to the Employment of Children in Factories (1834) contains reports by James Stuart on mills in the Stirling area. Of Wilson's woollen mill at Bannockburn he wrote that "The apartments of the weavers are good, but those in the spinning mills are ... the dirtiest and most low-roofed we have yet seen ... and the smell of whale oil and tar very disagreeable. I complained to Mr Wilson, junior, of the bad air and the smell, as being to me almost intolerable; but he treated my complaint very lightly, telling me that the smell of oil was peculiarly healthful, and that he preferred it to that of carnation". Parliamentary Papers are to be found in large libraries, such as university libraries, the National Library of Scotland (George IV Bridge, Edinburgh) and the Mitchell Library (North Street, Glasgow). These libraries have copies of the published catalogues of Parliamentary A glance at one of these shows the wide range of local topics documented in such reports. Some other examples with useful material on the Stirling area are:

Census Reports, 1801 and every 10 years thereafter (except 1941) Report from the Select Committee on Turnpike Roads and Highways (1821) Reports of the Municipal Corporations (Scotland) Commission (1835-6) Reports on the Sanitary Condition of the Labouring Population of Scotlan (1842 - This gives a spine-chilling account of the insanitary

condition of Stirling in the early 1840s by Dr William Forrest).

In many studies, the local historian must eventually go beyond printed works and examine manuscript sources - for example, diaries, letters or official records of various types. There is a small amount of manuscript material in the Stirling Central Library - for instance the notebooks of James Shirra. Shirra kept detailed notes of municipal and ecclesiastical affairs in Stirling in his own time (the late nineteenth century) and also conducted extensive research into the affairs of the previous generation. In addition to transcribing lists of councillors and documents of various types, he made comments which give an invaluable insight into the careers and motives of leading citizens of the period.

By far the most valuable local collection of manuscript material is in the Central Regional Council Archives. These are housed in the Old High School Buildings, Spittal Street, Stirling, where the very helpful staff will do everything they can to ease the novice into what can at first be the slightly intimidating field of manuscript sources. These archives consist basically of the local government records of the various areas which have been incorporated in the Central Region, including the Counties of Stirling and Clackmannan and the burghs of Stirling, Doune, Dunblane, Bridge of Allan, Alloa, Alva, Tillicoultry and Dollar. The county records cover a particularly wide range of topics, as can be illustrated from those for Stirlingshire. Assorted minute books of Road Trustees (1810-90) give information on road building and maintenance. School management is described in the minute books of various School Boards and the Education Authority which succeeded them in 1919. Fascinating material on the life of individual schools, written by the headmasters, may be found in school logs, including those for Bridge of Allan (1863-1948), Cambusbarron (1896-1950), Causewayhead (1883-1957), Raploch (1869-98), Stirling Holy Trinity (1874-1932) and St. Ninians (1874-98). The medical state of the county can be traced from the Medical Officer's Annual Reports (1891-1970). There are even records covering the history of the county militia (1816-61). The burgh records consist mainly of the Town Council Minutes and the Burgh Treasurer's Accounts (for Stirling from 1947 and 1860 respectively). But even in the burgh records there is material which will interest not only historians of local government. For example, the Stirling Register of Sasines Draft Minute Book (1860-1939) shows when and where new housing developments have occurred. Information on social welfare in Stirling

can be found in the records of the various charitable incorporations (Cowane's and Spittal's Hospitals and Allan's Mortification) and in the General Register of the Poor (from around 1865).

The Central Regional Council Archives contain two other valuable categories of material. There is an excellent collection of maps and plans. Some are old maps of towns or country areas — for example, John Wood's plan of Stirling, 1820 (which gives the names of the owners of many properties) and the 25" Ordnance Survey rn<i|> nl 116 Stirling (surveyed 1858-63). Others are drainage, water, rivoi <>i railway plans - for instance, plans of the Forth Navigation (1826) and the lines of the North British Railway in the Stirling area (1865) and those of the Caledonian Railway (1902). The Regional Archives contain also a few sets of business records, which have been donated. The most notable for the Stirling area are those of D. and J. McEwen, grocers (1799-1926) and the Rockvale Carpet Mills (James Templeton and Co., 1908-61). These are rare examples. Only too often the local historian is frustrated in his search for the records of individual business firms. They have either been lost or destroyed or are still regarded as confidential by the firms themselves or their legal representatives. Those interested in searching for business records should consult Studies in Scottish Business History, edited by P. L. Payne (London: Cass, 1967).

