

**NATIONAL AUDIT  
OF SCOTLAND'S GOLF COURSES  
AND ANCILLARY FACILITIES**

**FINAL REPORT**

**FEBRUARY 2003**

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*The Views expressed in this report are those of the consultants and do not necessarily reflect those of **sportscotland***

# 1 INTRODUCTION

MW Associates were commissioned by **sportscotland** to carry out an audit of Scotland's golf courses and ancillary facilities, as one of a series of national audits of sports facilities. The consultancy team also included Dr Robert Price (golf consultant), Verdant Associates (consultant agronomists), Oliver & Robb (architects), and Jim Murphy (quantity surveyor).

While a central aim of the national audits was to establish the physical condition of Scotland's sports facilities and the scale of costs required to maintain them to an acceptable standard over the next 20 years, the audit of golf facilities has also included data on how these facilities are managed and financed. Information on both the physical and financial condition of golf facilities has been analysed in the context of an improved national database of golf facilities and a new classification of golf course facilities.

These 'extensions' to what was originally envisaged were necessary for two reasons:

- Firstly, because the patterns of *use, operation, and financial performance* of golf facilities in Scotland *will have at least as much bearing as the physical condition of facilities on their long-term sustainability* – and thus on their ability to cater not just for their current users, but also for the growing and changing patterns of golf participation that **sportscotland** itself wishes to encourage.
- Secondly, because *grossing up from the sample results produced by the survey to arrive at national estimates, and applying our 'case study' results to other similar types of facility* require both a *more accurate national database* and a *clearer classification* of golf course facilities than already existed.

Another key issue to highlight at the outset is the *complexity and diversity of the golf sector* in Scotland – in terms of the range of types of facility and types of operator. This diversity has also been exacerbated by the use of *inconsistent and often inaccurate terminology* in public discussion of golf planning and policy issues.

The definitions we use in this report, and which we would recommend that **sportscotland** use both in their own planning and policy work and in their dealings with the golf sector, are:

## *Facility Provision*

- *Golf Course*

A course of at least 9 holes, and with a minimum 9 hole length of 1500 yards, which is the minimum length to qualify for a standard scratch score. On this definition, there were at the time of the audit 547 golf courses in Scotland.

- *Golf Course Facility*

One or more golf courses in one location and under one management. Usually includes a clubhouse, but there are examples where there is no clubhouse, or where the clubhouse is managed separately from the golf course(s). At the time of the

audit, there were 493 golf course facilities in Scotland.

- *Golf Clubhouse*

The building(s) adjacent to a golf course housing changing and often social facilities for golfers. Usually, but not always, under the same management as the golf course, eg non-course owning golf clubs typically run the clubhouses adjacent to local authority-run municipal golf courses – and there can be more than one such club and clubhouse adjacent to a single course.

- *Golf Range*

A golf practice facility allowing golfers to hit large numbers of balls into an outfield area in a relatively short time. Often, though not always, also includes other short game practice facilities, tuition services, and supporting retail and catering facilities. *Golf range* is a more accurate description than the often-used term *driving range*.

- *Short Course*

A basic course of less than 1500 yards. Often 9 holes, though sometimes fewer, and including *par 3 courses* (where these are less than 1500 yards in length) and *pitch and putt courses*.

### *Facility Operation*

Although there are *exceptions* (most notably St Andrews Links Trust, a statutory body responsible for the management of the publicly-owned courses in St Andrews), *hybrids* (some of the courses managed by links management committees on which golf clubs and local authorities have varying degrees of influence), and a few cases of courses (particularly small courses in remote areas) where there are ‘*informal*’ operating arrangements of various kinds, there are three categories which cover the vast majority of golf facility operation in Scotland.

The defining criterion is *who controls the operation of the facility*, not what the operating body may choose to call itself. In this respect, the term ‘golf club’ in particular is frequently misused and misinterpreted, eg to refer to a facility rather than an operator, or to refer to an operating body which is not in fact a golf club.

We have therefore described the three basic categories of operator in some detail, as this is the area where misunderstandings, compounded by confusion in terminology, frequently ‘get in the way of’ clear planning and policy-making.

- *Members’ clubs*

*Course-owning members’ golf clubs* operate 73% of Scotland’s golf course facilities. The clubs may hold the courses either through outright ownership or lease from a landowner. (They therefore include courses now leased by clubs from local authorities, even though ultimate ownership may still rest with the local authority). The clubs themselves are normally constituted as unincorporated associations (ie the club has no legal identity distinct from that of its individual members), although

some are incorporated as companies limited by guarantee (ie the club has a separate legal identity and members' liability is limited, but profits may not be distributed). In all cases, such clubs are non-profit making organisations, controlled by their members, run for the benefit of their members, and governed by individual constitutions (or Memorandum and Articles of Association where the clubs are companies).

Such clubs do not just control the running of their courses for the benefit of their members, but are responsible for the long-term stewardship of their own courses, again on behalf of their members. It is important to recognise that, while such clubs may well accept visitors and interact with a wider public in other ways, this is 'on their own terms' and, provided they operate within the law as it applies to such clubs, they are essentially their own masters. Where they are offered concessions (eg in terms of rating relief etc) or funding from external sources (such as **sportscotland** Lottery funding), they naturally have to meet the conditions attached to such concessions or funding if they wish to accept it, and their members have to abide by national handicapping schemes etc, but otherwise such clubs can, if they wish, operate in relative isolation from the wider world of golf in Scotland.

There is also a 'sub-category' of *non-course owning members' club*. As the name implies, these clubs do not operate golf courses, but they are otherwise similar in their constitutions and general objectives to course-owning clubs. Many are attached to municipal or commercial golf course facilities and have certain playing privileges by agreement with the local authority or commercial operator running such courses. (The Scottish Golf Union defines such courses as 'course-owning' for its subscription and official handicapping purposes, although they are clearly not 'course-owning' in the sense of having any control over the running of the courses to which they are attached). The clubs often operate the clubhouses adjacent to municipal courses, and in some instances there may be more than one club (and clubhouse) attached to a particular municipal course.

Other non-course owning clubs have no facilities at all, but simply play as visitors on a range of different courses. These are typically work-based or pub-based clubs, and some are properly-constituted clubs affiliated to the SGU for official handicapping purposes. Because they have no playing or clubhouse facilities of their own, they have not been covered by this audit.

### *Commercial*

- These are individuals, partnerships, or companies which operate golf course facilities on a commercial basis, ie with the aim of making profits for the operator. Tenure is usually outright ownership by the operator, although the facilities may be leased – the criterion again being commercial *control* of the operation. Commercially-operated golf course facilities vary widely in scale from groups of courses run as part of major golf resort complexes to basic 9 hole courses built and run by individuals, including farmers diversifying from agriculture. Commercially run golf course facilities have grown rapidly in number in recent years, and now account for 15% of Scotland's golf course facilities. Most golf ranges are also commercially operated.

- Again, it is the commercial operation that is the defining criterion, rather than the scale of the facility or what it is called. For instance, a great deal of confusion is caused in discussions about the tax treatment of golf facilities by the fact that (presumably for marketing purposes) some commercial golf course facility operators choose to call themselves ‘clubs’ and to call their customers ‘members’. The term ‘*proprietary club*’ is also often applied to this sector, which is equally misleading. These facilities are not controlled by members’ clubs – they are controlled by commercial operators and run as businesses. For business reasons, the operator may allow a constituted golf club to be based at the facility and to have some privileges in terms of access to the course for competitions etc (as also happens at some municipal courses as noted above), but the club and its members control only their own competitions and social events – they have no control over the running of the facility as a whole.
- The term ‘*pay-as-you-play*’ courses is also often used as a description of this sector. Again, this is misleading and should be discontinued. ‘Pay-as-you-play’ refers only to a particular method of paying for golf – not to a type of golf course operation. Most commercial course operators allow players to play on a season ticket basis (again, sometimes confusingly referred to as a ‘subscription’, a term best reserved for members’ clubs), while virtually all course-owning members’ clubs courses and municipal course operators accept visiting or ‘casual’ players on a ‘pay-as-you-play’ basis in addition to their members and season ticket holders respectively.
- While some commercial golf course facilities may be expensive and exclusive, many are entirely ‘open access’, and – because many of them are relatively new, have capital costs to pay off, and need to provide the operator’s livelihood by maximising their capacity utilisation – they are much more active in trying to attract all kinds of golfers than are many established golf clubs. In so doing, they are operating in a competitive leisure market where the principles of good customer service, effective marketing, and fair and flexible pricing are basic requirements. For this reason, and because this is the expanding sector of golf facility provision in Scotland, such commercial operators should play a key role in ‘delivering’ national strategies aimed at expanding and diversifying golf participation in Scotland.

### *Municipal*

- This term describes the operation of golf course facilities by local authorities, including ‘arm’s length’ trusts attached to local authorities. It excludes situations where courses are still owned, and were previously operated, by local authorities but where the courses have been leased either to clubs or to commercial operators on terms that effectively give the clubs or commercial operators control of the operation of the courses.
- Municipal operation of golf course facilities is concentrated in the cities and in the central belt of Scotland. Their rationale has always been the provision of inexpensive golf for local people, usually with significant concessions for particular user groups. The courses cater for a mix of season ticket and ‘casual’ players, and many have clubs attached (and with the clubs rather than the local authorities often running the clubhouses at the courses as noted earlier). Municipal courses often carry more rounds of golfs than club courses, but, with more commercial provision

and operation of golf courses and increasing financial pressures on local authorities, several local authorities are reviewing their options for the future of their courses. Certainly, no new municipal courses have been built in Scotland in recent years, and there is little prospect of any new ones being built.

- This public sector of golf course facility operation is therefore declining in both absolute and relative terms in Scotland, and now accounts for only 12% of golf course facilities in the country. However, the existing courses still play an important role in providing facilities for people who might otherwise not have ready access to golf, and – as facilities operated by local authorities which also have responsibility for education, sports development, etc in their areas – there should, in principle, be scope for such municipally-operated facilities to play an important role in golf development initiatives.

We have rather ‘laboured’ these points about definitions, and some may appear cumbersome, but a clearer understanding than usually characterises public (and professional) debates is required if this audit is to make an effective contribution to planning for the development of the sport of golf in Scotland.

Our approach to the audit of golf facilities also reflects a number of unique features of the golf sector in addition to these issues of definition, ie:

- Unlike many other ‘standard’ sports facilities, every golf course is *physically quite distinct* in terms of its site characteristics – area covered, topography, soil types - and the impact of its original construction methods and prevailing weather conditions on its playability and maintenance requirements. (There can also be distinct differences in soil types, micro-climates, etc within the bounds of one golf course, given that an 18 hole course typically covers 120 acres or more).
- Just as importantly, and again unlike many other sports facilities where public provision is the norm, the pattern of ownership and operation of Scotland’s golf facilities is dominated by *members’ clubs*, (73% of golf course facilities as noted above), while the main growth in the past decade has been in the number of *commercially owned and operated facilities* (now 15% of golf course facilities and most of the golf ranges). Conversely, the number of *local authority-owned and operated facilities* (now only 12% of golf course facilities) has declined, both as a proportion of the total stock and in absolute terms, as a number of municipal courses have been leased to members’ clubs and two have been closed.
- A combination of the unique physical characteristics of each golf course and the unique features of each operator (whether club, commercial, or municipal) in terms of their own policies, priorities, and financial circumstances, means that there are simply *too many variables* to allow a ‘template’ to be usefully applied to individual facilities.
- However, in a situation where each operator accepts responsibility for the management and maintenance of its own facilities, but often does so in relative isolation, what the audit can offer is *new information* – both to highlight issues and trends of which individual operators may be insufficiently aware, and to provide figures and guidance that these operators can then interpret and apply as appropriate

in their own circumstances.

- This, in turn, recognises that *terms like ‘acceptable standards’ can only be very relative ones* when applied to the golf sector. Other than in meeting statutory requirements, the standards set by individual golf facility operators reflect the market they are in (one round of golf at some courses in Scotland costs more than a year’s golf at others), and what they can afford to spend (while the ‘rule of thumb’ is that replacing a green to USGA specification costs around £20/£25,000, a small golf club in a remote part of Scotland indicated in their audit return that they had replaced 6 greens at a total cost of £250 using local materials and volunteer labour).
- Similarly, *financial sustainability (or viability) is also an elusive concept* in the golf sector. Members’ golf clubs are non-profit making organisations and essentially charge their members subscriptions at a level necessary to maintain the club in operation. The financial accounting in the case of municipal courses reflects the policies and accounting methods of the individual local authorities concerned, which can include concessionary pricing and contributions to overheads. Financial viability is a clearer concept in the case of commercially-run facilities, but each operator’s criteria for return on capital etc may be different and operators naturally tend to keep their figures confidential in any case.

While these kinds of complexities and extremes are the reality of the golf sector in Scotland, they strengthen rather than undermine the case for more effective information gathering and forward planning by golf facility operators. Indeed, when combined with the new situation of an excess supply of golf courses in many parts of Scotland (as described later in this report), and with other new factors like possibly changing weather patterns, there is a clear need for members’ golf clubs in particular to plan ahead in a way they have not traditionally been accustomed to doing.

This report is concerned essentially with the supply side of the golf sector, although our conclusions highlight the need for better information on the supply side to be matched by improved demand information if national and local planning is to be effective.

This full report is accompanied by a summary, which is designed to stand alone as a summary of the key findings and conclusions of the audit, for those who do not require all the detailed results and the supporting information. Chapters 2 and 3 of this full report cover the national database and the classification of facilities respectively. The following five chapters (4 to 8) then contain the results of our various questionnaire surveys and inspection visits, while the final chapter highlights some strategic issues and recommendations prompted by the study.

Copies of the questionnaires used in our postal surveys are attached as Appendices A to E, while Appendix F contains our case studies. These are based on our site visits to golf courses and clubhouses, and describe typical situations at various types of golf facility. These can be used, in conjunction with our classification of golf course facilities, as ‘pointers’ to the kinds of situations, and costs, particular facilities may be facing – while recognising our over-riding conclusion about the uniqueness of every facility, and therefore the need for each facility operator (whether club, commercial, or municipal) to base its own forward plans on expert advice relating directly to its own particular circumstances.



## 2 DATABASE OF SCOTLAND'S GOLF FACILITIES

### Introduction

This study has been concerned principally with golf courses, which are the core of Scotland's golf facility provision, and with their supporting clubhouses - but also with coverage where possible of golf ranges and short courses.

There is enormous variety within golf facility provision in Scotland, and this variety is likely to increase as commercial developers and operators in particular seek to provide facilities in flexible ways which are geared to the different demands of different sectors of the market, and to the interests of people with much less than 4 hours to spend on each visit. Golf provision is therefore moving away from the traditional, and often male-dominated members' club with an 18 hole course and conventional clubhouse, and towards the provision of golf facilities as an informal leisure activity, with a range of facilities on offer, open to all, and often with catering as an important element of the product mix.

Maintaining an accurate database of golf facilities will therefore become more complex, with a higher proportion of commercial facilities, more variation among facilities, and more elements within facilities which do not 'fit' traditional definitions, eg several full-length holes as part of a comprehensive practice, tuition, and playing complex..

As a starting point for this study, and to provide a sound foundation on which to build an ongoing and more complex database, we therefore refined **sportscotland's** existing database of golf facilities in two ways:

- *correcting the entries* themselves, ie adding missing facilities, removing duplicates, and amending details of type, location, etc where required;
- *changing the categorisation* to better identify the key characteristic of who *controls* the operation of the facility, as per our definitions in Chapter 1 of this report.

### Golf courses

The core of the database are golf courses, with '*golf course*' being defined for practical purposes as indicated in the previous chapter, ie a course of at least 9 holes and 3000 yards in length (for 18 holes) – the minimum length required for the award of a standard scratch score.

Courses with fewer than 9 holes or shorter than 3000 yards for 18 holes (ie 1500 yards for 9 holes) are defined as '*short courses*', and can include par 3 courses and pitch-and-putt courses. As noted earlier, the trend is likely to be towards the provision of more short courses of various kinds (including courses specifically designed for children's use, several golf holes incorporated into golf practice and tuition complexes, etc).

In addition to the number of holes, grid reference, full postal address, and local authority location, the key variable in the golf courses database is 'management type', ie who controls the operation of the course, as this is the main determinant of operational objectives and therefore of day-to-day operating policies.

Based on our categorisation into club, commercial, and municipal facilities, Table 1 below shows the number of golf course facilities of each management type in each local authority area in Scotland, together with the total number of courses in each area. The distribution of individual courses by management type is very similar to the distribution of golf course facilities shown in the table.

The table also shows the skewed geographical distribution of golf course facilities in Scotland in terms of the year 2000 population per 18 holes in each local authority area.

*Table 1: Database of Scotland's Golf Course Facilities*

| Area                | Golf course facilities |           |           |            | Courses    | Popn (000)<br>per 18 holes |
|---------------------|------------------------|-----------|-----------|------------|------------|----------------------------|
|                     | Club                   | Com       | Mun       | Total      |            |                            |
| Aberdeenshire       | 30                     | 4         | 2         | 36         | 41         | 7                          |
| Angus               | 5                      | 2         | 4         | 11         | 17         | 7                          |
| Argyll and Bute     | 24                     | 4         | 0         | 28         | 29         | 5                          |
| City of Aberdeen    | 5                      | 1         | 4         | 10         | 15         | 17                         |
| City of Dundee      | 1                      | 1         | 2         | 4          | 4          | 38                         |
| City of Edinburgh   | 19                     | 1         | 5         | 25         | 27         | 19                         |
| City of Glasgow     | 4                      | 0         | 5         | 5          | 9          | 69                         |
| Clackmannanshire    | 6                      | 0         | 0         | 6          | 7          | 9                          |
| Dumfries & Galloway | 23                     | 8         | 0         | 31         | 32         | 6                          |
| East Ayrshire       | 5                      | 0         | 2         | 7          | 8          | 21                         |
| East Dunbartonshire | 14                     | 1         | 0         | 15         | 17         | 7                          |
| East Lothian        | 12                     | 3         | 2         | 17         | 19         | 5                          |
| East Renfrewshire   | 8                      | 1         | 0         | 9          | 9          | 11                         |
| Falkirk             | 5                      | 0         | 1         | 6          | 6          | 29                         |
| Fife                | 23                     | 7         | 8         | 38         | 45         | 9                          |
| Highland            | 35                     | 5         | 1         | 41         | 44         | 6                          |
| Inverclyde          | 5                      | 0         | 0         | 5          | 6          | 16                         |
| Midlothian          | 3                      | 2         | 1         | 6          | 6          | 13                         |
| Moray               | 11                     | 3         | 0         | 14         | 15         | 7                          |
| North Ayrshire      | 18                     | 3         | 2         | 23         | 24         | 7                          |
| North Lanarkshire   | 12                     | 3         | 2         | 17         | 18         | 19                         |
| Orkney              | 3                      | 0         | 0         | 3          | 3          | 8                          |
| Perth and Kinross   | 18                     | 10        | 1         | 29         | 37         | 5                          |
| Renfrewshire        | 9                      | 1         | 1         | 11         | 11         | 16                         |
| Scottish Borders    | 16                     | 6         | 0         | 22         | 22         | 6                          |
| Shetland            | 3                      | 0         | 0         | 3          | 3          | 11                         |
| South Ayrshire      | 4                      | 2         | 6         | 12         | 16         | 7                          |
| South Lanarkshire   | 13                     | 2         | 6         | 21         | 23         | 16                         |
| Stirling            | 9                      | 1         | 0         | 10         | 10         | 10                         |
| West Dunbartonshire | 4                      | 1         | 1         | 6          | 6          | 19                         |
| West Lothian        | 9                      | 3         | 1         | 13         | 13         | 15                         |
| Western Isles       | 5                      | 0         | 0         | 5          | 5          | 9                          |
| <b>Total</b>        | <b>361</b>             | <b>75</b> | <b>57</b> | <b>493</b> | <b>547</b> | <b>11</b>                  |

Scotland has a ratio of 18 golf holes per 11,000 people – almost the highest level of golf provision per head of population in the world. However, as shown in Table 1, the pattern is very skewed geographically, with much higher levels of provision per head in rural areas than in urban areas – and with this skewed distribution being strengthened rather than ‘corrected’ by the pattern of recent development, with many of the new courses being built (and existing courses extended) in the rural areas where provision per head was already highest.