By using the Central Regional Council Archives it is possible to pursue valuable studies in local history without travelling outside the immediate area. But for many classes of records for Stirling it is necessary to go to Edinburgh to the Scottish Record Office, H.M. General Register House, Princes Street (opposite the G.P.O.). Practically all the records of the Royal Burgh of Stirling up to the midnineteenth century have been transmitted to the S.R.O. (Ref. B66 - an inventory of these can be seen in the Central Regional Council Archives). And the S.R.O. contains many other materials of local interest. It has several sets of papers of local landowners and solicitors - for example, the Murray of Polmaise Papers (GD.189). It has the records of the Scottish Central Railway (BR/SCC). It should have all pre-1870 Church of Scotland records, but many were retained by the minister or session clerk. One set of kirk session minutes from the Stirling area which is in the S.R.O. is for the parish of St Ninians (CH2/337 - to 1838). The S.R.O. also has an excellent collection of town, estate and railway plans (the Register House Plans, in West Register House, Charlotte Square, Edinburgh). There are many plans of the Stirling area in this collection, for which there is a published index (Scottish Record Office, *Descriptive List of Plans*, ed. I. H. Adams, 3 vols, Edinburgh, 1966-74). It is not necessary to make any prior arrangement to use the facilities of the S.R.O., but on the first visit a reader's ticket must be obtained in the Historical Search Room.

Another valuable source of local information in Edinburgh is the Registrar-General for Scotland's Office, New Register House, Edinburgh (behind the S.R.O.). There the local historian can find detailed information on the lives of ordinary people from the midnineteenth century. The Register of Birth; Marriages and Deaths dates from 1855. In addition, the Registrar-General has available for inspection the Census schedules for the Censuses of 1841-91 inclusive. These are of enormous value to the historian, as they give the name, sex, age, occupation and birthplace of each person and (from 1861) the number of rooms in each house. This makes it possible to learn a great deal about the sort I people who lived in different parts of the Stirling area. That, basely, is the prize the historian seeks — to find out what manner of people our forebears were and how they lived. It is a prize which (Within the grasp, not only of professional historians, but also of the amateur. It is to the latter that this brief introduction to the sources of history of modern Stirling has been mainly directed. It is hoped that it will encourage him to use and guide his path through the rich mass of material which is simply waiting to be investigated.

### THE ANTONINE WALL

#### Mrs. Lorna Main

The east - west link provided by the Forth/Clyde isthmus offers the shortest route from coast to coast across central Scotland, and as such formed an important strategic zone. The Romans recognised this initially in the first century under Agricola, and again in the second century when Q. Lollius Urbicus became governor of the province of 'Britannia in A.D. 139. The Antonine Wall was completed by A.D. 142/143, this date being arrived at from a coin issued in A.D. 142/143, which has been interpreted as commemorating the successful completion to campaigns by the Roman Army, aimed at conquering and occupying southern Scotland.

For a period of 20 — 40 years the Antonine Wall formed the northern frontier of the Roman Empire. Like Hadrian's Wall, built some 20 years earlier, the building of the Antonine Wall proceeded from east to west, running for almost 60 Kilometres from Bridgeness on the Forth to Old Kilpatrick on the Clyde, clinging closely to the southern valley slopes. The Antonine Wall is considered by many to be the most important ancient monument in Scotland, and the 21 Kilometres of its length which lie in the Central Region include some of its best preserved sectors. (Fig. 1)

The wall comprises four main elements: (Fig. 2)

# (a) The Rampart

Excavations have confirmed the literary evidence that the Wall was constructed, over the greater part of its length, from squared blocks of turf — "murus cespiticus" resting on a single course of stone-work which provided a stable and level base for the Rampart (Plate nine)l. This base consists of a core of large rounded boulders edged by two rows of dressed kerb stones. Over the first 14.5 Kilometres, the nature of the Rampart varies to include an earth or clay core revetted with clay or turf cheeks (facings). Over the whole length of the Wall there is considerable variation in the width of the base (between 4.3m and 4.88m). This variation, while possibly relating to military considerations, may be partly related to the activities of individual legions or work squads involved in the construction work. The

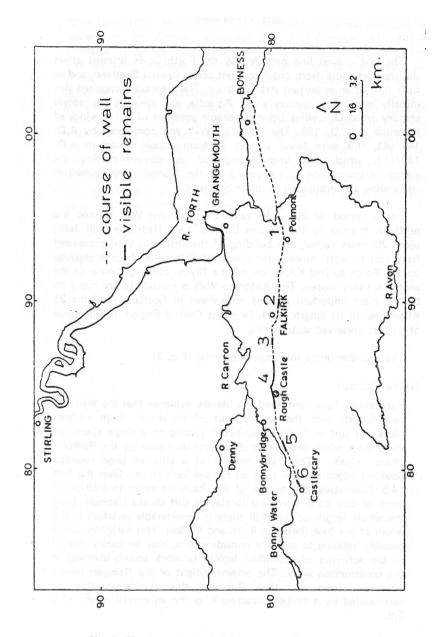


Fig. 1. The Antonine Wall in Central Scotland



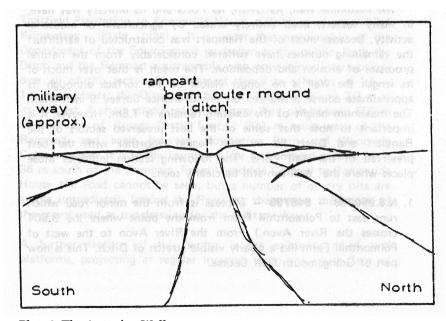


Plate 9. The Antonine Wall

## Fig. 2. The Antonine Wall—cross section

# (b) The Ditch

To the north of the Antonine Wall a V-shaped Ditch was dug out, again varying in size to a maximum of 12.2m wide and 3.7m deep. The berm i.e. the level stretch of ground between the Wall and the Ditch, is normally 6.1m wide. The upcast from the Ditch was deposited on the northern lip and, depending on the lie of the ground, was either spread out or heaped up to form a counter-scarp (also known as the Outer Mound).

### (c) The Forts

As on Hadrian's Wall the garrison from the Antonine Frontier was housed in a series of Forts located to the south of the wall. It seems likely that there were originally 19 forts at intervals of 3.2 Kilometres. Of the 8 which lie in the Central Region the precise location of 2 is unknown and, of the others, only that at Rough Castle can still be clearly seen on the ground (N.S.843798).

# (d)The Military Way

This, the main line of communication between the Wall Forts, ran parallel to the Wall, some 35-40m behind it (i.e. to the south). It was 4.9-5.5m wide with a foundation of large stones set in clay, overlain by a cambered surface of cobbles covered with fine gravel.

The Antonine Wall, its Ditch, its Forts and its Military Way have, in many sectors, been entirely erased by agricultural or industrial activity. Because most of the Rampart was constructed of earth/turf the remaining outlines have suffered considerably from the natural processes of erosion and deposition. The result is that over much of its length the Wall is no longer visible on the surface although its approximate course is marked on the Ordnance Survey 6 inch Maps. The maximum height of the existing remains is 1.8m. However, it is important to note that some of the best preserved sectors of the Rampart and Ditch lie in this Region, together with the best preserved of the Wall Forts. The following section indicates those places where the Wall can still be clearly seen.

1. N.S.950798 - 948795 - (Access is from the minor road which runs east to Polmonthill Farm from the point where the B.904 crosses the River Avon.) From the River Avon to the west of Polmonthill

Farm lies a clearly visible stretch of Ditch. This is now part of Grangemouth Golf Course.

2. **N.S.901795 - 897796 -** (Access is via the main park entrance from the A.9 (Laurieston Road), Falkirk.)

While the Rampart is no longer visible, the Ditch is still readily traceable for a distance of some 550 m in the grounds of Callendar Park, Falkirk. It measures up to 12.2 m wide and is still c 2.7 m deep.

3. **N.S.866798** - **862796** - (This stretch is signposted from the junction of the A.9 (Camelon Road) and Glenfuir Road, and can be reached by following the B.816 (Tamfourhill Road) towards High Bonnybridge.

The section from Lock 16 on the Forth and Clyde Canal to Watling Lodge runs for a distance of 320 m, with the Ditch in a remarkably fine state of preservation. It is 12.2 m wide, and scarp (the side of the Ditch next to the Rampart) and counter-scarp (the side of the Ditch opposite to the Rampart) measure up to 4.6 m and 3.4 m in height respectively. There are now no surface indications of the Rampart, but the northern lip of the Ditch is heightened by the upcast mound.