Another significant feature of Scotland’s golf provision is that 29% of courses are 9 hole courses, while more than half of the new courses built since 1980 are less than 6000 yards in length.

In the above table, both the St Andrews Links Trust courses and the courses run by links management committees in Angus are included with the ‘municipal’ category for convenience, although they could be regarded as in ‘hybrid’ categories of their own. If they were shown separately, this would reduce the number of strictly ‘municipal’ golf course facilities to 53. Even without this modification, the figures show that there are now significantly more commercial golf course facilities in Scotland than municipal ones.

Historically, the pattern of provision of golf facilities in Scotland has changed dramatically, as the following table shows:

*Table 2: Changing Pattern of Provision of Golf Course Facilities*

| <b>Date</b> | <b>Members’ clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> |
|-------------|-------------------------|---------------------|--------------------|
| 1880        | 100                     | 0                   | 0                  |
| 1920        | 91                      | 1                   | 8                  |
| 1960        | 86                      | 2                   | 12                 |
| 1980        | 83                      | 2                   | 15                 |
| 2001        | 73                      | 15                  | 12                 |

Since 1990, 99 new courses have been built in Scotland (with this number including extensions of at least 9 holes to existing courses). 75% of these have been commercial courses, and this new construction represents a 20% increase in the number of golf holes in Scotland.

The other components of the **sportscotland** database are *golf ranges* and *short courses*.

### **Golf ranges**

Although accurate records of growth have not been kept, there has been a significant increase in the number of *ranges* in Scotland in recent years, and the database now lists a total of 65. (While this study was being carried out, at least two more have opened). Most of these are stand-alone commercial facilities, with the remainder being run by clubs, local authorities, or commercial operators as adjuncts of golf courses. As with golf courses, they vary considerably in scale, facilities and services offered, and quality, and a considerable number have recently upgraded their facilities, and extended them to

include short game practice areas, etc. About 30% of ranges responded to our questionnaire survey, and the findings are summarised in Chapter 7.

### **Short courses**

The database of *short courses* is patchy, but does suggest that there are only a few such facilities in Scotland, with many being ‘second courses’ run by members’ clubs. The others are a miscellaneous mix of facilities, run by local authorities and the commercial sector. Most appear to be of a ‘traditional’ nature, and have seen little investment in upgrading in recent years. The emerging pattern appears to be to have such short courses, or a few full-length holes, incorporated into new commercial golf complexes which offer a mix of playing, practice, and tuition facilities for a range of types of customers.

The results of our questionnaire survey of short courses are reported in Chapter 8.

### **Summary**

Although it is difficult to ensure 100% coverage, and to track all new developments, there is now a reasonably accurate database of Scotland’s golf facilities – with this being most accurate and comprehensive in the case of golf courses, which form the core of golf facility provision in Scotland.

In understanding the pattern of provision, and the way in which golf facilities are operated, the key variable is their ‘management type’. There is considerable confusion in both the terminology used and in the understanding of these types, which hinders effective planning, and **sportscotland** should adopt – and publicise – the categorisation into members’ club, commercial, and municipal facilities described in this chapter.

Key features of the database are the *skewed geographical provision* of golf facilities relative to population and the *growth of commercial provision* of courses and ranges – both features that should be taken into account in **sportscotland**’s national planning.

For the future, Scotland’s golf facilities are likely to become even more varied in terms of the product mix on offer, as the commercial developers and operators of new facilities (and some existing members’ clubs) attempt to match what they provide to what are seen as emerging patterns of demand – including demands for practice, tuition, less time-consuming golf, and better ways of introducing youngsters and other beginners to the game. ‘*Golf centres*’ which combine many different elements of golf facility provision may well characterise the pattern of development in the next decade, and, again, both the structure of the national database and **sportscotland**’s own strategies should take these into account.

### 3 CLASSIFICATION OF SCOTLAND'S GOLF COURSE FACILITIES

#### Introduction

With so much variety among individual golf course facilities in Scotland (the reasons for which were highlighted earlier), there is a need for some classification of these facilities – both to provide a structure for national strategies and to enable individual facility operators to relate to, and thus benefit from, the ‘case study’ examples in this report.

This chapter describes the classification developed by Dr Robert Price, and refined using the new information gathered in the course of this national audit – including further analysis of information gathered in a 2001 Scottish Golf Union survey. The classification was first applied to members’ golf clubs, and then applied to commercial and municipal golf course facilities using the audit team’s working knowledge of the Scottish golf sector as a whole.

There is no current classification of golf ranges or short courses, but these are relatively few in number, and golf course facilities remain the core of golf provision in Scotland.

The classification is based on the scale and nature of operation of golf course facilities as measured by a combination of three key indicators, ie:

- *total annual income;*
- *weekday green fee;*
- *standard scratch score.*

A clear five-class classification emerges, with Class 5 being subdivided because of the significant differences between 18 hole and 9 hole facilities at this level. The classification is based on the following values for each of these key indicators:

*Table 3: Basis of Classification of Scotland’s Golf Course Facilities*

| <b>Indicator</b>           | <b>Class 1</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b>  | <b>Class 5B</b> |
|----------------------------|----------------|----------------|----------------|----------------|------------------|-----------------|
| Total annual income (£000) | 500+           | 350-499        | 250-349        | 150-249        | <150<br>18 holes | <150<br>9 holes |
| Weekday green fee (£)      | 50+            | 30-49          | 20-29          | 16-19          | <16              | <16             |
| SSS                        | 72+            | 70-71          | 68-69          | 66-67          | 66               | 65              |

The distribution of Scotland’s 493 golf facilities, by management type, is as follows:

*Table 4: Number of Golf Course Facilities by Classification and Management Type*

| <b>Type</b> | <b>Class 1</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b> | <b>Class 5B</b> | <b>Total</b> |
|-------------|----------------|----------------|----------------|----------------|-----------------|-----------------|--------------|
| Club        | 10             | 50             | 106            | 63             | 39              | 93              | 361          |
| Commercial  | 11             | 7              | 21             | 9              | 7               | 20              | 75           |
| Municipal   | 2              | 0              | 9              | 9              | 25              | 12              | 57           |
| <b>All</b>  | <b>23</b>      | <b>57</b>      | <b>136</b>     | <b>81</b>      | <b>71</b>       | <b>125</b>      | <b>493</b>   |

The following table shows the same figures as percentages of the total for each management type:

*Table 5: Percentage of Golf Course Facilities by Classification and Management Type*

| <b>Type</b> | <b>Class 1</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b> | <b>Class 5B</b> | <b>Total</b> |
|-------------|----------------|----------------|----------------|----------------|-----------------|-----------------|--------------|
| Club        | 3%             | 14%            | 29%            | 17%            | 11%             | 26%             | 100%         |
| Commercial  | 15%            | 9%             | 28%            | 12%            | 9%              | 27%             | 100%         |
| Municipal   | 3%             | 0%             | 16%            | 16%            | 44%             | 21%             | 100%         |
| <b>All</b>  | <b>5%</b>      | <b>11%</b>     | <b>28%</b>     | <b>16%</b>     | <b>15%</b>      | <b>25%</b>      | <b>100%</b>  |

Features of the figures in the above tables are:

- Class 1 facilities make up only 5% of the total stock of golf facilities in Scotland, but 15% of commercial facilities are in this category.
- Most of the Class 2 facilities are members’ clubs, but again Class 2 facilities account for only 11% of all facilities.
- Class 3 is a large group, with members’ clubs again the dominant type in terms of numbers, but with a significant proportion of commercial courses coming into this category.
- In percentage terms, club, commercial, and municipal courses are about equally represented among Class 4 facilities.
- Over a third of club and commercial courses, and two-thirds of municipal courses, come in Class 5, with about a quarter of all club and commercial courses in Scotland being small 9 hole operations (ie Class 5B).
- Taken together, Class 5A and B (which could be described as ‘very basic’ facilities) account for 40% of golf course facilities. When combined with Class 4, which are ‘basic’, it is clear that well over half of Scotland’s golf course facilities can be described as basic/very basic.
- Some municipal courses are in our Class 5A largely because of their low season ticket and green fee charges (and therefore relatively low total income). However, based on the limited data available, the nature of the courses themselves means that their course maintenance costs are often more typical of Class 3 or Class 4 courses,

and we take this into account in our later financial estimates.

Since the focus of the national audit was on golf facilities which are most readily available to golfers in general in terms of their access and pricing policies, our detailed inspection visits excluded 'exclusive' and expensive 'top of the range' courses. Because of their importance in the total stock of facilities, we did visit a number of 'basic' facilities, although there is obviously concern (as evidenced by our findings, reported later) about whether the operators of such facilities will be able to afford to invest in upgradings and improvements to meet emerging customer demands.

Our questionnaire surveys covered all facilities, and this report contains information on all categories of facilities based on the returns received.

In the next chapter, we describe our findings in relation to the key *financial and management* aspects of golf course facility operation in Scotland, before going on to summarise the results of our surveys of the *physical* aspects of golf courses and clubhouses.

## 4 FINANCIAL AND MANAGEMENT ISSUES

### Introduction

Using the classification system just described, this chapter summarises the key findings of our surveys and desk research as they relate to the management and finances of golf course facilities in Scotland. These are key issues, as the long-term sustainability of golf facilities is likely to depend as much on the robustness of their finances and their management structures as on the physical condition of their courses and clubhouses.

Obviously, facility operators will only be able to maintain and upgrade their facilities if they can afford to do so – and with members’ clubs still responsible for over 70% of Scotland’s golf course facilities, the financial ‘health’ and stability of these clubs will be a key factor.

In the first part of the chapter, we therefore provide a summary of key information for all 361 golf facilities run by members’ clubs, based on our own questionnaire survey (a copy of our General questionnaire is included as Appendix A), boosted by information from the SGU survey and the interpretation and application of this information to the facilities whose clubs did not respond to either survey.

Later in the chapter, we report on additional information provided by those who did respond to our questionnaires, including the limited financial information available for commercial and municipal golf course facilities. (The financial and management information provided by range and short course operators is reported in the chapters dealing with these facilities).

### Summary Data for Members’ Club Facilities by Class

Scotland’s 361 course-owning members’ clubs operate a total of 392 golf courses.

69% of clubs have one 18 hole course. 24% have a 9 hole course, 4% have 27 holes, and 3% have 36 holes or more. (The very few clubs which have 10, 12, or 13 hole courses are included in the 9 hole category).

Course-owning clubs have an estimated total membership of 211,000, which represents 645 members per 18 hole unit on average, made up approximately as follows:

*Table 6: Club Membership by Membership Type*

| Type          | Percentage  |
|---------------|-------------|
| Adult male    | 56%         |
| Senior male   | 9%          |
| Junior male   | 11%         |
| Adult female  | 12%         |
| Senior female | 3%          |
| Junior female | 1%          |
| Other         | 8%          |
| <b>Total</b>  | <b>100%</b> |



Among course-owning clubs in Scotland, there are only 16 single-sex clubs (about 4% of the total) – 15 male-only clubs and one female-only club.

The following table provides a summary of key membership and financial data, by class, for all 361 clubs. Using a combination of our own surveys and that of the SGU, data were directly obtained from 75% of clubs for the years 1999, 2000, or 2001, and that data has been applied to the remaining clubs using our own working knowledge of the golf sector.

*Table 7: Club Membership and Financial Data by Classification of Facility*

|  | <b>Class 1</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b> | <b>Class 5B</b> |
|--|----------------|----------------|----------------|----------------|-----------------|-----------------|
| Number in class                                  | 10             | 50             | 106            | 63             | 39              | 93              |
| % in class                                       | 3              | 14             | 29             | 17             | 11              | 26              |
| Av no of members                                 | 965            | 917            | 750            | 630            | 360             | 300             |
| Av waiting list (years)                          | 7              | 5              | 2              | 1              | 0               | 0               |
| % with waiting list over 1 year                  | 100            | 75             | 72             | 20             | 0               | 0               |
| Av annual income (£000)                          | 750            | 450            | 300            | 200            | 95              | 55              |
| Members' fee income %                            | 45             | 63             | 65             | 60             | 50              | 61              |
| Visitors' fee income %                           | 45             | 20             | 15             | 18             | 28              | 28              |
| Other income %                                   | 10             | 17             | 20             | 22             | 22              | 11              |
| Av adult male joining fee (£)                    | 637            | 798            | 455            | 227            | 50              | 69              |
| Av adult male annual fee (£)                     | 350            | 450            | 333            | 265            | 160             | 119             |
| Av weekday green fee (£)                         | 75             | 33             | 21             | 18             | 15              | 12              |
| Av annual course expenditure per 18 holes (£000) | 164            | 175            | 131            | 96             | 61              | 29              |
| Av annual clubhouse expenditure (£000)           | 134            | 117            | 70             | 48             | 20              | 7               |
| Av annual admin expenditure (£000)               | 138            | 93             | 60             | 41             | 20              | 12              |

*The figures in the table can be used, with discretion, by individual clubs to compare their own performance with those of the class averages, with this kind of benchmarking being particularly useful both for general business planning purposes and to identify areas where a club's performance is 'out of line' and might be improved.*

Three particularly interesting features of the figures are:

- the relatively high reliance of Class 1 clubs on visitor income (due as much to the levels of green fee charges as the actual numbers of visitors), which allows these clubs to charge lower membership subscriptions than Class 2 clubs;
- the similarly high reliance on visitor income among Class 5 clubs, where relatively high numbers of visitors can be (and have to be) taken because of the clubs' small membership numbers and lack of waiting lists;
- clubs in Classes 2, 3, and 4 achieve a more balanced relationship between membership and visitor income, with fees broadly reflecting the class of facility.

The financial security or otherwise of clubs in each class is further highlighted by the following figures, which are based on a sample of 193 clubs for which we obtained detailed enough financial information for one or more of the years 1999-2001. As noted earlier, golf clubs – as non-profit making bodies – aim to broadly ‘balance their books’ year on year, while making adequate provision for anticipated future expenditure and contingencies via small operating surpluses where possible. Substantial recurring annual surpluses or deficits are therefore rare, and would normally be avoided by restraining or increasing membership subscriptions accordingly. Nonetheless, the figures do indicate where the greatest financial pressures are among clubs, ie among the smallest clubs which are least able to generate additional membership income.

*Table 8: Clubs' Recent Operating Surpluses and Deficits by Classification*

|                                  | <b>Class 1</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b> | <b>Class 5B</b> |
|----------------------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| Number in class                  | 10             | 50             | 106            | 63             | 39              | 93              |
| Number in sample                 | 8              | 29             | 62             | 19             | 24              | 51              |
| % in sample                      | 80             | 58             | 59             | 30             | 62              | 55              |
| % with surplus                   | 100            | 83             | 81             | 74             | 67              | 76              |
| Av surplus (£000)                | 106            | 40             | 21             | 13             | 6               | 4               |
| % with deficit                   | 0              | 17             | 19             | 26             | 33              | 24              |
| Av deficit (£000)                | 0              | 45             | 13             | 9              | 6               | 5               |
| Av annual income (£000)          | 750            | 450            | 300            | 200            | 95              | 55              |
| Av surplus as % of annual income | 14             | 9              | 7              | 6.5            | 6.3             | 7.3             |
| Av deficit as % of annual income | 0              | 10             | 4              | 4.5            | 6.3             | 9               |

Other findings from the surveys and our desk research which have a bearing on the long-term sustainability of the club sector of golf in Scotland include:

- Over the ten-year period 1991-2001, and based on limited sample data, course maintenance and club administration costs rose 100% on average, membership income also rose 100%, and the average midweek visitor green fee rose 200% - all

compared to an increase of only 50% or so in the retail price index. With visitor business becoming more competitive, and more courses participating in '2 for 1' green fee schemes, it is unlikely that green fee charges can continue to increase in this way. (Indeed, the green fee charges quoted in the *Official Guide to Golf in Scotland* suggest that, taking all the courses in Scotland together, such charges have not increased at all – and have therefore decreased in real terms – over the past three years). This, in turn, will put more of the onus back on to club members for funding the running of their clubs – the dilemma being that substantial increases in membership subscriptions, combined with a possible trend towards 'recreational' rather than club golf, may make this self-defeating for smaller clubs with no waiting lists because some members will not renew their memberships.

- Our survey found that, while 100% of Class 1 clubs have full-time secretaries/administrators, the proportion falls to 75% among Class 2 clubs, 40% among Class 3 clubs, and close to zero among Class 4 and 5 clubs.
- 35 clubs receive over £100,000 a year in visitor income, with 8 of these receiving over £300,000 a year. 50% of all visitor income accrues to 20% of clubs.
- Adult male and female members pay equal subscriptions at most clubs in rural areas, but in central Scotland adult male subscriptions are higher than female subscriptions at 85% of clubs – often, but not always, reflecting varying degrees of playing and voting restrictions on lady members.

Finally, if it is assumed that a club with an 18 hole course can accommodate 800 members (30% already do), and that an annual income of £250,000 is necessary to maintain an 18 hole course and clubhouse to a reasonable standard (£100,000 in the case of 9 hole courses), two key conclusions are:

- *Scotland's course-owning golf clubs have a theoretical spare capacity equivalent to about 50,000 members.*
- *45% of course-owning clubs have incomes below the level required to maintain their facilities to a good standard on an ongoing basis. None of these clubs are in Classes 1 and 2, but over 60% of clubs in Classes 3 and 4, and around 90% of clubs in Class 5 come into this category. Geographically, these 'low income' clubs are concentrated in the rural areas and, to a lesser extent, around the fringes of the central belt of Scotland.*

Financial information on commercial and municipal facilities is more limited. However, in terms of overall classification, our earlier table showed concentrations of *commercial* course facilities in Class 3 and Class 5 (and particularly Class 5B, ie 9 hole courses), with a significant number of Class 1 courses. In other words, and perhaps contrary to the perception of commercial courses as exclusive and expensive (as may tend to be the case with commercial provision in some other sports), commercial golf facilities are mainly mid-range or basic courses, and open to all golfers. Indeed, almost half of the commercial courses built in the last 10 years or so are in Classes 4 and 5, and were almost certainly built without professional design or construction expertise – something which may have implications for their long-term playing quality and maintenance/upgrading costs.

The classification shows that *municipal* course facilities are mainly in Class 5, with most of the remainder in Classes 3 and 4. (The few Class 1 courses are run by links trusts rather than local authorities). Typical municipal golf course facilities are therefore providing inexpensive but fairly basic golf, again open to all.

Compared to an average midweek green fee of about £21 at members' club courses, the averages at commercial and municipal courses are about £27 and £13 respectively. However, the commercial average is 'boosted' by the small number of courses charging much higher green fees, and the median green fee figure for commercial courses is in the £16 to £20 range.

With relatively low response rates to our questionnaires from commercial and municipal operators, and few respondents prepared to provide financial figures, it is not possible to analyse the financial performance of commercial or municipal facilities in the same way as we have done for members' club facilities.

Most of those responding to the questionnaires did give figures for numbers of members/season ticket holders at their commercial or municipal facilities. The procedure at such courses is that those wishing to play regularly buy a season ticket from the facility operator, and then pay separately if they wish to join a club attached to the facility. It is known that a proportion of season ticket holders choose not to join the attached clubs (probably more so in the case of municipal courses than at commercial courses), while commercial courses also tend to limit the number of season tickets sold in order to keep an adequate number of tee times available for 'pay-as-you-play' players, who normally generate higher revenue per round for the facility operator than do season ticket players.

The average numbers given by respondents for the main categories, with the average numbers of members given by clubs shown for comparison, were as follows:

*Table 9: Number of Season Ticket Holders at Commercial and Municipal Golf Course Facilities*

| <b>Type</b>   | <b>Commercial</b> | <b>Municipal</b> | <b>Club</b> |
|---------------|-------------------|------------------|-------------|
| Adult male    | 216               | 304              | 367         |
| Adult female  | 35                | 30               | 79          |
| Senior male   | 24                | 54               | 56          |
| Senior female | 9                 | 16               | 22          |
| Junior male   | 38                | 47               | 72          |
| Junior female | 6                 | 13               | 9           |
| <b>Total</b>  | <b>344</b>        | <b>501</b>       | <b>589</b>  |

The remaining questions on our General questionnaire asked about employment at golf facilities, and the booking procedures and availability of the facilities for different types of players. Again, too few returns were received from local authorities to allow reliable averages to be calculated. However, it is known that, in many cases, golf facilities are managed as part of a wider portfolio of leisure facilities and therefore do not have their own dedicated management or maintenance staff – which would make it very difficult to quantify the local authority employment directly related to golf facilities. Similarly,

such municipal facilities tend to be widely available to all golfers, albeit with some reserved times for local club members and concessionary pricing for particular groups within the local community. In some cases, it is pressure of numbers wanting to play rather than restrictions on who can play that restricts the availability of such municipal courses.

The following tables therefore summarise the information provided by members' club and commercial facilities in response to these questions:

*Table 10: Numbers of Staff at Club and Commercial Golf Course Facilities*

| Area of operation  | Year-round, full-time |             | Year-round, part-time |            | Seasonal, full-time |            | Seasonal, part-time |            |
|--------------------|-----------------------|-------------|-----------------------|------------|---------------------|------------|---------------------|------------|
|                    | Club                  | Com         | Club                  | Com        | Club                | Com        | Club                | Com        |
| Course maintenance | 3.9                   | 3.9         | 0.8                   | 0.3        | 0.0                 | 0.2        | 0.1                 | 0.2        |
| Administration     | 0.6                   | 2.4         | 0.8                   | 0.3        | 0.0                 | 0.2        | 0.1                 | 0.2        |
| Bar                | 1.1                   | 1.0         | 1.7                   | 1.4        | 0.1                 | 0.2        | 0.6                 | 0.7        |
| Catering           | 0.9                   | 1.2         | 1.0                   | 1.1        | 0.2                 | 0.3        | 0.7                 | 0.4        |
| Professional       | 0.7                   | 1.1         | 0.1                   | 0.1        | 0.0                 | 0.0        | 0.1                 | 0.1        |
| Other              | 0.1                   | 0.4         | 0.2                   | 0.8        | 0.0                 | 1.0        | 0.1                 | 0.4        |
| <b>Total</b>       | <b>7.3</b>            | <b>10.0</b> | <b>3.9</b>            | <b>3.8</b> | <b>0.5</b>          | <b>2.4</b> | <b>2.0</b>          | <b>2.6</b> |

Expressed as full-time equivalent (FTE) jobs (ie where a year-round part-time job and a seasonal full-time job are each 50% of an FTE and a seasonal part-time job is 25% of an FTE), the figures show that the average members' club golf course facility employs 10.0 FTEs and the average commercial golf course facility employs 14.4 FTEs.

Club and commercial facilities employ similar numbers of course maintenance staff – it is in administration and, to a lesser extent, in other services that the difference is significant. This is confirmed by the responses to the question about the number of hours worked per week on average by unpaid volunteers or officials receiving small honoraria. For club facilities, the average figure was 49 hours per week, while for commercial facilities it was only 14 hours – the difference being equal to a full-time equivalent job.

This confirms the relative importance of commercial golf course facilities in terms of employment creation, as well as highlighting the extent to which course-owning members' golf clubs rely on volunteer labour to manage their affairs. If this was replaced by paid staff, and depending on the nature of the job(s), the cost to the average course-owning golf club could be well over £20,000 a year when employer's costs are included – equivalent to an additional £40 payment per member per year on average.

Grossed up, these figures suggest that members' course-owning clubs and commercial golf course facility operators taken together probably employ the equivalent of about 6,000 full-time staff in Scotland. (This figure includes catering and golf professional staff, who are often self-employed in the case of members' golf clubs, and contracted to provide services to the club). Depending on how they allocate their maintenance and office staffing, and taking account of the fact that few local authorities run the clubhouses attached to their courses, municipal golf course facilities probably account for a further 500 or so full-time equivalent staff, ie an average of 7 or 8 per course.

The pattern of responses to the question on booking procedures was as shown below:

*Table 11: Golf Course Tee Time Booking Procedures*

| <b>Method</b>             | <b>Club (%)</b> | <b>Commercial (%)</b> |
|---------------------------|-----------------|-----------------------|
| Internet                  | 14              | 15                    |
| Email                     | 53              | 75                    |
| Advance, by letter or fax | 84              | 100                   |
| Telephone                 | 86              | 100                   |
| Starting sheet            | 49              | 75                    |
| Ball in the chute         | 23              | 10                    |
| None                      | 4               | 0                     |

The responses confirm that commercial golf course facility operators are generally more businesslike and ‘modern’ in the ways they take bookings for their facilities, with higher levels of use of all the methods except the traditional ‘first come, first served’ ball in the chute method – which is still prevalent at a significant number of Class 2, 3, and 4 clubs. Almost all the small number of clubs that have no methods of booking are Class 5B clubs, while the use of electronic methods like email decreases along the spectrum from Class 1 to Class 5B clubs.

The availability of the facilities themselves to different types of player is summarised in the table below, and further highlights the extent to which commercial golf course facilities are open to all, compared to the significant restrictions applied to players like women, juniors, and non-members in the case of many course-owning golf clubs. The percentages are the percentages of golf course facilities in each case.

*Table 12: Availability of Golf Course Tee Times to Different Categories of Players*

| <b>Time</b>                        | <b>Adult males Members or season ticket holders</b> |          | <b>Adult female members or season ticket holders</b> |          | <b>Junior members or season ticket holders</b> |          | <b>Visitors or green fee players</b> |          |
|------------------------------------|---|----------|--|----------|--|----------|--------------------------------------|----------|
|                                    | % of clubs  | % of com | % of clubs   | % of com | % of clubs                                     | % of com | % of clubs                           | % of com |
| Weekdays, all times available      | 58  | 75       | 49   | 75       | 28   | 60       | 27                                   | 65       |
| Weekdays, slight restrictions      | 33  | 15       | 38   | 15       | 50   | 20       | 49                                   | 30       |
| Weekdays, significant restrictions | 3   | 0        | 3  | 0        | 14   | 5        | 16                                   | 0        |
| Weekends, all times available      | 50  | 65       | 31   | 60       | 14   | 40       | 8                                    | 35       |
| Weekends, slight restrictions      | 39  | 25       | 51   | 30       | 56   | 40       | 44                                   | 60       |
| Weekends, significant restrictions | 5   | 0        | 9  | 0        | 22   | 5        | 40                                   | 0        |

We now go on to describe the detailed results of our various facility surveys.

## 5 SURVEY OF GOLF COURSES

### Introduction

There were two elements to our survey of courses:

- A detailed postal questionnaire survey of all courses. (A copy of the questionnaire is included as Appendix B).
- Site surveys of 33 golf course facilities by the team's agronomist.

The response rates to the postal survey were 43% from members' clubs, 35% from local authorities running municipal courses, and 29% from commercial course operators, giving a total of 197 completed questionnaires – 155 from members' clubs, 22 from commercial operators, and 20 from local authorities/links management committees. These overall response rates reflect what was, deliberately, a lengthy questionnaire, while the lower response rate from commercial operators is likely to reflect business confidentiality and, possibly, less 'engagement' to date by the private sector with **sportscotland** and the SGU in terms of national strategies and planning.

The 33 golf course facilities for site visits were selected from those for which completed questionnaires were received, whose operators agreed to such visits, and which formed a reasonable cross-section of the types of course of most significance to the national audit. As noted earlier, these were courses that were accessible to golfers in general in terms of their policies and pricing, and which were likely to exhibit typical characteristics that would make them useful both in terms of grossing up estimates of required longer-term expenditure and as providing material for 'case studies' from whose experience other operators of similar courses could learn.

An undertaking was given that individual course results and findings would remain confidential, and the figures and assessments in this chapter are therefore either aggregated and average figures or anonymous case study-type assessments. In this respect, our earlier classification of facilities is useful to course operators who can compare their own situation to the averages and case studies of courses with the same classification to their own. (The case studies themselves are included as Appendix F).

### Questionnaire Survey Results

For ease of reference, the results are reported in the same sequence as the questions on the questionnaire. The results are shown for members' club, commercial, and municipal golf course facilities (including links management facilities) respectively, with significant differences between clubs in different classes highlighted in the text. Totals may not always add to exactly 100% because of rounding.

*Table 13: Tenure of Golf Courses*

| <b>Tenure</b>        | <b>Clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|----------------------|----------------|---------------------|--------------------|----------------|
| Own                  | 61             | 73                  | 90                 | 65             |
| Lease                | 29             | 23                  | 10                 | 26             |
| Part-own, part-lease | 10             | 0                   | 0                  | 8              |
| Not stated           | 0              | 5                   | 0                  | 1              |
| <b>Total</b>         | <b>100</b>     | <b>101</b>          | <b>100</b>         | <b>100</b>     |

Significant proportions of golf courses are held on leases, particularly in the case of members' club courses – and the proportion increases as the size of the club decreases, ie 48% of Class 5 clubs lease all or part of their courses, compared to less than 20% of Class 1 clubs. When combined with the financial vulnerability of smaller clubs noted earlier, this further highlights the overall insecurity of such clubs, given inevitable doubts about whether (and on what terms) leases will be renewed on expiry.

On average, course leases have 35 years to run, but this figure is much higher (71 years on average) in the case of commercial courses – many of which have only recently been built – and lower (32 years on average) for members' club leases. Again, leases are generally closer to their expiry/renewal dates for smaller clubs, where the average term remaining is about 20 years. Overall, 8% of all members' clubs in Scotland hold their courses on leases with 10 years or less until their expiry dates.

There may also be a concern about the timing of lease rent reviews, and the basis of such reviews, although we have no details on this aspect of leases.

When asked to provide figures on usage of their courses, 40% of operators were unable to (or were not prepared to) provide figures, while 80% of those who did were only able to provide estimates rather than recorded figures – with this proportion rising to 90% for use by club members. It is therefore a feature of the golf sector that many members' golf clubs maintain no accurate records of the level or pattern of use of their courses. This obviously makes it difficult to identify trends in use, times of spare capacity, etc, which in turn makes it difficult to plan effectively for the future.

From the returns that were made, the average figures for total numbers of rounds played per year were 16,500 for commercial courses, 19,600 for club courses, and 45,700 for municipal courses. In the club sector, the numbers fell from about 30,000 in Classes 1, 2, and 3 to less than 9,000 in Class 5.

While we do not have confidence in the reliability of these figures (because of the relatively small number of returns, the high proportion of estimated rather than recorded figures, and the clearly erroneous figures given by some respondents), the pattern does suggest that municipal courses are the most heavily used, while the low figure for commercial courses (which generally have to generate as many rounds as possible for financial reasons) may reflect the significant number of 9 hole courses and the newness of many of the courses in the commercial sector.



With a ‘rule of thumb’ for the *physical carrying capacity* of a typical 18 hole course, ie *the number of rounds it could carry per year while being maintained in good condition at reasonable cost*, sometimes quoted as being around 40,000 rounds (with wide variations depending on circumstances), the figures also tend to support the anecdotal evidence to the effect that:

- there is little if any spare capacity on many municipal courses;
- there are varying degrees of spare capacity on many club courses, but clubs in the ‘higher’ classes may have no pressing need to increase the number of rounds played on their courses, while low levels of demand may make it difficult to generate more rounds in the case of the smaller clubs in rural areas;
- with the high number of new commercial courses built in recent years, often in areas of already-high supply, some commercial courses may struggle to generate the number of rounds necessary to achieve financial viability.

The next question asked about the availability of practice facilities at golf courses, and the proportions of courses with particular practice facilities were as follows:

*Table 14: Practice Facilities at Golf Courses*

| <b>Practice facility</b>                  | <b>Clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|---|----------------|---------------------|--------------------|----------------|
| Covered range, balls provided             | 3              | 36                  | 35                 | 10             |
| Covered range, players use own balls      | 1              | 5                   | 0                  | 2              |
| Open practice area, balls provided        | 6              | 18                  | 30                 | 10             |
| Open practice area, players use own balls | 65             | 32                  | 45                 | 59             |
| Short game practice area                  | 65             | 68                  | 50                 | 63             |
| Practice putting green                    | 84             | 77                  | 90                 | 84             |
| Outdoor practice net                      | 46             | 18                  | 20                 | 40             |
| Indoor practice facilities                | 1              | 14                  | 0                  | 3              |
| None                                      | 6              | 14                  | 5                  | 7              |

The figures highlight:

- the higher provision of modern practice facilities (where balls are provided) at the newer commercial courses; (the high figure for municipal courses will be skewed by the provision at the St Andrews Links Trust courses);
- the relatively high proportions of all types of course that have at least the basic facilities for practising all aspects of the game – full shots (although this will be restricted in some cases by the size of the open practice area), short game, and putting.

As would be expected, smaller clubs are less likely to have the more extensive practice facilities, but just as likely as larger clubs to have basic facilities like a practice net.

About 40% of respondents were unable to give even an approximate figure for the total area of their course, any unused ground, and the length and width of their practice areas. The average figures given (again with doubts about the accuracy of some of the figures) were about 112 acres for the course (123 acres for 18 hole courses and 62 acres for 9 holes) , and 220 by 100 yards for the average practice area. Only 23% of clubs indicated they had any spare ground, and the average was only about 10 acres. About 40% of commercial operators have spare ground (possibly earmarked for future expansion when the course was first established), with an average of 20-30 acres, while the returns suggest there is virtually no spare ground at municipal courses.

Overall, the main scope for physical expansion of existing facilities on their existing sites is in the commercial sector, although the situation is very site-specific.

The next set of questions sought information about the physical characteristics of the golf courses., starting with soil type.

*Table 15: Predominant Soil Type on Golf Courses*

| <b>Soil type</b> | <b>Clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|------------------|----------------|---------------------|--------------------|----------------|
| Sand             | 18             | 9                   | 15                 | 17             |
| Sand/loam        | 22             | 36                  | 20                 | 23             |
| Loam             | 12             | 18                  | 0                  | 12             |
| Loam/clay        | 31             | 23                  | 35                 | 30             |
| Clay             | 12             | 14                  | 5                  | 12             |
| Peat             | 11             | 9                   | 5                  | 10             |
| Other            | 3              | 0                   | 0                  | 2              |
| Not stated       | 3              | 0                   | 25                 | 5              |
| <b>Total</b>     | <b>112</b>     | <b>109</b>          | <b>105</b>         | <b>111</b>     |

*Table 16: Greens Construction*

| <b>Type of construction</b>             | <b>Clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|---|----------------|---------------------|--------------------|----------------|
| Traditional links                       | 26             | 9                   | 25                 | 24             |
| Amended soil overlying a drainage base  | 35             | 18                  | 30                 | 32             |
| USGA-type profile                       | 8              | 36                  | 5                  | 11             |
| Other profile                           | 15             | 14                  | 0                  | 14             |
| Combination of some or all of the above | 18             | 23                  | 10                 | 18             |
| Not stated                              | 3              | 0                   | 30                 | 5              |
| <b>Total</b>                            | <b>105</b>     | <b>100</b>          | <b>100</b>         | <b>104</b>     |

Table 17: Drainage type

| Type of drainage               | Clubs %    | Commercial % | Municipal % | Total %    |
|--------------------------------|------------|--------------|-------------|------------|
| Natural percolation            | 46         | 32           | 45          | 44         |
| Supplementary drainage systems | 53         | 68           | 30          | 52         |
| Not stated                     | 1          | 0            | 25          | 4          |
| <b>Total</b>                   | <b>100</b> | <b>100</b>   | <b>100</b>  | <b>104</b> |

The totals sum to more than 100% in some instances because some respondents indicated more than one predominant type.

The low proportion of commercial course built on sandy soils and having traditional links greens and natural percolation drainage systems probably relates to the fact that few such links sites were readily available by the time most of the commercial courses were being built, while the high proportions of all types of courses built on clay or loam/clay soils (again a reflection of the ‘move inland’ in the first course construction ‘boom’ around 1890 to 1910) may be a factor in the apparent increase in the ‘wetness’ of courses – particularly on older course with old, rudimentary, and possible damaged drainage systems.

Similarly, the relatively high proportion of commercial courses with USGA-type greens reflects their recent construction, and should assist their year-round playability.

Over 80% of courses of all types have irrigation systems, although, among members’ clubs, the proportion drops from well over 80% in Classes 1 to 4, to 60-65% in Class5.

Among those which have irrigation, the types of systems are as follows:

Table 18: Types of Irrigation System

| Type of system                                    | Clubs %    | Commercial % | Municipal % | Total %    |
|---|------------|--------------|-------------|------------|
| Manual, greens only                               | 24         | 6            | 22          | 22         |
| Manual, greens and tees                           | 10         | 12           | 22          | 11         |
| Automatic, greens only                            | 15         | 12           | 6           | 14         |
| Automatic, greens and tees                        | 28         | 47           | 6           | 27         |
| Automatic, greens, tees, and approaches           | 9          | 24           | 6           | 10         |
| Automatic, greens, tees, approaches, and fairways | 14         | 12           | 39          | 16         |
| Not stated  | 5          | 6            | 0           | 4          |
| <b>Total</b>                                      | <b>105</b> | <b>119</b>   | <b>101</b>  | <b>104</b> |

Table 19: How Irrigation System is Fed

| Method                             | Clubs %    | Commercial % | Municipal % | Total %    |
|------------------------------------|------------|--------------|-------------|------------|
| Mains supply                       | 42         | 18           | 50          | 41         |
| On-site water features             | 7          | 41           | 0           | 10         |
| On-site or adjacent water sources  | 23         | 18           | 39          | 24         |
| On-site ground water or spring-fed | 22         | 35           | 44          | 26         |
| Combination of mains and on-site   | 7          | 6            | 0           | 6          |
| Not stated                         | 5          | 0            | 0           | 4          |
| <b>Total</b>                       | <b>106</b> | <b>118</b>   | <b>133</b>  | <b>111</b> |

Again, some totals add to more than 100% because of multiple responses from some respondents.

The figures again highlight the greater sophistication of commercial operators' systems (with the high figure for the full automatic system in the case of municipal courses again relating to the links trust courses rather than municipal courses as such). Among clubs, most Class 5 clubs which have systems have manual systems only.

Irrigation is a pre-requisite for effective management of USGA-type green constructions and has therefore been included in most new-build courses in the last 20 years. Most commercial operators feed their irrigation systems from water features on-site. This does away with the costs associated with radius-fed systems and encourages the incorporation of a range of features within the course design. These features, in turn, create enhanced playability, aesthetics, and habitats. The development of relatively inexpensive liners has made the inclusion of water features more feasible on ground not entirely suited for the purpose.

Course operators' approach to ecological management is summarised in the following tables.

Table 20: Person or Sub-Committee Responsible for Ecological Management?

|              | Clubs %    | Commercial % | Municipal % | Total %    |
|--------------|------------|--------------|-------------|------------|
| Yes          | 52         | 73           | 70          | 56         |
| No           | 47         | 27           | 30          | 43         |
| Not stated   | 1          | 0            | 0           | 1          |
| <b>Total</b> | <b>100</b> | <b>100</b>   | <b>100</b>  | <b>100</b> |

Table 21: Use Services of Ecological Consultancy?

|     | Clubs % | Commercial % | Municipal % | Total % |
|-----|---------|--------------|-------------|---------|
| Yes | 39      | 45           | 80          | 44      |
| No  | 59      | 50           | 20          | 54      |

|              |           |            |            |            |
|--------------|-----------|------------|------------|------------|
| Not stated   | 1         | 5          | 0          | 2          |
| <b>Total</b> | <b>99</b> | <b>100</b> | <b>100</b> | <b>100</b> |

Again, and perhaps surprisingly, it is in the newer commercial sector (plus the links trust courses) where most attention is paid to ecological management of courses, although the findings are generally positive for clubs as well. Although larger clubs are more likely to be involved than smaller clubs, the proportion of the smallest (Class 5) clubs with someone responsible for ecological management is still as high as 40% or so.