4. **N.S.857798 - 834798** (Access is easiest from the west, following the B.816 from its junction with the A.803 at Bonnybridge, across the Canal to Bonnyside House.)

This is the finest surviving stretch of the entire Wall, running from Tentfield Plantation to Bonnyside House, a distance of around 2.4 Kilometres (Plate nine) i. It is under the guardianship of the Department of the Environment, and open to the public. Both the Ditch and the Rampart are traceable with only minor interruptions over all of this sector. The Rampart stands to a height of 1.5 -1.8 m in places; the Ditch is uniformly 12.2 m wide and 3.3 m at its deepest. A short stretch of the Military Way can be seen 550 m to the east of Rough Castle Fort, c 200 m south-west of the Rampart, and again between Rowantree Burn and Woodside Cottage, where it is in the form of a low turf-covered mound 27 — 36 m south of the Rampart. From Woodside Cottage to Bonnyside House the road cannot be seen, but a number of quarry pits are

visible immediately behind the Rampart; these were the source of the gravel used as top-dressing for the Military Way.

A further feature of this sector is the existence of 4 turf platforms, projecting at regular intervals from the south face of the Rampart. Excavation has suggested that these were signalling platforms linking the Wall with the forward area of the Stirling Gap.

## Rough Castle N.S.843798 -

Rough Castle is the best preserved of all the Antonine Wall Forts. It lies in a belt of moorland 1.6 Kilometres east of Bonnybridge, on a slope which rises sharply from the east bank of the Rowantree Burn. The site is under the guardianship of the Department of the Environment.

It is a very small Fort, about 65.5 square metres internally, enclosing a little over 0.4 ha. The northern defence of the Fort is formed by the Antonine Wall itself and its Ditch. Beyond the Ditch lies a unique series of defensive pits or *lilia*, 0.76 m deep. Some of these are still visible and were originally arranged in ten parallel rows.

On the other three sides, the Fort rampart was built of turf laid on a stone foundation 3.3 m thick and fronted by two ditches. The scarp of the rampart survives to a height of 2.5 m and is spread over 10 -11 m. There were four gateways, the northern one being 6.2 m wide, centrally placed with a causeway across the Ditch. Initially, the Military Way appears to have run from east to west through the Fort as the via principalis, but subsequently a bypass was constructed on the southern side of the Fort. The former route can still be seen as a track 5.0 m wide running across the Fort. Inside the Fort the remains of three stone buildings were excavated, the headquarters building (principle), the granary, and the commandant's house, and a number of timber-framed buildings, probably barrack blocks have also been located. None of these internal structures are now traceable on the ground. To the east of the Fort lies an annexe of 0.6 ha, defended by an earthen rampart. The remains of a single ditch on the south and three on the east are now barely visible, while nothing is to be seen of the bath house which formerly stood in this annexe.

**5.** N.S.815793 - 811792 (Access is from the B.816, about halfway between Bonnybridge and Castlecary.)

Rampart, Ditch, and Outer Mound are all very clear for around 0.4 Kilometres in Seabegs Wood, the Rampart standing to a height of around 1.2 m in places. The Ditch is 12.2 m wide and the Military Way is also visible as a cambered mound 4.9 - 5.5 m wide and some 0.5 m high. This sector is in the guardianship of the Department of the Environment.

6. N.S.799788 - 795787 - (This sector can be seen from the B.816 to the east of its junction with the A.80, Stirling/Glasgow Road.)

From Woodend to Castlecary Primary School the Ditch is quite prominent and can be clearly followed.

### FURTHER READING

- KEPPIE, L. F. J., 1974. The building of the Antonine Wall: archaeological and epigraphic evidence. Proceedings of the Society of Antiquaries of Scotland, 151 - 165.
- McDONALD, G., 1934. The Roman Wall in Scotland, Second Edition, Oxford. ROBERTSON, A. S., 1973. The Antonine Wall, Fifth Edition, Glasgow.
- THE ROYAL COMMISSION ON THE ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND, 1963. Inventory of Monuments in Stirlingshire, 93 - 106 (Items 111 - 117), Edinburgh, H.M.S.O.
- SCOTTISH ARCHAEOLOGICAL FORUM, 1975. Volume 7, Edinburgh.