Table 22 shows the average greenkeeping staff complements at different types of golf course facility.

*Table 22: Number of Greens Staff*

| <b>Category</b>        | <b>Clubs</b> | <b>Commercial</b> | <b>Municipal</b> | <b>Average</b> |
|------------------------|--------------|-------------------|------------------|----------------|
| Course manager         | 0.2          | 0.4               | 0.3              | 0.3            |
| Head greenkeeper       | 0.9          | 0.8               | 1.1              | 0.9            |
| Assistant, time served | 2.0          | 2.0               | 3.7              | 2.2            |
| Apprentice             | 0.7          | 1.4               | 1.1              | 0.8            |
| Journeyman/labourer    | 0.7          | 1.2               | 1.5              | 0.9            |
| <b>Total</b>           | <b>4.5</b>   | <b>5.8</b>        | <b>7.5</b>       | <b>5.1</b>     |

Respondents generally gave these figures for their facility as a whole, ie more than one course in a few cases, so the staffing complements per golf course will be slightly lower. Also, the relatively high municipal figure reflects the staffing levels on the links trust courses.

Among golf clubs, the proportion with a course manager (the more modern term and generally denoting a more highly qualified person than head greenkeeper) fell from 83% among Class 1 clubs to 18% among Class 5 clubs, and the total greenkeeping staff complement similarly fell from an average of 10.8 staff in Class 1 clubs (several of which have more than one course) to an average of 2.8 staff in Class 5 clubs, a majority of which have 9 hole courses.

Overall, this breakdown of the course maintenance staff complement corresponds closely to the general employment figures given earlier.

Course maintenance machinery (items costing more than £4,000 each) is acquired and maintained in various ways as shown below.

Table 23: How is Course Maintenance Machinery Acquired and Replaced?

| Category   | Clubs %    | Commercial % | Municipal % | Total %    |
|--|------------|--------------|-------------|------------|
| Purchase from reserves                               | 26         | 9            | 20          | 23         |
| Purchase using borrowing                             | 8          | 14           | 0           | 8          |
| Purchase using combination of reserves and borrowing | 17         | 32           | 0           | 17         |
| Lease-purchase                                       | 21         | 18           | 0           | 19         |
| Lease  | 7          | 18           | 5           | 8          |
| Combination of purchase and lease                    | 31         | 5            | 75          | 32         |
| Not stated   | 2          | 9            | 0           | 3          |
| <b>Total</b>   | <b>105</b> | <b>105</b>   | <b>100</b>  | <b>110</b> |

Table 24: How is Course Maintenance Machinery Serviced and Repaired?

| Category                  | Clubs %    | Commercial % | Municipal % | Total %    |
|---------------------------|------------|--------------|-------------|------------|
| In-house staff            | 21         | 55           | 40          | 27         |
| Leasing company or agents | 12         | 18           | 15          | 13         |
| Other external agents     | 36         | 5            | 5           | 29         |
| Combination of the above  | 39         | 32           | 20          | 37         |
| Not stated                | 1          | 0            | 25          | 4          |
| <b>Total</b>              | <b>109</b> | <b>110</b>   | <b>105</b>  | <b>110</b> |

Members' clubs (particularly the better-off clubs in Classes 1 and 2) are more likely to acquire machinery using their financial reserves, but also more likely to have major servicing done by outside agents. Commercial operators, on the other hand, are more likely to use borrowing or leasing to acquire the equipment, but then to have it maintained by their own in-house staff.

Across all classes there is a trend towards the securing of immediate access to 'specialist equipment'. With the narrowing of weather windows when aeration, top-dressing and over-seeding can be carried out to best effect, greenstaff require instant access to specialist equipment such as verti-drains and dressers. For the wealthier clubs this equipment is kept in-house. The less well-off commercial operators and smaller members' clubs in the main have local 'machinery ring' arrangements in place whereby two or three clubs share the equipment.

Municipal course operators tend to rely on the hire of this specialist equipment, resulting in the works being carried out during the period of the hire as opposed to being completed under the ideal ground conditions. At best, this results in the works not having the full agronomical benefit and, in a worst case scenario, damage can actually be inflicted on the fabric of the course with long term management consequences.

50% of members' clubs claimed to have a written long-term (3 years or more) course

management plan drawn up by the head greenkeeper, greens committee, or agronomy consultants, with the proportion of clubs with such a plan falling steadily from 83% of Class 1 clubs to about 35% of Class 4 and 5 clubs. The proportions were around 40% in the case of commercial and municipal operators.

On health and safety issues, the findings were as follows.

*Table 25: Position on Health and Safety Issues, Golf Course*

| <b>Policy</b>  | <b>Clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|--|----------------|---------------------|--------------------|----------------|
| Have written health and safety policy covering greenkeeping staff      | 83             | 82                  | 75                 | 82             |
| Have written health and safety policy covering players                 | 30             | 45                  | 50                 | 34             |
| Have nominated health and safety officer or sub-committee              | 69             | 59                  | 65                 | 68             |
| Have used consultants to advise on health and safety issues and policy | 54             | 68                  | 40                 | 54             |
| Member of staff on site at all times when players using the facilities | 32             | 68                  | 25                 | 36             |
| Keep a record of notifiable incidents                                  | 87             | 95                  | 75                 | 87             |
| Not stated   | 6              | 5                   | 25                 | 8              |

Very high proportions of all types of operators have written policies covering greenkeeping staff and keep records of notifiable incidents. Commercial operators are the most likely to have policies and measures in place to cover most of the other aspects of health and safety, while – as with a number of the questions on the questionnaire – municipal course operators were more likely to have omitted to respond to the question.

Also, as would be expected, lower proportions of the smaller clubs had the various policies and measures in place, with only 12% of Class 5B clubs able to have a member of staff on site at all times when their facilities were in use.

The next set of questions dealt with course conditions.

On average, operators indicated that their courses were closed for about 10 days a year because of snow or frost, with little difference between the different types of facilities. There was more variation in the number of days closed because of flooding or wet ground conditions. While the overall average was again about 10 days, the average was about 14 days for municipal courses, and, among members' clubs, the average rose from less than 5 days in the case of Class 1 and 2 clubs to around 15 days in the case of Class 5 clubs.

(These estimates were given before the wet 2002 season, when it is known that significant numbers of courses suffered summer closures because of wet conditions to a greater extent than in previous years).

Interestingly, given the attention sometimes paid to the issue of whether and how to

upgrade/replace greens, four times as many operators identified the main problem as wet fairways (45% as against 11% identifying greens as the main problem area), and with 21% indicating that the problem areas were greens and fairways together.

When asked how many greens would need substantial reconstruction to make a significant improvement to the playability of the course, the responses were as follows.

*Table 26: Number of Greens Needing Substantial Reconstruction*

| <b>Number</b> | <b>Clubs<br/>%</b> | <b>Commercial<br/>%</b> | <b>Municipal<br/>%</b> | <b>Total<br/>%</b> |
|---------------|--------------------|-------------------------|------------------------|--------------------|
| None          | 30                 | 59                      | 10                     | 31                 |
| 1             | 7                  | 14                      | 5                      | 8                  |
| 2             | 12                 | 5                       | 5                      | 10                 |
| 3             | 11                 | 9                       | 5                      | 10                 |
| 4             | 5                  | 5                       | 0                      | 5                  |
| 5             | 3                  | 0                       | 5                      | 2                  |
| 6             | 7                  | 0                       | 0                      | 6                  |
| More than 6   | 9                  | 0                       | 20                     | 9                  |
| Not stated    | 17                 | 9                       | 50                     | 20                 |
| <b>Total</b>  | <b>101</b>         | <b>101</b>              | <b>100</b>             | <b>101</b>         |

Although based on few responses, there is some indication that the biggest problem is in the municipal sector, while club courses are twice as likely as commercial courses (most of which are, of course, relatively new) to indicate that one or more of their greens needs substantial reconstruction. Indeed, given that so many commercial courses are of recent construction, it is significant that about 30% of operators - possibly among those who have built inexpensive courses with little or no professional design or construction input - confirm that one or more greens need substantial reconstruction. Among members' clubs, it was again the smaller clubs which identified the biggest problems, eg no Class 1 clubs see a need for reconstruction of greens, while more than 60% of Class 5 clubs have one or more greens needing replaced.

Perhaps reflecting their more recent construction and correspondingly better ground conditions, commercial course operators are much less likely to impose protective measures for their courses in winter, ie golfers playing on such courses are much more likely to be playing the full course year-round than in the case of members' club or municipal courses - and, in this instance, clubs in the 'higher' classes are just as likely to impose protective measures as those in the 'lower' classes. The overall figures are shown below.



Table 27: Protective Measures for Winter Play

| Measures                              | Clubs % | Commercial % | Municipal % | Total % |
|---------------------------------------|---------|--------------|-------------|---------|
| Tee mats                              | 66      | 32           | 35          | 59      |
| Fairway mats                          | 34      | 18           | 20          | 30      |
| Lifting from fairway to edge of rough | 35      | 9            | 15          | 30      |
| Winter greens                         | 66      | 36           | 60          | 62      |
| Other                                 | 18      | 14           | 10          | 17      |
| None                                  | 6       | 36           | 0           | 9       |
| Not stated                            | 2       | 9            | 25          | 5       |

It therefore appears that the goal of year-round playability of courses in Scotland through improved greenkeeping practices is simply not achievable in the case of many members' club and municipal courses, presumably as a result of the age of many of these courses, their underlying soil conditions and drainage systems, the pressure of play in some instances, and possibly changing weather patterns.

Respondents were then asked for details of any significant alterations, extensions, or improvements they had made to their courses within the last 10 years, how these had been funded, and what impact they had had. The results for the 70% or so of operators who had undertaken such projects are summarised below.

Table 28: Types of Projects Undertaken in Last 10 Years

| Project                         | % of Operators |
|---------------------------------|----------------|
| Reconstructing/replacing greens | 29%            |
| Reconstructing/replacing tees   | 28%            |
| Irrigation                      | 22%            |
| Fairway drainage                | 15%            |
| Bunkers                         | 15%            |
| Course extension                | 10%            |
| Greenkeeping facilities         | 7%             |
| New holes/revised layout        | 7%             |
| Re-routing/lengthening course   | 6%             |
| Paths                           | 4%             |
| Complete reconstruction         | 4%             |
| Additional tees                 | 3%             |
| Coastal erosion protection      | 3%             |
| New trees/woodland              | 3%             |
| Land purchase                   | 2%             |
| Development of range            | 2%             |
| New 9 hole course               | 2%             |
| New/improved fairways           | 2%             |

The average cost per project was about £47,000, but with most projects costing either less than £20,000 or more than £50,000.

*Table 29: Sources of Funding for Course Improvement Projects*

| <b>Source of funding</b> | <b>Clubs<br/>%</b> | <b>Commercial<br/>%</b> | <b>Municipal<br/>%</b> | <b>Total<br/>%</b> |
|--------------------------|--------------------|-------------------------|------------------------|--------------------|
| Reserves/own capital     | 81                 | 85                      | 93                     | 83                 |
| Members' contributions   | 21                 | 0                       | 0                      | 16                 |
| Commercial borrowing     | 17                 | 23                      | 0                      | 16                 |
| VAT refunds              | 20                 | 0                       | 0                      | 16                 |
| Lottery funding          | 8                  | 8                       | 7                      | 8                  |
| R&A grants/loans         | 40                 | 0                       | 7                      | 33                 |
| Grants from other bodies | 22                 | 23                      | 21                     | 22                 |

*Table 30: Impact of Course Improvement Projects*

| <b>Impact</b>   | <b>% of Operators</b> |
|---|-----------------------|
| Increased user satisfaction   | 79%                   |
| Helped secure future of course, but little direct financial return                | 40%                   |
| Increase in overall use of course   | 33%                   |
| Increased visitor green fee income  | 29%                   |
| Project has cost more in repayments or running costs than has generated in income | 2%                    |
| Other impacts   | 15%                   |
| Not stated  | 4%                    |

Most of the projects undertaken have been related to the most intensively used parts of the course (and the ones players tend to talk about most), ie the greens and tees, plus work on irrigation and drainage.

Funding sources reflect the nature of the operator, with only members' clubs able to draw on members' contributions and VAT refunds, while assistance from the R&A has also gone very largely to members' clubs. Local authorities have largely used their own resources, while commercial operators, too, have tended to use accumulated capital (often investing in improvements after some experience of how the original course is used and after income streams start to be generated) plus commercial borrowing.

Most projects are seen as having had positive impacts, though not always in terms of measurable financial returns, with only a very small number being regarded as 'negative' overall.

Where operators make any provision for disabled users, this is largely by way of buggies (19% of operators), with a few operators indicating that they cater for disabled groups (with the Blind Golfers' Association mentioned in particular) and individual

mentions of wheelchairs, nominal subscriptions for disabled players, and a school for disabled golfers. However, 75% of respondents make no special provision for disabled golfers, and, in some cases, the buggies that are available can be hired by any players.

Similarly, about three-quarters of respondents suffer no serious vandalism at their courses, and it is only a minor problem for a further 10%. However, 15% of respondents highlighted theft and damage as serious problems, while a further 6% cited specific damage caused by cars, bikes, and animals. Vandalism is a much bigger problem at municipal courses, with 65% mentioning general thefts and damage, and 20% citing damage by cars, bikes, and animals. There are also known to be relatively high levels of unpaid-for use of some municipal courses, which is difficult to control.

Finally, respondents were asked about any future plans for significant long-term course improvements. A very wide range of types of projects were listed by the 60% of operators who responded, with those mentioned by 2% or more included in the table below.

*Table 31: Planned Course Improvement Projects*

| <b>Project</b>                 | <b>% of Operators</b> |
|--------------------------------|-----------------------|
| Course drainage                | 30%                   |
| Replace/reconstruct greens     | 19%                   |
| Irrigation                     | 18%                   |
| Practice facilities            | 14%                   |
| Junior facilities/range        | 11%                   |
| Course extension               | 10%                   |
| Tree planting                  | 8%                    |
| Improved tees                  | 8%                    |
| Greenkeeping facilities        | 7%                    |
| Improve greens                 | 6%                    |
| General upgrade                | 6%                    |
| New/longer holes               | 5%                    |
| Conservation work              | 5%                    |
| Water features                 | 4%                    |
| Bunkers                        | 3%                    |
| Purchase land/re-locate course | 3%                    |
| New par 3 course               | 2%                    |
| Alternate tees                 | 2%                    |
| New machinery                  | 2%                    |
| Erosion protection             | 2%                    |
| Paths/bridges                  | 2%                    |

In terms of timescale, most projects were planned to be undertaken either within the next 3 years, or 5 years or more ahead. As with projects already undertaken, most of the planned projects were either relatively small (less than £20,000) or major (in this case, more than £100,000). About a quarter of respondents were unable to put an estimated cost figure on their planned projects, and more than half of all the projects were still under consideration rather than committed.

The fact that course drainage works are the top priority by quite a margin in terms of the types of projects being considered highlights the concerns course operators clearly have about the wetness of many courses – and the same issue emerges clearly from our own agronomist’s inspections of courses, as noted in the next section of this chapter.

*This is therefore the major physical problem facing Scotland’s stock of golf courses, and one likely to get worse if climatic patterns are changing towards wetter weather at critical times of year, unless remedial action is taken. (The problem is, of course, likely to be disproportionately bad where golf courses are built on heavy soils and are in the wettest parts of the country, ie inland courses in the west of Scotland).*

The other improvements being planned are a good mix of projects aimed at improving the playing quality of courses, providing more facilities for juniors and for practice, and carrying out conservation and environmental programmes.

The last two questions on the golf course questionnaire were of considerable significance to the overall audit, as they asked course operators about the long-term adequacy or otherwise of their courses and whether they, as operators, were likely to have the resources to implement any work required to maintain their courses in adequate condition. The results are summarised below.

*Table 32: Likely Adequacy of Course in Longer-Term*

| <b>Opinion</b>  | <b>Clubs %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|---|----------------|---------------------|--------------------|----------------|
| Course likely to be adequate, possibly with minor improvements from time to time  | 67             | 77                  | 30                 | 64             |
| Course likely to need significant upgrading over time, which can probably be accommodated and planned for within our physical and financial resources   | 9              | 14                  | 20                 | 11             |
| Course likely to need substantial improvements or upgrading which we are unlikely to be able to accommodate within the land or finances available to us | 21             | 9                   | 25                 | 20             |
| Not stated  | 3              | 0                   | 25                 | 5              |

As well as the clear ‘hierarchy’ in the above responses – least problems in the commercial sector (not surprising, given the relative newness of many of the courses in this sector), and most problems in the municipal sector (again, confirming what is generally known about the volumes of play on such courses and local authorities’ lack of resources for re-investment), there is the usual difference along the spectrum of members’ clubs. Only around 5% of clubs in Classes 1 and 2 envisage problems arising that they will not be able to deal with, but the proportion rises steadily to 11% of Class3

clubs, 18% of Class 4 clubs, and 36% of Class 5 clubs.

*Taken overall, these responses suggest that about 20% of Scotland's golf course facilities are 'at risk' of deteriorating to the point where they no longer provide a good quality playing experience – with a total of about 100 courses coming into this category, and with those most at risk being some municipal courses and at least a third of the smallest members' clubs. Some of the small (Class 4 and 5) commercial courses, many of which had no professional input to their design or construction, may also be at risk in this respect.*

Those indicating that they were likely to be unable to afford the cost of maintaining their courses in adequate condition gave the following reasons for this. (As with many of these types of questions on the questionnaire, this one was 'open', ie to be completed in the respondents' own words, and the table is our grouping of the kinds of responses given – many of which were variations on similar themes).

*Table 33: Reasons for Being Unable to Fund Necessary Course Improvements*

| <b>Reason</b>  | <b>% of Operators</b> |
|--|-----------------------|
| No funds   | 13%                   |
| Can't afford to lengthen course                        | 10%                   |
| Rising water table or erosion                          | 10%                   |
| Small club, wet course, can't afford to drain properly | 10%                   |
| Can't generate enough income                           | 10%                   |
| Old greens, can't afford to replace                    | 8%                    |
| Miscellaneous reasons                                  | 8%                    |
| Problems with greens                                   | 5%                    |
| Restrictive lease conditions                           | 5%                    |
| Need irrigation, can't afford cost                     | 5%                    |
| Loans to repay   | 5%                    |
| Course too short, no room to extend                    | 5%                    |

It therefore appears that straightforward lack of funds (and an inability to generate more net income) combined with physical problems (including space restraints etc) are the reasons for operators' inability to undertake the works they see as necessary in the future.

### *Summary*

The key findings from the courses questionnaire can be briefly summarised as follows:

- Little reliable data is available on the levels and patterns of use of Scotland's golf courses. While most members' clubs have reasonable information (or could provide estimates derived from their financial figures) on the number of rounds played by visitors, many keep no records on the number of members' rounds. This hinders effective planning at both the national and individual facility level – although the information gap could be at least partly filled if those that use starting sheets to manage tee times subsequently used such sheets for record purposes.

- Limited information was provided on municipal courses, but they do appear to be more heavily used than commercial courses, and to be suffering from under-investment, which is likely to continue.
- Partly because most of them are of recent construction, but also partly as a result of management decisions, commercially-operated courses appear to be generally better-equipped, to be more involved in ecological management and health and safety issues, more likely to be playable year-round without the use of mats, temporary greens, etc, and less likely to require significant investment in improvement works in the foreseeable future.
- Among members' clubs, those least secure in terms of tenure and most at risk in terms of an inability to fund future improvement works are the smallest clubs – while the largest clubs are generally quite secure financially and are able to fund ongoing improvements etc largely from their own resources.
- Improvement works over the past 10 years have focused on greens and tees, and on drainage and irrigation of courses. Drainage is the big issue in terms of future requirements.
- To maintain them at a good and sustainable playing standard, up to 100 courses in Scotland, largely in the municipal sector and among the smallest members' clubs (and including some smaller commercial courses), are likely to need investment which their operators are unlikely to be able to afford to undertake.

### Site Surveys

Agronomic inspection visits were made to 33 golf course facilities. In addition to selecting facilities whose operators gave specific approval for such visits (on the basis that their courses would not be specifically identified in the survey results), the aim was to visit a reasonable cross-section of publicly-accessible courses by classification, management type, and geographical area.

The resulting sample was made up as follows:

| Class 1 | Class 2 | Class 3 | Class 4 | Class 5A | Class 5B |
|---------|---------|---------|---------|----------|----------|
| 0       | 4       | 6       | 7       | 10       | 6        |

| Club | Commercial | Municipal |
|------|------------|-----------|
| 14   | 5          | 14        |

| West | East | Central | North | South |
|------|------|---------|-------|-------|
| 12   | 11   | 6       | 2     | 2     |

Facilities were given scores from 1 to 5 on the basis of the following agronomic, machinery, and maintenance shed ratings:

*Agronomic Rating*

| <b>Rating</b> | <b>Description</b>   |
|---------------|--|
| 1             | A course in an unplayable condition or in a condition that was unsafe to play  |
| 2             | A course requiring significant renovation or reconstruction works to achieve long term playability of an acceptable standard               |
| 3             | Acceptable turf playing standards which could be further improved with some additional investment or minor changes in management practices |
| 4             | A high standard of turf and management giving year round access to surfaces that are above the national average in terms of turf quality   |
| 5             | World class turf quality and presentation  |

*Machinery Rating*

| <b>Rating</b> | <b>Description</b>   |
|---------------|--|
| 1             | Machinery entirely unfit for purpose or in an unsafe condition   |
| 2             | Machinery complement requiring significant renovation or replacement to achieve effective long term course maintenance                 |
| 3             | An effective, well maintained machinery complement which is fit for purpose  |
| 4             | Full machinery complement in house with supplementary equipment for advanced maintenance programmes and high standards of presentation |
| 5             | State of the art complement of course maintenance equipment  |

*Maintenance Shed Rating*

| <b>Rating</b> | <b>Description</b>  |
|---------------|---|
| 1             | Machinery shed entirely unfit for purpose or in an unsafe condition   |
| 2             | Machinery shed requiring significant renovation or replacement to achieve long term safe and effective maintenance facilities |
| 3             | An effective, well maintained machinery shed which is fit for purpose   |
| 4             | Fully fitted building with supplementary equipment for advanced maintenance programmes and high standards of presentation     |
| 5             | State of the art machinery shed   |

Wherever possible, the inspection visits were carried out in conjunction with the head greenkeeper, with whom discussions were also held on greenkeeping issues in the course of the visit.

Reports were prepared for each golf course facility visited, covering:

- soil and turf types on the golf course(s);

- ratings for agronomy, machinery, and maintenance sheds as above;
- maintenance and any safety problems identified, and how these were being addressed;
- other issues and plans as appropriate to each course;
- estimated capital spend requirements (in addition to normal ongoing maintenance expenditure for the type of facility in question) to the year 2025 in order to address identified deficiencies.

Predictably, the visits confirmed the unique set of circumstances prevailing at each facility in terms of the courses' physical characteristics, history and type of use, and management policies and available resources. However, a recurring theme, as noted earlier, was of courses becoming increasingly wet, and of this condition becoming a problem during the main playing season as well as in the winter months. (In this respect, some greenkeepers gave significantly higher figures for the number of days of course closures due to weather and ground conditions than were given by the course administrators in response to our postal questionnaire, and reported earlier in this chapter).

While acknowledging the uniqueness of each facility visited, the following tables show the average ratings achieved by facilities of different types in the sample:

*Table 34: Ratings by Classification of Golf Course Facility*

| <b>Average rating</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b> | <b>Class 5B</b> |
|-----------------------|----------------|----------------|----------------|-----------------|-----------------|
| Agronomy              | 3.5            | 3.0            | 3.0            | 2.7             | 2.4             |
| Machinery             | 3.0            | 3.0            | 2.9            | 2.8             | 2.3             |
| Maintenance sheds     | 3.3            | 2.8            | 3.0            | 2.8             | 2.6             |

*Table 35: Ratings by Management Type of Golf Course Facility*

| <b>Average rating</b> | <b>Club</b> | <b>Commercial</b> | <b>Municipal</b> |
|-----------------------|-------------|-------------------|------------------|
| Agronomy              | 3.1         | 3.0               | 2.5              |
| Machinery             | 2.9         | 3.0               | 2.6              |
| Maintenance sheds     | 3.0         | 3.0               | 2.6              |

*Table 36: Ratings by Geographical Area*

| <b>Average rating</b> | <b>West</b> | <b>East</b> | <b>Central</b> | <b>North</b> | <b>South</b> |
|-----------------------|-------------|-------------|----------------|--------------|--------------|
| Agronomy              | 2.8         | 2.8         | 2.8            | 3.0          | 3.0          |
| Machinery             | 2.6         | 2.9         | 2.8            | 3.0          | 2.5          |
| Maintenance sheds     | 2.7         | 3.0         | 3.0            | 2.5          | 3.0          |

None of the golf course facilities received the highest ('world class') or lowest ('unfit



for use or unsafe’) rating in any of the three categories, so the figures are relatively ‘bunched’.

The main patterns in the ratings are:

- As would be anticipated, the ratings all decrease along the spectrum from Class 2 to Class 5 golf course facilities, with the differences most marked in the agronomic condition of the courses themselves.
- There is little difference between club and commercial golf course facilities, but municipal facilities received significantly lower ratings in all three categories.
- There are no significant differences geographically in the ratings of this particular sample of courses.

Particular issues highlighted at specific courses included:

- Increasing use of verti-drain equipment required during wet growing seasons.
- Work required to deal with subsidence of greens and tees on recently-built commercial course.
- Reconstruction of several greens being undertaken on another recent commercial course, because indigenous material was wrongly used as rootzone in original construction.
- Construction of high boundary fence necessary to stop balls going on to adjacent road. On another course, tees being re-positioned to address the same problem.
- High level of fairway mowing required to give definition to fairways on new commercial course on open ground. Tree planting will assist in time, and will thus reduce the amount of mowing required.
- Introduction of ponds to increase water-holding capacity of the site.
- Green being remodelled to increase number of available pin positions.
- Moorland course with thin topsoils and steep slopes suffers from flash floods and difficulty of access for machinery.
- Major drainage work undertaken to address problem of high tidal range on adjacent river estuary.
- Need for varied course management practices where construction specification of course extension is very different from original course construction.
- Difficult to deal with drainage problems where old clay drains have collapsed or

become choked or damaged by verti-drain equipment, tree roots have penetrated pipe bores, there is long-term compaction, little fall across the course, underlying mine workings now flooded, and surrounding land shows signs of long-term waterlogging.

- Tree-lined fairways cause frost and snow to lie in the shaded areas in winter.
- Remodelling and repositioning of bunkers being undertaken, to restore challenge of original course.
- Astroturf paths being introduced in areas of heavy traffic.
- Severe vandalism problems on inner city course, to the extent that it can be unsafe to play. Only solution appears to be secure perimeter fencing.
- Tees are too small on some heavily used courses, resulting in bare and uneven teeing surfaces.

For the 33 golf course facilities taken together, the estimated total cost (at year 2001 prices) of maintaining the courses and addressing the problems identified on the visits in order to create courses which will provide adequate and sustainable playing conditions with normal ongoing maintenance operations is £73,937,000 over the period to 2025, of which by far the largest proportion (£67,666,000) is annual ongoing maintenance of the courses – which course operators naturally build into their normal budgeting and expenditure plans. The remainder (£6,271,000) is capital expenditure on more major improvement works.

As noted earlier in this report, average annual course maintenance costs vary from £29,000 a year for Class 5B (9 hole) courses to £175,000 for Class 2 courses – very much higher figures than have to be spent on ongoing maintenance of clubhouses.

Based on our inspection visits, the suggested levels of annual capital expenditure over the period to 2025 range from around £70,000 a year to over £700,000 a year for all 33 facilities taken together. Recommended spend is highest in the early years of the period, ie to address significant problems before they deteriorate further and to provide improved playing conditions as soon as possible. The suggested capital spend per facility visited over the period to 2025 also ranges very widely – with the obvious ‘Catch 22’ that the courses in need of most expenditure tend to be the ones whose operators have the least resources, which is, of course, part of the explanation for the courses being in the condition they are.

While again emphasising the unique set of circumstances at each facility visited, and the relatively small number of visits (33) in relation to the total stock of 493 golf course facilities in Scotland, we have further broken down the estimated costs by type of facility, as an aid to grossing up the figures using our classification system to arrive at some very broad estimate of the likely total cost of carrying out the necessary work on Scotland’s total stock of golf course facilities. The figures are given below:

Table 37: Average Cost per Golf Course Facility for Necessary Works for Period to 2025, by Class

| Class | Ongoing maintenance<br>£000 | Replacements and upgrades<br>£000 | Total<br>£000 | Annual<br>£000 |
|-------|-----------------------------|-----------------------------------|---------------|----------------|
| 2     | 4025                        | 141                               | 4166          | 181.1          |
| 3     | 3013                        | 207                               | 3220          | 140.0          |
| 4     | 2208                        | 121                               | 2329          | 101.3          |
| 5A    | 1403                        | 181                               | 1584          | 68.9           |
| 5B    | 667                         | 197                               | 864           | 37.6           |

Table 38: Average Cost per Golf Course Facility for Necessary Works for Period to 2025, by Type

| Type               | Ongoing maintenance<br>£000 | Replacements and upgrades<br>£000 | Total<br>£000 | Annual<br>£000 |
|--------------------|-----------------------------|-----------------------------------|---------------|----------------|
| Course-owning club | 2665.7                      | 172.5                             | 2838.2        | 123.4          |
| Commercial         | 2461.0                      | 99.4                              | 2560.4        | 111.3          |
| Municipal          | 2093.0                      | 223.1                             | 2316.1        | 100.7          |

*Note:* As noted earlier, while many 18 hole municipal courses fall into our Class 5A because of their low charges, their maintenance costs are more similar to those of Class 3 or 4 courses. We have therefore used the average of Class 3 and 4 course maintenance expenditure figures for 18 hole municipal courses in the above table.

The two key features of these figures are:

- Overall, the required capital expenditure averaged over the period is very much lower than the normal ongoing annual maintenance which course operators are accustomed to incurring – the difference, of course, being that the capital expenditure may come in large amounts (and sometimes unexpectedly). It therefore needs to be anticipated, and then budgeted for.
- The facilities where improvement works are most required, and where such capital costs are much higher relative to ongoing annual maintenance costs, are the smallest (Class 5B) facilities and the municipal facilities. For instance, across all the Class 5B and municipal courses we visited, the average capital expenditure required per course per year is of the order of £10,000. Given that some courses will require much less expenditure than this, it is very unlikely that the operators of the Class 5B

and municipal courses which are in the poorest condition will be able to fund the expenditure of what will be the equivalent of much more than £10,000 a year every year for 23 years on course improvements.

Because of the widely varying situations encountered at the courses visited, and therefore the individual variations in works required, only very cautious estimates can be made of the likely overall scale of costs involved in meeting the required standards across Scotland's total stock of golf course facilities – even when the grossing up is done on a weighted basis using our cost estimates for each class of facility.

We assume that the Class 2 figures also apply to Class 1 facilities for the purposes of grossing up. (We did not visit any Class 1 courses, but a significant proportion are links courses and some may face potentially serious coastal erosion problems in future years).

With these caveats and adjustments, the total costs of meeting all the ongoing maintenance, upgrading, and replacements required to keep Scotland's stock of golf course facilities to a reasonable standard over the period to 2025 would be approximately as shown below.

*Table 39: Estimated Cost of Works Required to Scotland's Golf Course Facilities, by Class of Facility*

| <b>Class</b> | <b>Number of facilities in class</b> | <b>Ongoing maintenance £000</b> | <b>Replacements and upgrades £000</b> | <b>Total £000</b> | <b>Annual £000</b> |
|--------------|--------------------------------------|---------------------------------|---------------------------------------|-------------------|--------------------|
| 1 and 2      | 80                                   | 322,000                         | 11,280                                | 333,280           | 14,490             |
| 3            | 136                                  | 409,768                         | 28,152                                | 437,920           | 19,040             |
| 4            | 81                                   | 178,848                         | 9,801                                 | 188,649           | 8,202              |
| 5A           | 75                                   | 105,225                         | 13,575                                | 118,800           | 5,165              |
| 5B           | 121                                  | 80,707                          | 23,837                                | 104,544           | 4,545              |
| <b>Total</b> | <b>493</b>                           | <b>1,096,548</b>                | <b>86,645</b>                         | <b>1,183,193</b>  | <b>51,442</b>      |

*Table 40: Estimated Cost of Works Required to Scotland's Golf Course Facilities, by Type of Facility*

| <b>Type</b>        | <b>Number of facilities</b> | <b>Ongoing maintenance £000</b> | <b>Replacements and upgrades £000</b> | <b>Total £000</b> | <b>Annual £000</b> |
|--------------------|-----------------------------|---------------------------------|---------------------------------------|-------------------|--------------------|
| Course-owning club | 361                         | 962,318                         | 62,273                                | 1,024,591         | 44,547             |
| Commercial         | 75                          | 184,575                         | 7,455                                 | 192,030           | 8,349              |
| Municipal          | 57                          | 119,301                         | 12,717                                | 132,018           | 5,740              |
| <b>Total</b>       | <b>493</b>                  | <b>1,266,194</b>                | <b>82,455</b>                         | <b>1,348,639</b>  | <b>58,636</b>      |

The totals in the above tables are slightly different because of the adjustment to municipal course maintenance costs noted earlier. However, the overall magnitude of the figures, and the basic patterns within them, are clear, ie:

- Over the period to 2025, total expenditure of around £1.2 to £1.35 billion will be

required to keep Scotland's existing stock of golf courses in good condition.

- 90-95% of this total, however, consists of normal ongoing course maintenance expenditure which course operators budget to carry out annually in any case – with only 5-10% of the total consisting of capital expenditure required to put right current or anticipated problems, many relating to increasingly wet course conditions.
- Although required capital expenditure is a small proportion of total expenditure, it nonetheless amounts to around £82.5 to £86.5 million over the period.
- While this, in turn, equates to an average of only about £7,500 per golf course per year in Scotland, the tables above show that the requirement to spend money on capital improvements is disproportionately high among the operators least able to afford it, ie small course-owning clubs and local authorities.

The figure is much higher than the required spend per clubhouse (as shown in the next chapter), and reflects the fact that, in terms of both ongoing maintenance and required improvements, golf course facility operators need to spend much more on their prime resource – the golf course itself – than on the ancillary clubhouse facilities.

The three final points to re-emphasise are:

- While the required capital expenditure may not seem high when averaged across all courses (some of which will require very little capital spend) and over the whole period to 2025, this expenditure will, by its nature, fall heavily on particular courses and at particular times. To maintain these courses in good condition, their operators would have to spend substantially more than the average figures given above, and would have to be able to spend it in large 'lumps'.
- In terms of phasing, our inspection visits also confirmed the urgency of the need for capital expenditure in many cases, ie more than 50% of the total expenditure for the period to 2025 should be undertaken by 2010, and 30% of it within the next 3 years. If this can be achieved, it would help to reduce, or at least contain, ongoing maintenance costs. However, if it cannot be achieved, the result will be courses that continue to deteriorate and which therefore offer poor playing conditions and the prospect of either eventually becoming completely unplayable or requiring much more radical capital works to restore them to a good condition.
- Our analysis shows that the courses which are most accessible to the public in terms of their locations, management type, and/or spare capacity are the ones where the most money will have to be spent, and whose operators have least money to spend – ie the municipal courses and the smallest rural club courses.

## 6 SURVEY OF GOLF CLUBHOUSES

### Introduction

As in the case of golf courses, there were two elements to our survey of clubhouses:

- A detailed postal questionnaire (copy in Appendix C) sent to the operators of all clubhouses, including non-course owning clubs with clubhouses attached to municipal golf courses.
- Site surveys of 30 golf clubhouses by the team's architect and quantity surveyor.

In total, 183 completed questionnaires were received – 149 from members' course-owning clubs, 15 from commercial operators, 4 from local authorities (most of whom do not operate clubhouses), and 11 from non-course owning clubs. This compares to 197 completed course questionnaires received, which is a similar overall response rate since a few small club and commercial courses do not have clubhouses.

Of the 30 clubhouses visited, 29 were attached to courses which were also visited, which enabled us to compile the 'case studies' (Appendix F) of typical golf facilities, ie ones which consist of a course plus clubhouse, as well as reporting on courses and clubhouses separately.

The structure of this chapter is also similar to the previous one, with the results of the postal survey reported first, followed by the results of the inspection visits.

### Questionnaire Survey Results

As with the golf course facility results, the clubhouse questionnaire findings are reported in the same sequence as the questions on the questionnaire. The results are shown for members' club and commercial facilities since there were few returns in the other categories, but with comments on the non-course owning club and municipal clubhouse results where appropriate, and with significant differences between members' course-owning clubs in different classes highlighted in the text. Again, totals may not always add to exactly 100% because of rounding.

*Table 41: Date of Construction of Current Clubhouses*

| Date          | Club % | Commercial % | Total % |
|---------------|--------|--------------|---------|
| 1990 or later | 17     | 79           | 23      |
| 1970-1989     | 27     | 5            | 24      |
| 1950-1969     | 8      | 5            | 8       |

|                 |           |           |            |
|-----------------|-----------|-----------|------------|
| 1930-1949       | 9         | 5         | 9          |
| 1910-1929       | 14        | 5         | 14         |
| 1890-1909       | 16        | 0         | 16         |
| 1889 or earlier | 6         | 0         | 6          |
| Not stated      | 1         | 0         | 1          |
| <b>Total</b>    | <b>98</b> | <b>99</b> | <b>101</b> |

The figures show the anticipated pattern of a high proportion of commercial golf facility clubhouses being of recent construction, while members' club clubhouses tend to be either less than about 30 years old or more than 70 years old. Interestingly, the smallest clubs (which possibly had no clubhouse when their courses were first built) have the newest clubhouses, with about two-thirds of Class 5 clubs having clubhouses which are less than about 30 years old.

About 65% of respondents indicated that they had carried out significant replacement, alteration, extension, or refurbishment work on their clubhouses within the last 10 years, with the timing of projects fairly evenly spread over that period. The following table summarises the kinds of work undertaken.

*Table 42: Types of Clubhouse Projects Undertaken in Last 10 Years*

| <b>Type of project</b>   | <b>Club %</b> | <b>Commercial %</b> | <b>Total %</b> |
|--------------------------|---------------|---------------------|----------------|
| Bar, lounge              | 24            | 0                   | 24             |
| Locker rooms             | 15            | 11                  | 14             |
| Kitchen                  | 12            | 11                  | 13             |
| Toilets, lounge, kitchen | 12            | 22                  | 12             |
| Roof                     | 9             | 11                  | 11             |
| Extension                | 9             | 0                   | 8              |
| Major redevelopment      | 9             | 0                   | 8              |
| Toilets, showers         | 6             | 11                  | 7              |
| General works            | 5             | 0                   | 6              |
| Restaurant               | 4             | 11                  | 5              |

Widely varying amounts were spent, with about 45% of projects costing up to £30,000, while 28% cost over £100,000. Not surprisingly, about 40% of the projects carried out by Class 1, 2, and 3 clubs cost over £100,000, while over 60% of projects carried out by Class 5 clubs cost £20,000 or less.

The sources of funding used for such projects were as shown below.

*Table 43: Sources of Funding for Clubhouse Improvement Projects*

| <b>Source of funding</b> | <b>Clubs %</b> | <b>Commercial %</b> | <b>Total %</b> |
|--------------------------|----------------|---------------------|----------------|
| Reserves/own capital     | 80             | 89                  | 81             |
| Members' contributions   | 35             | 11                  | 31             |
| Commercial borrowing     | 43             | 44                  | 43             |
| VAT refunds              | 31             | 0                   | 28             |
| Lottery funding          | 12             | 0                   | 10             |

|                          |    |    |    |
|--------------------------|----|----|----|
| R&A grants/loans         | 7  | 0  | 7  |
| Grants from other bodies | 30 | 11 | 26 |

The pattern is similar to the funding of course improvement projects (Table 29), ie commercial operators rely on a combination of their own resources and commercial borrowing, while clubs have been able to draw on a wider range of sources of funding, including VAT refunds, Lottery funding, and grants or loans from the R&A.

As with golf course improvements, respondents were then asked what impact their clubhouse improvement projects had had.

*Table 44: Impact of Clubhouse Improvement Projects*

| <b>Impact</b>   | <b>% of Operators</b> |
|---|-----------------------|
| Increased user satisfaction   | 80%                   |
| Increase in overall use of clubhouse by members                                   | 48%                   |
| Increased visitor income  | 39%                   |
| Helped secure future of clubhouse, but little direct financial return             | 30%                   |
| Other impacts   | 13%                   |
| Project has cost more in repayments or running costs than has generated in income | 7%                    |
| Not stated  | 4%                    |

Given concerns that some clubs may have ‘overspent’ on such projects during a period when they had access to VAT refunds, and Lottery and R&A funding were more readily available than they are now, it is encouraging that only a small proportion of respondents feel the outcome has been ‘negative’ financially – although high proportions acknowledge that the main benefits may have been ‘non-financial’ and long term rather than being able to treat the work as an investment with an identifiable payback period.

Fewer than half of respondents were able to give indications of the floor area of their clubhouses, and some of the estimated figures given were clearly inaccurate. However, the average figure given was around 4,000 square feet, with members’ club clubhouses slightly larger than commercial facility clubhouses on average, and with members’ club clubhouses reducing in size from around 7,000 square feet on average among Class 1, 2, and 3 clubs to around 3,000 and 2,000 square feet for Class 5A and 5B clubs respectively. (These figures compare to an average of just over 5,000 square feet per clubhouse for the 30 covered by our inspection visits, based on our approximate measurements).



The proportions of clubhouses with specific facilities were as follows:

*Table 45: Proportions of Clubhouses with Specific Facilities*

| <b>Facility</b>                | <b>Clubs %</b> | <b>Commercial %</b> | <b>Total %</b> |
|--------------------------------|----------------|---------------------|----------------|
| Men's changing rooms           | 95             | 100                 | 95             |
| Ladies' changing rooms         | 95             | 100                 | 92             |
| Lounge                         | 92             | 89                  | 91             |
| Bar                            | 87             | 79                  | 86             |
| Men's showers                  | 78             | 79                  | 78             |
| Dining room                    | 81             | 63                  | 77             |
| Secretary's/manager's office   | 77             | 79                  | 77             |
| Ladies' showers                | 69             | 68                  | 67             |
| Access for disabled people     | 60             | 100                 | 63             |
| Visitors' changing rooms       | 54             | 74                  | 56             |
| Committee/meeting room         | 51             | 47                  | 52             |
| Professional's shop            | 54             | 58                  | 52             |
| Juniors' changing room         | 53             | 32                  | 49             |
| Visitors' showers              | 44             | 53                  | 45             |
| Visitors' dining/function room | 27             | 58                  | 30             |
| Junior games/meeting room      | 27             | 11                  | 26             |

The different pattern of facility provision in members' club and commercial facility clubhouses is clear, with clubs naturally making more provision for their members (including junior members) to whom the clubhouse belongs, while commercial operators make more provision for their customers as a whole – including disabled people.

Among members' clubs, the range of facilities naturally decreases with the size of club (and clubhouse), and only about 50% of Class 5 clubs provide anything other than men's and ladies' changing rooms and a bar/lounge in their clubhouses.

Respondents were also asked to give an indication of the adequacy of each of the facilities in their clubhouses, and of any plans to upgrade or renew the facilities in question. The pattern of responses was as shown in the table below, with the code numbers explained in the key following the table:

*Table 46: Adequacy of, and Plans for, Clubhouse Facilities*

| <b>Facility</b>                | <b>1<br/>%</b> | <b>2<br/>%</b> | <b>3<br/>%</b> | <b>4<br/>%</b> | <b>5<br/>%</b> | <b>6<br/>%</b> | <b>7<br/>%</b> | <b>8<br/>%</b> | <b>2-6<br/>%</b> |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|
| Men's changing rooms           | 50             | 10             | 13             | 5              | 3              | 11             | 1              | 7              | 42               |
| Ladies' changing rooms         | 55             | 7              | 11             | 5              | 3              | 9              | 2              | 7              | 35               |
| Lounge                         | 55             | 8              | 13             | 6              | 1              | 4              | 3              | 10             | 32               |
| Bar                            | 56             | 7              | 9              | 5              | 2              | 4              | 6              | 11             | 27               |
| Men's showers                  | 45             | 10             | 9              | 5              | 5              | 10             | 7              | 9              | 39               |
| Dining room                    | 47             | 8              | 10             | 4              | 3              | 5              | 10             | 11             | 30               |
| Secretary's/manager's office   | 43             | 13             | 11             | 4              | 4              | 7              | 6              | 13             | 39               |
| Ladies' showers                | 46             | 7              | 8              | 4              | 6              | 8              | 9              | 12             | 33               |
| Access for disabled people     | 46             | 9              | 8              | 2              | 4              | 11             | 3              | 16             | 34               |
| Visitors' changing rooms       | 35             | 8              | 7              | 4              | 5              | 10             | 15             | 16             | 34               |
| Committee/meeting room         | 39             | 8              | 6              | 2              | 5              | 5              | 17             | 17             | 26               |
| Professional's shop            | 40             | 7              | 4              | 2              | 2              | 3              | 23             | 17             | 18               |
| Juniors' changing room         | 32             | 7              | 7              | 3              | 5              | 11             | 15             | 19             | 33               |
| Visitors' showers              | 31             | 8              | 7              | 1              | 5              | 10             | 18             | 20             | 31               |
| Visitors' dining/function room | 24             | 3              | 5              | 2              | 2              | 4              | 31             | 28             | 16               |
| Junior games/meeting room      | 20             | 6              | 2              | 1              | 6              | 8              | 28             | 29             | 23               |

*Key:*

- 1: Adequate for foreseeable future and no plans to upgrade
- 2: Will upgrade or renew within next year or so
- 3: Will upgrade or renew in next 5 years or so
- 4: Will upgrade or renew in next 10 years or so
- 5: Do not currently have the facility, but plan to provide in next 10 years
- 6: Will need to provide, upgrade, or renew in next 10 years, but unlikely to be able to afford to do so
- 7: Do not have and do not intend to provide
- 8: Not stated

When columns 2 to 6 in Table 46 are combined, ie all the options involving upgrading (or a perceived need to upgrade) in the next 10 years, it can be seen that significant proportions of operators (generally 25 to 40% or so) recognise the need for provision or upgrading of each of the main facilities over the period.

About 5 to 10% of operators plan to upgrade or renew each of the facilities within the next year or so, with a further 10 to 15% planning to upgrade or renew the main

facilities within the next 5 years or so. The proportion then drops to around 5% with plans to provide or renew each of the facilities within the 10 year period, while a further 5 to 10% recognise the need to provide or renew each of the facilities within that timescale, but are unlikely to be able to afford to do so. This is particularly so for changing rooms and showers, and facilities for juniors, visitors, and people with disabilities.

The next question asked respondents to describe the various elements of their clubhouse facilities, and again to indicate their adequacy/plans for each using the same headings as in the previous question.

Respondents' descriptions of the various elements helps in making judgements about the representativeness of the sample of clubhouse our team inspected, and therefore about how to gross up our inspection findings and cost estimates to arrive at an overall estimate for work likely to be required to bring Scotland's total stock of clubhouses up to a reasonable standard by the year 2025.

The responses to this question were of variable quality, but the general descriptions that emerged were as follows:

#### *Roof*

About 75% have pitched roofs, and about 20% have flat roofs, with a few having a combination.

#### *Walls*

About 60% are brick/block, about 25% are stone, and about 15% are timber

#### *Windows and external doors*

About 65% timber, with slightly less than half double-glazed, with the rest various combinations of single and double-glazed metal, PVC, etc.

#### *Internal walls*

Again a mixture, with rather more brick/block with plaster than timber stud

#### *Floor finishes*

About 80% carpets, with some areas of timber flooring and tiles

#### *Ceiling finishes*

About 60% Plasterboard, with most of the rest suspended with tiled/lined finish

#### *Heating/ventilation*

About 45% gas, 35% electricity, 15% oil, and 5% other

### *Lifts*

About 10% have a service lift and about 5% have a passenger lift (the small proportions naturally reflecting the considerable number of clubhouses which are single storey)

### *Kitchen equipment*

Most have ovens, hobs, cookers, and other appliances

### *Fittings and furnishings*

Almost all have tables and chairs, and gantries where they have a bar, with about 25% having bench seating

### *Roads and car parking*

About 60% have tarmac surfaces, with almost all the others being gravel.

The responses in terms of the adequacy of each of these elements and any plans for upgrading were as follows.

*Table 47: Adequacy of, and Plans for, Clubhouse Elements*

| <b>Element</b>         | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>2-6</b> |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|------------|
|                        | <b>%</b> | <b>%</b> | <b>%</b> | <b>%</b> | <b>%</b> | <b>%</b> | <b>%</b> | <b>%</b> | <b>%</b>   |
| Roof                   | 65       | 8        | 7        | 3        | 0        | 6        | 2        | 9        | 24         |
| External walls         | 71       | 5        | 5        | 1        | 1        | 5        | 2        | 10       | 17         |
| Windows/external doors | 61       | 7        | 9        | 3        | 1        | 7        | 2        | 10       | 27         |
| Internal walls         | 73       | 4        | 6        | 1        | 1        | 4        | 2        | 10       | 16         |
| Floor finishes         | 52       | 9        | 14       | 6        | 1        | 5        | 2        | 10       | 35         |
| Ceiling finishes       | 68       | 4        | 8        | 2        | 0        | 5        | 2        | 11       | 19         |
| Plumbing/drainage      | 56       | 7        | 5        | 1        | 0        | 5        | 2        | 23       | 18         |
| Heating/ventilation    | 58       | 9        | 8        | 4        | 1        | 7        | 2        | 11       | 29         |
| Electrical             | 54       | 6        | 6        | 2        | 2        | 5        | 1        | 24       | 21         |
| Lifts                  | 19       | 1        | 2        | 1        | 1        | 3        | 11       | 62       | 8          |
| Kitchen equipment      | 48       | 13       | 15       | 4        | 1        | 7        | 1        | 11       | 40         |
| Fittings/furnishings   | 39       | 14       | 19       | 7        | 2        | 7        | 1        | 11       | 49         |
| Bar fittings           | 53       | 8        | 10       | 5        | 2        | 4        | 2        | 16       | 29         |
| Roads/car parking      | 37       | 11       | 13       | 8        | 4        | 10       | 1        | 17       | 46         |

### *Key:*

- 1: Adequate for foreseeable future and no plans to upgrade
- 2: Will upgrade or renew within next year or so
- 3: Will upgrade or renew in next 5 years or so
- 4: Will upgrade or renew in next 10 years or so
- 5: Do not currently have the facility, but plan to provide in next 10 years

6: Will need to provide, upgrade, or renew in next 10 years, but unlikely to be able to afford to do so

7: Do not have and do not intend to provide

8: Not stated

As in the previous table, the final column (2-6) shows the proportion of respondents who recognise the need to provide or renew the element in question over the next 10 years or so.

Apart from the naturally high proportions seeing the need to renew furnishings and equipment, the highest figure is for car parking, with about half of the 46% having plans to upgrade this element within the next 5 years. Otherwise, 20 to 30% of respondents anticipate having to upgrade or renew major clubhouse elements like the roof, windows and external doors, and heating and electrical systems within the next 10 years. Again, 5 to 10% of respondents think they will be unable to afford to carry out work that they see as being necessary.

Although the next question specifically asked about plans or needs for improvements not covered by the responses to the previous two questions, there is naturally a degree of overlap in the responses. About 40% of respondents listed projects, the main ones being:

- New clubhouse 19%
- Lounge, bar, dining area 18%
- Complete refurbishment 15%
- Locker rooms 11%
- Toilets, showers, offices 10%
- Extension 7%
- Bar, kitchen 4%
- Staff accommodation 4%

About two-thirds of these were seen as major projects, likely to cost in excess of £50,000 each, which may explain why about 75% of them are ‘under consideration’ rather than ‘committed’.

As with golf courses, vandalism to clubhouses is only seen as a serious problem by a very small minority (about 5%) of respondents, with break-ins and general damage, often by young people, being identified as the main problems.

The responses on health and safety issues as they relate to clubhouses were:

*Table 48: Position on Health and Safety Issues, Clubhouse*

| <b>Policy</b>   | <b>Clubs %</b> | <b>Commercial %</b> | <b>Total %</b> |
|---|----------------|---------------------|----------------|
| Have written health and safety policy covering clubhouse staff        | 80             | 79                  | 77             |
| Have written health and safety policy covering users of the clubhouse | 52             | 53                  | 51             |

|  |    |    |    |
|--|----|----|----|
| Have nominated health and safety officer or sub-committee              | 70 | 53 | 64 |
| Have used consultants to advise on health and safety issues and policy | 55 | 63 | 55 |
| Member of staff on site at all times when players using the facilities | 52 | 74 | 54 |
| Keep a record of notifiable incidents                                  | 85 | 89 | 84 |
| Not stated   | 7  | 11 | 8  |

The pattern of responses is broadly similar to that relating to golf courses. However, although based on relatively few responses, the figures suggest that non-course owning clubs are much less likely to have policies and procedures in place for dealing with health and safety issues than are course-owning clubs or commercial operators.

The final questions on the clubhouse questionnaire were also identical to those on the golf courses questionnaire, and related to the long-term adequacy of clubhouses, and operators' ability to fund any necessary upgradings.

The responses were as follows:

*Table 49: Likely Adequacy of Clubhouse in Longer-Term*

| <b>Opinion</b>   | <b>Clubs %</b> | <b>Commercial %</b> | <b>Total %</b> |
|--|----------------|---------------------|----------------|
| Clubhouse likely to be adequate, possibly with minor improvements from time to time  | 56             | 47                  | 54             |
| Clubhouse likely to need significant upgrading over time, which can probably be accommodated and planned for within our physical and financial resources   | 17             | 21                  | 16             |
| Clubhouse likely to need substantial improvements or upgrading which we are unlikely to be able to accommodate within the land or finances available to us | 24             | 21                  | 26             |
| Not stated   | 3              | 11                  | 4              |

Interestingly, although the golf courses are their prime resource, more operators see a need for upgrading of their clubhouses than of their courses. Also, commercial operators are at least as likely as members' clubs to see a need for clubhouse upgrading, and to envisage problems in funding this – which may reflect the limited profitability of some commercial golf facilities in terms of generating sufficient surpluses for re-investment.

Again, non-course owning clubs are twice as likely as the average to envisage a need for clubhouse upgrading which they will be unable to afford, and smaller course-owning clubs come into a similar category.

*Taken overall, these responses suggest that about a quarter of Scotland's golf clubhouse facilities are 'at risk' of falling below a reasonable standard – with a total of*

over 100 clubhouses coming into this category, and with those most at risk being clubhouses owned and run by non-course owning clubs and the smallest members' course-owning clubs.

Those indicating that they were likely to be unable to afford the cost of necessary clubhouse improvements gave the following reasons for this.

*Table 50: Reasons for Being Unable to Fund Necessary Clubhouse Improvements*

| <b>Reason</b>  | <b>% of Operators</b> |
|--|-----------------------|
| Major works required, can't afford without assistance          | 21%                   |
| Visitors need better facilities, can't afford to provide       | 13%                   |
| Have to concentrate resources on golf course                   | 13%                   |
| Small club, basic facilities, can't generate income to replace | 13%                   |
| Clubhouse inadequate, can't afford to upgrade                  | 11%                   |
| Restrictive lease conditions and inadequate resources          | 6%                    |

As with golf courses, some clubhouse operators have reached the point where they cannot see a way of tackling what are mounting problems because their income is inherently limited.

*Summary*

The key findings from the clubhouse questionnaire survey can be briefly summarised as:

- While 80% of commercial golf facility clubhouses are no more than about 10 years old, more than a third of members' club clubhouses are at least 70 years old. Many of these have been significantly upgraded or refurbished in the last 10 years, taking advantage of VAT refunds and assistance from the R&A and the Lottery. Generally, such improvements have had a positive impact, though seldom a directly financial one.
- There are different patterns of facility provision within members' club and commercial facility clubhouses, reflecting their focus on members and 'customers' respectively.
- Vandalism is very seldom a problem, but serious when it does occur.
- Clubhouses are generally seen as more in need of upgrading than the prime resource of the golf courses themselves, with commercial operators just as likely as members' clubs to see this need.
- As with golf course upgrading, a significant proportion of operators think they will be unable to afford to carry out what they regard as necessary improvements, with

this being the case with non-course owning clubs and the smallest course-owning clubs in particular.

### Site Surveys

Building inspection visits were made to 30 golf clubhouses. In addition to selecting facilities whose operators gave approval for such visits (on the basis that their clubhouses would not be specifically identified in the survey results), the aim was to visit a reasonable cross-section of publicly-accessible facilities by classification, management type, and geographical area – and to coincide so far as possible with the golf courses visited. 29 of the 30 clubhouses visited were attached to courses which were also visited.

The resulting sample was made up as follows:

| Class 1 | Class 2 | Class 3 | Class 4 | Class 5A | Class 5B |
|---------|---------|---------|---------|----------|----------|
| 0       | 5       | 6       | 5       | 9        | 5        |

| Course-Owning Club | Commercial | Municipal | Non-Course Owning Club |
|--------------------|------------|-----------|------------------------|
| 15                 | 4          | 6         | 5                      |

| West | East | Central | North | South |
|------|------|---------|-------|-------|
| 12   | 10   | 4       | 2     | 2     |

Visits were arranged with the clubhouse operators, and were carried out by the team’s architect and quantity surveyor. Clubhouse plans were consulted wherever these were available, and approximate floor area measurements taken.

For each clubhouse inspected, a spreadsheet was prepared which allowed estimated cost figures to be entered for:

- each element of the clubhouse (ie roof, external walls, etc as listed earlier);
- the type of work required (ongoing cyclical maintenance, straightforward replacement of worn out elements, upgrading, and replacement respectively);
- each 5-year period up to 2025.

While all the detailed figures are available for each clubhouse visited, an assurance of individual confidentiality was given to the operators involved. This chapter therefore contains aggregated and average figures, presented in such a way as to allow both the best possible grossing up to arrive at national estimates and the use of our sample visit figures by the operators of similar types of clubhouses in their own forward planning and budgeting. The case studies in Appendix F are designed to help further in this regard.

The table below shows the configuration and average floor area of the clubhouses visited by the classification of the facility.



Table 51: Configuration and Floor Areas of Clubhouses Visited

| Class | Single storey % | Two storey % | Mixed | Average floor area (sq. feet) |
|-------|-----------------|--------------|-------|-------------------------------|
| 2     | 20              | 80           | 0     | 7373                          |
| 3     | 100             | 0            | 0     | 6168                          |
| 4     | 40              | 40           | 20    | 6222                          |
| 5A    | 67              | 22           | 11    | 4833                          |
| 5B    | 100             | 0            | 0     | 2368                          |

The average clubhouse floor area by management type was:

Table 52: Floor Areas of Clubhouses Visited by Management Type

| Type                   | Average floor area (sq. feet) |
|------------------------|-------------------------------|
| Course-owning club     | 6383                          |
| Commercial             | 5328                          |
| Municipal              | 3552                          |
| Non course-owning club | 4381                          |

These figures show that, for the sample of clubhouses visited, the size of clubhouse generally decreases with the overall scale of the golf facility operation, from over 7000 square feet in Class 2 to just over 2000 square feet in Class 5B. Similarly, course-owning clubs have the largest clubhouses, while the local authority ‘pavilions’ at their municipal courses are the smallest.

The following tables show the average cost per clubhouse visited for carrying out the necessary works in each of the categories over the period to 2025. The definitions used were:

- *Ongoing cyclical maintenance*: checking condition and operation of all the elements of the building, and making good where necessary.
- *Replacement of worn out elements*: replacement of carpets, ceiling finishes, sanitary fittings, heating components, kitchen equipment, lockers, bar fittings, etc.
- *Upgrading facilities*: introduction of more modern and better quality elements to roof, walls, windows, floors, and ceilings, including redecoration
- *Necessary replacement of facilities*: replacement of roof coverings and gutters/downpipes, treatment of external walls, upgrading windows, electrical upgrade or rewiring.

Table 53: Average Cost per Clubhouse for Necessary Works for Period to 2025, by Class

| Class | Ongoing maintenance<br>£000 | Straightforward replacement<br>£000 | Upgrading<br>£000 | Replacement<br>£000 | Total<br>£000 | Annual<br>£000 |
|-------|-----------------------------|-------------------------------------|-------------------|---------------------|---------------|----------------|
| 2     | 92.5                        | 97.1                                | 200.9             | 99.6                | 490.1         | 19.6           |
| 3     | 40.0                        | 92.9                                | 104.8             | 44.0                | 281.7         | 11.3           |
| 4     | 35.0                        | 57.9                                | 140.8             | 36.6                | 270.3         | 10.8           |
| 5A    | 30.0                        | 45.4                                | 60.7              | 45.3                | 181.4         | 7.3            |

|    |      |      |      |      |       |     |
|----|------|------|------|------|-------|-----|
| 5B | 22.5 | 29.7 | 18.8 | 33.2 | 104.2 | 4.2 |
|----|------|------|------|------|-------|-----|

*Table 54: Average Cost per Clubhouse for Necessary Works for Period to 2025, by Type*

| Type                   | Ongoing maintenance<br>£000 | Straightforward replacement<br>£000 | Upgrading<br>£000 | Replacement<br>£000 | Total<br>£000 | Annual<br>£000 |
|------------------------|-----------------------------|-------------------------------------|-------------------|---------------------|---------------|----------------|
| Course-owning club     | 55.0                        | 85.0                                | 128.6             | 65.4                | 334.0         | 13.4           |
| Commercial             | 32.5                        | 56.4                                | 138.3             | 9.0                 | 236.2         | 9.4            |
| Municipal              | 30.0                        | 34.2                                | 13.8              | 52.8                | 130.8         | 5.2            |
| Non course-owning club | 25.0                        | 37.1                                | 90.5              | 37.0                | 189.6         | 7.6            |

While there are some patterns in the figures, there were also very different circumstances at individual clubhouses, even when these were of the same class or type. In addition, one Class 2 facility clubhouse visited happened to be one where major works are required – otherwise, the overall average figures for Class 2 would have been significantly lower.

Similarly, one of the commercial facility clubhouses visited was about to be substantially upgraded, which reflects the situation at a number of such relatively new golf facilities, ie the initial investment is concentrated on the golf course, with temporary clubhouse accommodation then replaced by permanent clubhouse facilities as income builds up and the pattern of demand for such facilities becomes established.

Because of the widely varying situations encountered at different clubhouses, and therefore the individual variations in works required, only very cautious estimates can be made of the likely overall scale of costs involved in meeting the required standards across Scotland’s total stock of clubhouses – even when the grossing up is done on a weighted basis using our cost estimates for each class of facility.

In particular, given the evidence from the questionnaire survey that most members’ clubs in Class 1 regard their clubhouses as adequate, with only minor works required from time to time, we assume that the Class 2 figures also apply to Class 1 facilities (none of which were visited) for the purposes of grossing up.

We also take account of the fact that several Class 5B facilities do not have clubhouses,

and therefore use a figure of 110 for the total stock of Class 5B clubhouses – 11 fewer than the overall total of 121 Class 5B courses.

With these caveats and adjustments, the total costs of meeting all the ongoing maintenance, upgrading, and replacements required to keep Scotland’s stock of golf clubhouses to a reasonable standard over the period to 2025 would be approximately as shown below.

*Table 55: Estimated Cost of Works Required to Scotland’s Golf Clubhouse Facilities, by Class of Facility*

| <b>Class</b> | <b>Average cost per sample facility (£000)</b> | <b>Number of facilities in class</b> | <b>Total cost (£000)</b> |
|--------------|--|--------------------------------------|--------------------------|
| 2            | 490.1  | 80                                   | 39208                    |
| 3            | 281.7  | 136                                  | 38311                    |
| 4            | 270.3  | 81                                   | 21894                    |
| 5A           | 181.4  | 75                                   | 13605                    |
| 5B           | 104.2  | 110                                  | 11462                    |
| <b>Total</b> |  | <b>482</b>                           | <b>124,480</b>           |

The total figure – at 2001 prices and exclusive of VAT – would be around £125 million. Interestingly, this equates to about £10,000 per year per clubhouse, which is close to the average of what is currently being spent, based on figures in a sample of golf club annual accounts. Also, proportionately more of this clubhouse spend would be among the ‘higher class’ facilities, whereas the required golf course spend identified earlier would be concentrated on the ‘lower class’ facilities.

## 7 SURVEY OF GOLF RANGES

### Introduction

The survey was carried out by means of a postal questionnaire sent to all 65 ranges on the **sportscotland** database. 22 completed questionnaires were received – a response rate of 34%, which is reasonable given that over 90% of ranges are commercially owned and operated, and therefore more likely to regard some of the information asked for as confidential.

As in the golf sector generally, terminology is problematical. Ranges are typically referred to as '*driving ranges*', which perpetuates the mistaken view that their main purpose is to cater for golfers who want to practise with the longest club in the bag – when, in fact, the practice most golfers should concentrate on is the short game.

This need is now being recognised, and many new practice and tuition facilities provide for every aspect of the game, including putting, bunker shots, and a short game area for chipping and pitching, as well as the standard range – often now with more realistic target greens and occasionally with features like outfield bunkers and water hazards to frame these target greens. These more comprehensive centres are often called '*golf academies*' rather than simply ranges.

As well as the term 'driving range' being misleading, there is a danger that the term 'academy' may deter some users (beginners in particular) who may associate it with a kind of elitism and a rather 'severe' approach to learning.

As a follow-up to this national audit, there may therefore be a role for **sportscotland** in encouraging the use of more appropriate and consistent terminology throughout the golf sector. In the case of ranges, we would suggest:

- *golf range* rather than driving range for the basic facility;
- *golf centre* rather than golf academy for the more comprehensive facilities, which are becoming increasingly diverse in the facilities they offer, eg incorporating short courses, large golf shops, etc.

In this chapter, we summarise the results of the postal survey of ranges. Again, operators were assured that their individual returns would remain confidential, and the results are therefore presented as totals and averages.

### Questionnaire Survey Results

The results are again reported in the same sequence as the questions on the questionnaire, a copy of which is attached as Appendix D.

The average size of golf range was about 30 bays, (rather larger than the average size of all the ranges on the database), made up as follows:

*Table 56: Average Size of Golf Range*

| <b>Type of bay</b>          | <b>Number</b> |
|-----------------------------|---------------|
| Covered, with mats          | 18.5          |
| Outdoor, with mats          | 4.8           |
| Outdoor, grass teeing areas | 6.4           |
| <b>Total</b>                | <b>29.7</b>   |

As in the golf sector generally, however, these averages cover very wide variations. For instance, among the ranges for which questionnaires were received, the number of covered bays with mats varied from 7 to 72, while the number of outdoor grass teeing areas varied from none to 60.

On the basis of the averages, the main provision is still in the form of conventional covered bays with mats, with about 50% of respondents providing only this form of bay.

The average dimensions of ranges are about 300 yards length and 175 yards width, with most ranges clustered fairly closely around these averages. Widths vary more than lengths, as length should, wherever possible, accommodate a full length shot whereas width is dependent to a considerable extent on the number of bays.

In terms of construction, ranges were divided evenly between expanded steel and timber frame construction.

The average number of car parking spaces provided was 58, with numbers ranging from 20 to 200 depending on the size of the range and the ancillary facilities offered.

Respondents were then asked to indicate the facilities that were available at their ranges. The proportions of ranges with each facility are shown below:

Table 57: Proportions of Ranges with Facilities

| Facility                                | Yes % |
|---|-------|
| Floodlighting                           | 86    |
| Perimeter fence for safety              | 50    |
| Perimeter fence for security            | 50    |
| Target greens in main hitting area      | 68    |
| Other targets in main hitting area      | 91    |
| Short game practice area (chipping)     | 86    |
| Bunker practice area                    | 82    |
| Practice putting green                  | 82    |
| Automated ball dispensers               | 86    |
| Automated ball washing facility         | 91    |
| Mechanised ball collecting arrangements | 100   |
| Golf tuition available                  | 100   |
| One or more customised teaching bays    | 77    |
| Video instruction facilities            | 68    |
| Golf shop                               | 68    |
| Club hire                               | 86    |
| Club repair                             | 77    |
| Catering – vending machines             | 64    |
| Catering – snacks/meals                 | 73    |
| Bar                                     | 50    |
| Access and toilets for disabled people  | 100   |
| Playing facilities for disabled people  | 77    |

High proportions of ranges provide all the main facilities listed, with particular features of the figures being:

- All respondents claim their facilities are accessible for disabled people, with about three-quarters saying they also provide playing facilities for disabled people.
- Similarly, all provide golf tuition, and about three-quarters have at least one customised teaching bay, with most of these offering video instruction.
- 86% have floodlighting, which would now be regarded as a pre-requisite for a viable operation, given the significant winter and evening demand for the use of ranges.
- 80-90% have progressed beyond the stage of simply having players hit balls into an open outfield, and now provide targets and short game practice facilities, while two-thirds now have target greens.
- Only 50% have perimeter fencing for safety or security, which can be a major cost item in the original construction of ranges if high fencing is required.
- Almost all ranges have mechanised systems for ball dispensing, collection, and washing.

- While high proportions offer club hire to those without their own clubs, slightly fewer have a club repair service, and about two-thirds have a golf shop.
- About three-quarters offer a catering service, with two-thirds having vending machines, either instead of or in addition to the catering service. 50% have a bar.

The average numbers of staff in different categories employed at ranges was as follows:

*Table 58: Staff Employed at Ranges*

| <b>Type</b>           | <b>Number</b> |
|-----------------------|---------------|
| Year-round, full-time | 5.7           |
| Year-round, part-time | 4.1           |
| Seasonal, full-time   | 0.6           |
| Seasonal, part-time   | 1.1           |

However, these averages are skewed by the inclusion of figures from one very large facility. If its figures are excluded from the averages, the more typical figures are 4.8 year-round full-time, 3.1 year-round part-time, 0.5 seasonal full-time, and 0.6 seasonal part-time. These typical figures therefore suggest that ranges employ 6-7 full-time equivalent staff (FTEs) on average, with most of these being year-round staff – which reflects the fact that these are year-round operations.

Within their overall staffing complements, ranges employ 1.5 PGA-qualified teaching professionals on average. (There may, of course, also be unqualified assistants involved in providing tuition).

About two-thirds of ranges are owned by limited companies, with most of the others also being owned by smaller businesses, ie sole traders or partnerships. Two of the ranges for which questionnaires were received are owned by ‘public’ bodies, ie a local authority and a links trust. This highlights the extent to which this sector of golf provision in Scotland – a sector which could be central to efforts to introduce more people to golf and to improve playing standards – is dominated by private sector ownership and operation.

The ‘standard’ unit sold at ranges is still a basket or bucket of 50 balls, for which the average charge is close to £2.50. The range of charges reflects the ‘sophistication’ of the range’s facilities and the quality of balls, mats, etc – with some of the newer ranges charging closer to £3 per 50 balls on average, and also offering very flexible options in terms of the numbers of balls taken, discounts for bulk purchases, large groups, season tickets, off-peak times, senior/junior players, school groups, etc.

When asked for an indication of their volume of business, operators gave a range of different types of figures, including numbers of users (annually or per peak/off-peak day), financial turnover, numbers of balls hit, or numbers of buckets of balls purchased. Several did not divulge any figures.

Because of the systems used and the commercial nature of the operations, range operators naturally have better records of the levels of use of their facilities than do

many course-owning golf clubs. However, the variety of types of measures used, their individual confidentiality, and the limited number of responses received, mean that the only approximate average that can be quoted is that ranges of about the average size typically attract several tens of thousands of users per year, whether measured by numbers of people or buckets of balls.

Of more significance in terms of national strategies are the indications of the types of users and the patterns of use and spare capacity at ranges, as indicated below.

*Table 59: Golf Range User Types*

| <b>Type</b>                                 | <b>%</b>   |
|---|------------|
| Experienced golfers, low to medium handicap | 27         |
| Experienced golfers, high (or no) handicap  | 38         |
| Beginners, with professional tuition        | 16         |
| Beginners, on their own or with friends     | 19         |
| <b>Total</b>                                | <b>100</b> |

While these figures can only be estimates, they do suggest a good ‘market mix’ of different types of user, with about two-thirds being experienced golfers and one-third beginners.

*Table 60: Proportions of Ranges with Spare Capacity at Particular Times*

| <b>Time</b>                | <b>Little spare capacity %</b> | <b>Reasonable spare capacity %</b> | <b>Substantial spare capacity %</b> | <b>Range closed %</b> |
|----------------------------|--------------------------------|------------------------------------|-------------------------------------|-----------------------|
| Summer, midweek, daytime   | 23                             | 54                                 | 23                                  | 0                     |
| Summer, midweek, evenings  | 59                             | 32                                 | 9                                   | 0                     |
| Summer, weekends, daytime  | 45                             | 45                                 | 9                                   | 0                     |
| Summer, weekends, evenings | 32                             | 36                                 | 23                                  | 9                     |
| Winter, midweek, daytime   | 0                              | 32                                 | 68                                  | 0                     |
| Winter, midweek, evenings  | 0                              | 77                                 | 14                                  | 9                     |
| Winter, weekends, daytime  | 18                             | 64                                 | 18                                  | 0                     |
| Winter, weekends, evenings | 0                              | 41                                 | 41                                  | 18                    |

Times of peak demand are clearly summer midweek evenings followed by summer weekend daytimes, but even at these times at least a third of ranges have reasonable spare capacity – times which could be taken by schools if tuition arrangements could be set up. All ranges have considerable spare capacity in the winter, when the peak times are weekend daytimes and some ranges close in the evenings.

Many range operators already have arrangements, or plans, for working with schools or community groups. Descriptions given included:

- Golf Foundation Starter Centre, or used for lessons part-funded by Golf Foundation.
- Various forms of tuition packages and classes for local school groups, including



after-school clubs and target competitions between schools.

- Visits to schools to introduce golf into primary schools, eg through the TOPS programme or Tri Golf, and including use of a mobile ‘golf academy’.
- Run activities in school holidays, including ‘festival of golf’, training camps, junior golf schools, and periods when free tuition and balls provided.
- Plans in the pipeline included working with the police with ‘problem’ children, providing an area dedicated to schools use, proposal to ‘adopt’ local schools, and the construction of a pitch and putt course adjacent to the range for junior use and tuition.

Taken together, these initiatives suggest that the commercial operators are active in finding ways of introducing young people to golf. While this will essentially be for short and long-term business reasons, it does appear that these commercial operators may be doing more to develop golf in Scotland than are many members’ golf clubs.

Over the past three years, 40% of operators have seen growth in the use of their ranges, while 45% have experienced stability and 15% have seen a decline. When combined with the following figures which show that a high proportion of ranges are of recent construction, ie the supply of range facilities has grown significantly, the net growth in usage per facility suggests that this is a growth sector overall in terms of golf participation in Scotland.

*Table 61: When Ranges Constructed*

| <b>Date</b>   | <b>%</b>  |
|---------------|-----------|
| Before 1980   | 5         |
| 1980 to 1989  | 14        |
| 1990 to 1995  | 52        |
| 1996 to 1998  | 14        |
| 1999 or later | 14        |
| <b>Total</b>  | <b>99</b> |

In marked contrast to Scotland’s golf courses, about 70% of golf ranges have been built in the last 10 years or so.

Costs of construction varied widely, from £25,000 to over £3 million, depending on the size, quality, and date of construction of the range. Improvement works carried out in the last 5 years were also varied, ie:

- Complete refurbishment/upgrade
- Adding/upgrading short game practice area
- Improving targets
- Improving outfield – better grasses and drainage

- Adding bays – teaching bays and divided outdoor bays
- Higher netting
- Better ancillary facilities – office, conference room, shop

On average, ranges have to close for 7 days a year because of adverse weather or ground conditions.

Vandalism appears to be a problem for more range operators than course operators – the main problem being the theft of balls which was mentioned by about 25% of respondents. The other problems listed were break-ins and damage to fences.

The position on health and safety issues was as follows:

*Table 62: Position on Health and Safety Issues, Ranges*

| <b>Policy</b>  | <b>Operators %</b> |
|--|--------------------|
| Have written health and safety policy covering staff                   | 95                 |
| Have written health and safety policy covering players                 | 70                 |
| Have nominated health and safety officer                               | 70                 |
| Have used consultants to advise on health and safety issues and policy | 55                 |
| Member of staff on site at all times when players using the facilities | 90                 |
| Keep a record of notifiable incidents                                  | 100                |

This pattern of responses is broadly similar to that of golf course and clubhouse operators, but with slightly higher percentages overall, perhaps reflecting the high proportion of ranges owned and operated by businesses rather than clubs.

Future plans being considered by range operators would continue the pattern of upgrading and diversification set by recent improvement projects, ie:

- Addition of pitch and putt course
- New range for tuition and golf schools
- Improvements to outfield, including new drainage system
- Short game area
- Video analysis system
- Covering existing outdoor bays

- Upgrading road and car park to tarmac

Finally, range operators were asked the same question as course and clubhouse operators about the long-term adequacy or otherwise of their facilities. The responses were as follows.

*Table 63: Likely Adequacy of Range in Longer-Term*

| <b>Opinion</b>   | <b>Operators %</b> |
|--|--------------------|
| Range likely to be quite adequate, possibly with minor improvements from time to time  | 75                 |
| Range likely to need significant upgrading over time, which can probably be accommodated and planned for within our physical and financial resources | 15                 |
| Range likely to need substantial improvements/upgrading which we are unlikely to be able to accommodate within the land or finances available to us  | 10                 |

These responses suggest – presumably related to the fact that most are relatively new – that ranges are generally in better condition than either golf courses or clubhouses, and possibly also that, because they are almost all commercially run, their operators generally expect to meet the costs of any upgradings in the normal commercial way. The only examples where this was not the case were where an operator was close to retirement and necessary long-term improvements to drainage etc could not be justified, and where winter business was too low to generate the necessary funds for re-investment.

### **Summary**

Although based on a limited number of returns, the questionnaire survey of ranges suggests that this sector of golf in Scotland is in a generally ‘healthy’ state, ie:

- The number of ranges has grown significantly in the past 10 years, and the levels of use per range are also generally growing or stable.
- Most ranges offer good practice and tuition facilities, with significant improvement programmes to upgrade and diversify the facilities and services on offer.
- Many range operators are also active in initiatives to expand their market by attracting more beginners – and young people in particular. This would suggest scope for more partnership working with range operators and schools to further develop and extend these initiatives as part of the *clubgolf* junior development strategy.
- A high proportion of ranges are commercially owned and operated (though some are small businesses), and most see their facilities as adequate for the longer-term or capable of being upgraded in the normal commercial way, ie using their own resources and borrowings.

No inspection visits were made to ranges, as our visits were concentrated on the core facilities of golf courses and clubhouses, and nor did we seek detailed financial information – knowing that this would be unlikely to be forthcoming from commercial operators. However, the information provided on trends in the use of ranges, and the patterns of recent and planned investment, suggest that the respondents to our survey regard themselves essentially as normal businesses that should fund their own ongoing development and upgrading plans.

The two riders we would add to this are:

- Smaller operations away from the main urban populations may struggle to achieve the levels of throughput required to finance re-investment, and the operators of these smaller facilities may also lack the resources to re-invest. There may therefore be examples of facilities which are significant to their local communities in terms of encouraging both new participation in golf and an improvement in playing standards, and which may therefore justify support in upgrading and extending the facilities they offer.
- The responses showed considerable spare capacity at all ranges, and also highlighted the initiatives many range operators have introduced (or are considering) to attract more beginners – and young people in particular – to their facilities. There should therefore be a clear common interest between range operators (from the point of view of attracting more current and future customers, particularly at off-peak times) and **sportscotland** (from the standpoint of implementing their national junior golf strategy) in jointly developing and funding suitable junior programmes. These would then be delivered by qualified staff at the ranges, to a format and standard agreed with **sportscotland**.

## **8 SURVEY OF SHORT COURSES**

### **Introduction**

As with ranges, this element of the audit was carried out by means of a postal survey.

Questionnaires were sent to operators of the 11 short courses on **sportscotland's** database, and to several others that became known in the course of the survey work. A total of 8 completed questionnaires were received, a response rate of around 50%

Short courses are those of less than 1500 yards in length, and this general category covers a very miscellaneous range of types of facility in terms of their ownership and management. For instance, it includes second courses at members' golf clubs, local authority-run pitch and putt courses, and short courses attached to commercial golf ranges, hotels, academic institutions, or visitor attractions.

Also, the 'cut-off' point of 1500 yards – while logical in terms of 1500 yards being the minimum length of course for Standard Scratch Score purposes – means that some very similar types of course are included and some excluded from the 'short course' category. For instance, one golf club has a second course of 1504 yards which is excluded, although it performs the same kind of function as other such courses of between 1400 and 1500 yards.

Nor does the category of 'par 3' course necessarily coincide with the definition of 'short course', as a 9 hole par 3 course can be longer or shorter than 1500 yards depending on the length of its individual holes.

Overall, this is therefore a small sector of golf provision in Scotland, and a 'miscellaneous' one in terms of the variety of types of facilities and operators.

### **Questionnaire Survey Results**

A copy of the questionnaire used is included as Appendix E.

Although the response rate was good, the results relate to only 8 facilities in total – and facilities which vary widely. This should be borne in mind when interpreting the results, which are briefly summarised below:

- 75% of the short courses were 9 holes in length, with the others being less than 9 holes.
- The average length of course was about 860 yards, with a range from 510 to 1430 yards.
- The average charge was about £3.50 per adult per round and about £2 per child.

- About two-thirds of the facilities were owned by limited companies, with the others being run by local authorities or academic institutions.
- Most of the respondents provided actual or estimated usage figures, with total rounds played per year varying from about 2,000 to about 16,000. Most facilities operated entirely on a 'pay-as-you-play' basis, ie with no club members or season ticket holders.
- Adults were the biggest single user group, accounting for about 50% of total rounds played. About 35% of rounds were played by groups which included adults and children, with about 15% of rounds played by children-only groups. These facilities are therefore already providing for family and junior golf, and, with most operators indicating that the overall use of their facilities had been growing or at least stable but they still have substantial spare capacity, there could be scope to develop this demand further.
- Only a minority of operators have specific arrangements for working with school or community groups, or plans to promote their facilities more actively. However, there are good examples of such work among those which do pursue such initiatives – and these again could be built on.
- Again, only a minority of operators have invested significantly in improvements to their facilities, or have plans to do so. These improvements have usually involved expenditure of a few thousand pounds on upgrading greens and tees, better drainage, or landscaping and environmental work. Most have seen some direct benefit from this investment in terms of user numbers and revenue.
- None of the respondents currently makes any special provision for the use of their courses by people with disabilities.
- Professional tuition is available at about two-thirds of the facilities.
- Only one respondent indicated that vandalism was a problem, the main problems being damage to greens and break-ins.
- All respondents indicated that they had health and safety policies, and kept a record of notifiable incidents. All but one had a nominated health and safety officer, but only about half had a member of staff on site at all times when players were using the facilities.
- About 75% of respondents indicated that their facilities would be quite adequate in the longer-term, possibly with minor improvements from time to time. The remaining 25% indicated that their financial future was uncertain.

## **Summary**

While few in number and difficult to categorise, short courses perform an important role in the overall product mix of golf facilities in Scotland by providing inexpensive and informal golfing opportunities quite different from those available at most full-length

courses. Some cater simply for this kind of informal/casual golf, with no season tickets, no professional tuition, etc.

However, others do offer professional tuition and already work with schools and others on programmes to introduce young people to golf. Where this is the case, or where operators would be interested in developing such services, they could also play a more important role in delivering the 'foundation level' of national golf development strategies, and **sportscotland** should identify and then work in partnership with those which wish to participate in this way.

## 9 STRATEGIC ISSUES AND RECOMMENDATIONS

### Introduction

In this final chapter, we highlight a number of key issues which, in some respects, go beyond the scope of the audit as such, but which have been raised by our study and which will need to be addressed if there is to be a positive, comprehensive, well-informed, and modern approach to the development of golf in Scotland.

### Engaging with the Private Sector

A number of factors combine to suggest that **sportscotland** should engage more actively with the commercial providers and operators of golf facilities in Scotland, ie:

- Many commercially-operated golf facilities provide reasonably-priced ‘golf for all’, they want to attract more customers through effective marketing, and they have to focus on good customer service. In these respects, they differ from at least some members’ golf clubs (which can be ‘inward-looking’ and satisfied to have their facilities operate well below their capacity) and from some municipal facilities (which are already used to their capacity by their existing customers, and lack the financial resources for new investment or marketing).
- The commercial sector is the growth sector in Scottish golf, both in terms of conventional golf courses and, particularly, in terms of the new golf centres/golf academies, which are targeted at emerging patterns of demand and provide a wider range of playing, practice, and tuition facilities than do most club or municipal facilities. If the trend towards private sector provision continues, and if research confirms the growth of ‘non-club/recreational’ golf in terms of participation, commercially-operated golf facilities will be where much of the ‘action’ will be in the next 20 years.
- This is highlighted by the table below, which shows that, despite the rapid growth in the number of commercially-operated golf course facilities in Scotland over the past 10-15 years, Scotland is still ‘under-developed’ in terms of its commercial sector compared to the USA or the UK as a whole.

*Table 64: International Comparisons of Proportions of Golf Course Facilities by Management Type*

|          | <b>Club %</b> | <b>Commercial %</b> | <b>Municipal %</b> | <b>Total %</b> |
|----------|---------------|---------------------|--------------------|----------------|
| Scotland | 73            | 15                  | 12                 | 100            |
| UK       | 56            | 35                  | 9                  | 100            |
| USA      | 30            | 60                  | 10                 | 100            |

- Our survey results also show that, compared to club or municipal facilities,



commercial operators' golf facilities are generally likely to be in better condition (partly because they are newer), to be fully playable year-round, and to be more positively managed in terms of environmental and health and safety issues.

- While a few commercial facilities are owned and operated by major companies (and tend to operate at the expensive/exclusive end of the market), most have been established and are operated by relatively small businesses of various kinds. The basic economics of golf facility operation and the current supply/demand balance in Scotland suggest that many such facilities may be of marginal viability. This, in turn, should give the operators an incentive to work with **sportscotland** on initiatives to expand their business, while reassuring **sportscotland** that assisting such operators with the development of facilities or the running of programmes related to **sportscotland**'s national strategies is at least as legitimate in principle as assisting often-wealthy and less forward-looking golf clubs.

The principle that determines the importance of specific facilities in terms of the national golf strategy and the legitimacy of assisting the provision of such facilities or their use as bases for national programmes should therefore *not be the legal status of the operator* (whether club, commercial, or municipal), but rather *the way the facility is managed*, ie:

- Who are its target markets?
- What are its policies on access and pricing?
- What is the design and construction quality of the facility and its operation in terms of aspects like conservation and health and safety?
- Do its facilities match the needs of 'golf for all', introducing new players to the game, and developing the skills of those who already play?
- What are the skills and experience of the management, and how strong is their commitment to programmes that will benefit the development of golf in Scotland as well as the viability of their own business?

If the responses to these types of questions are positive, it is a straightforward matter to devise assistance conditions that will ensure that any public funding goes only to facilities or programmes that will yield public benefit, and that such assistance can be 'clawed back' if the facility operator makes higher than anticipated profits as a result of receiving assistance.

The first step, however, is '*engagement*'. The commercial sector of golf operation in Scotland is not familiar with **sportscotland**, and vice versa. If **sportscotland** makes the decision to engage fully with the private sector in pursuit of its national golf strategy (including the *clubgolf* strategy), the next steps might be:

- the drafting of preliminary guidelines on what that engagement would consist of, including the availability (and likely terms) of any Lottery or other funding support;
- inviting the commercial sector golf operators (of ranges as well as golf courses) to a forum for an exchange of information and views, and the development of 'rules of engagement';
- publicising the outcome of the forum, including a mechanism for ongoing contact

and information exchange.

While the SGU, as the sport's governing body, would be involved in this process, it cannot act as the intermediary between **sportscotland** and the commercial golf operators. SGU's direct role is in relation to the clubs based at some (though not all) commercial golf facilities, while the responsibility for all the development, management, and spending decisions rests with the commercial operators themselves.

### **The Future of Municipal Golf?**

Only 20 of Scotland's 32 local authorities in Scotland run any golf courses. Of these, 13 run just one or two courses, with the remaining 7 having significant 'portfolios' of up to 8 courses.

In some areas, these municipal courses are now run by 'arm's length' trusts, while several previously municipal courses have been leased to members' clubs in recent years, and two have been closed. Where municipal courses are still run directly by local authority departments, there are again variations. Some authorities regard the courses as central to their sports development policies while, in a situation of increasing private sector provision and deteriorating municipal course standards because of constraints on local authority resources, others are considering options for the future management of their courses. These options could include various forms of leasing or management arrangements involving clubs or commercial operators, either directly or in partnership with the local authority.

In such a varied and sensitive situation, the information provided for this audit by most local authorities was very limited. It was also complex, and difficult to interpret or compare, as it reflected the recording methods and accounting policies of individual authorities. There were also, of course, confidentiality requirements – not least because of the possibility that some local authorities may enter negotiations with other parties about management options for their courses.

The variety in the municipal sector extends to the quality of the courses themselves (some are very poor), their available spare capacity to cater for anyone other than their existing customers (some have little spare capacity at suitable times), and even their security (there are some where children or women would only be encouraged in groups because of fears for their safety).

Municipal courses should, in theory, form the basis for introducing and running golf development programmes aimed at introducing more people to golf – including young people and a wider spectrum of the population in terms of social class than are catered for by many golf clubs – for the following reasons:

- The courses are publicly owned and operated, and are inexpensive and open to all.
- They are located close to main population centres, and are therefore easily accessible to large numbers of people.
- They are run by local authorities, which also have responsibility for key related services like education and which may have specific sports development policies

and staff relating to golf. There should therefore be an opportunity to use municipal courses in an integrated golf development policy – starting at primary school level and incorporating **sportscotland's clubgolf** initiatives.

However, with so much variation among local authorities in terms of commitment, policies, resources, and the quality of their courses, **sportscotland's** approach should be similar in some respects to the approach to be taken with commercial operators, ie:

- identifying local authorities which would be willing, and able, partners in golf development initiatives;
- working in partnership with these authorities on new initiatives, with the authorities providing the physical resources, **sportscotland** providing funding assistance towards facility upgrading and new programmes, and each making an input of appropriate staffing expertise.

### **St Andrews Links Trust**

As noted in the body of our report, the Links Trust occupies a unique position in Scottish golf, as the body established by Act of Parliament to manage the publicly-owned courses in St Andrews.

With a portfolio of 6 courses already, plus a comprehensive practice centre, and a seventh course now to be built, the Trust is a major golf facility operator in Scottish terms. It also has the capacity to generate healthy operating surpluses, and is required to reinvest these in golf in St Andrews.

It can therefore bring substantial resources – golf facilities, staff, and money - to bear on golf development at a time when many other operators (whether clubs, commercial, or local authorities) struggle to do so. The Trust has already demonstrated its commitment to programmes like the *St Andrews Junior Golf Association*, and **sportscotland** should continue to work closely with the Links Trust in the delivery of all aspects of the Scottish golf strategy.

### **Climate Change**

It is now officially accepted that Scotland's climate is changing ( the Scottish Executive has a *Climate Change Team*, and produces regular *Climate Change* newsletters), but the evidence of change, the nature and speed of change, and how change will affect different parts of Scotland, are all aspects on which detail and consensus has yet to emerge.

However, two basic facts of key importance to the future of Scotland's golf facilities do seem to have been established:

- Climate change will involve more rain.
- Many of Scotland's golf courses are already getting steadily wetter.

The general situation is recognised in the sense that improved drainage has been

identified both by golf course operators in their own forward plans and by our agronomist on his site visits as the major element of course improvement and upgrading work likely to be required over the next 20 years or so.

However, more specific evidence and advice directly applicable to golf facility operators is required, and the Scottish Golf Environment Group (SGEG) and the Sports Turf Research Institute (STRI) have been commissioned by the Scottish Executive to carry out a 2-year programme of work in this area. The work is targeted at golf club committees and greens convenors, greenkeepers, and golfers themselves, and aims to raise awareness and understanding of the issues, improve communication and information exchange among all those involved, and provide guidance and factsheets on the kinds of impacts climate change is likely to have on golf courses and guidance on how to tackle these.

Again, it is being emphasised that the guidance itself can only be in general terms, and site-specific surveys and recommendations will still be required. All the agencies with expertise in these areas (including SEPA and the British and International Golf Greenkeepers Association) will be involved in the study, and **sportscotland's** role should be to:

- maintain ongoing liaison with those carrying out the work;
- ensure that the emerging results are taken into account in **sportscotland's** own planning and initiatives in the golf sector;
- just as importantly, ensure that the key findings of this national audit, and the follow-up action **sportscotland** intends to take (eg in the areas of market research etc that we highlight as well as in their *clubgolf* and other initiatives) are made known to those carrying out the environmental studies.

Where the impacts of climate change are projected to be severe or operators have very limited resources, some facility operators may have to accept that their facilities will become unsustainable, or will at least offer a lower quality golfing experience and over a relatively short season – which in turn may require golfers to ‘pay more for less’ if the facilities they use are to remain viable.

Since the problem of (increasingly) wet golf courses is a key finding of the audit, **sportscotland** should also determine how to deal with Lottery funding applications for projects aimed at addressing the problem in particular cases. The kinds of criteria we would recommend should be applied in considering such applications would include:

- the need for the applicant to have taken expert advice (which may be available from the facility's own greenkeeper, if suitably qualified and experienced) on the nature of the problem and the likelihood of a solution being found;
- evidence that the applicant has not allowed the problem to arise through neglect or poor greenkeeping, and is prepared to commit resources to tackling it;
- confirmation, possibly based on a ‘second opinion’ from an external expert, that the drainage and any other measures proposed have at least a reasonable chance of

success, and that there is a properly planned and adequately resourced long-term course management plan in place to maintain the course to a good standard after the project has been carried out;

- evidence, if possible, that the remedial or course improvement works are being carried out as part of a more comprehensive development plan, which involves making the facility more accessible to those whom **sportscotland** would regard as target groups, and running programmes to introduce more people to golf and to enhance the skills of those who wish to improve.

## **Safety**

The issues relating to safety in the design and use of golf courses are complex. In particular:

- There are no ‘blanket’ rules or regulations to define safety margins or safe procedures – not least because this is another example of the need to recognise the uniqueness of each golf course.
- The emerging ‘case law’ appears to be putting an increasingly onerous ‘duty of care’ on the golfer to ensure, before hitting the ball, that it is safe to do so.

With litigation ever-increasing, there is an understandable reluctance on the part of official bodies to attempt to define safety standards or responsibilities. The current approach is instead characterised by:

- golf course architects being encouraged to adopt (confidential) guidelines on safety margins produced by the *European Institute of Golf Course Architects* when designing new courses;
- individual golfers being encouraged to give safety a higher priority, and to carry adequate public liability insurance;
- golf course operators also being encouraged to recognise their responsibilities in terms of accepting paying customers on to their courses.

These are all necessary in a situation where many long-established golf courses in Scotland would probably not meet any defined modern standards in terms of safety margins, and where public access to and through golf courses was the subject of extensive consultation and discussion under the Land Reform Bill.

Other aspects of health and safety in the management of golf facilities are clearly covered by legislation, and information and advisory services are available to golf course operators on these, eg through the Health and Safety Executive, companies which specialise in (and widely advertise) such services, or the SGU’s specialist consultant.

There may therefore be a case for **sportscotland** and the SGU to draw together the best available information and legal advice on the more general aspects of the safe use of golf facilities, to highlight:

- how improvements might be made to existing facilities and their operation, to make them safer;
- the respective rights and responsibilities of golf course operators, golfers, and the general public, and the actions each should take to minimise accidents or to compensate for them through insurance when they do happen.

### **Increasing Diversity in Golf Facility Provision and Operation**

From a members' club-only situation 100 years ago, the golf sector in Scotland has diversified significantly – in terms of the types of golf facility on offer and the types of operators of these facilities. Even so, Table 64 highlights the fact that Scotland still lags the rest of the UK in terms of commercial provision, which may suggest that this is the sector which is likely to see future growth in provision – provided the market is there.

In addition to re-emphasising the general importance of engaging with the private sector as a matter of principle, we would highlight two other aspects of this increasing diversity:

- The national database of golf facilities needs to incorporate as comprehensive (and as accurately described) coverage as possible of all the types of facility – including the emerging sector of 'golf academies/golf centres'.
- Although relatively few in number, and very varied in terms of their characteristics and operation, short courses should be recognised as of potential strategic importance in introducing people to the kinds of '*fast golf, friendly golf, family golf*' that the Henley Centre sees as being emerging market requirements. As part of its ongoing database maintenance and monitoring, **sportscotland** should therefore establish closer links with the operators of short courses which wish to play an active role in the delivery of national golf development programmes.

### **Junior Golf**

A great deal of information is now emerging on junior golf, and there are many schemes 'on the market' for introducing young people to golf and then developing their interest and ability.

The aim must be to achieve *co-ordinated delivery* of the various initiatives and programmes, and that should be possible through **sportscotland**'s new *clubgolf* strategy and the network of junior golf managers – working closely with the golf facility operators and golf coaches who wish to participate.

The 'raw material' available now includes:

- SGU's survey of junior member numbers and policies at golf clubs in Scotland – now several years old, but with a lot of basic statistical information, and examples of best practice which could be used to encourage similar types of clubs to be more positive in terms of the number of junior members they accept and how they develop their junior sections.

- The junior charter and other junior golf development initiatives contained in the SGU's overall 2001-2005 golf strategy document.
- The report of the NFO System Three research into young people's perceptions of golf.
- The results of the various junior golf pilot schemes, which have been evaluated for **sportscotland** by MW Associates and Edinburgh University.

In addition to the ongoing work of the Golf Foundation, several commercial schemes have been developed, eg *Young Masters*, *Wee Wonders*, etc, and these can also be monitored.

Our own survey results suggest that about 12% of club members in Scotland are juniors, with a boy:girl ratio of about 11:1. However, it was clear from the SGU survey findings that broadly similar types of golf club often have very different junior policies. Some have relatively few junior members but nonetheless restrict that number by having a waiting list, with some clubs in this category tending to regard juniors as a 'problem' in terms of allocating tee times on the course, managing their competitions, general supervision on the course and in the clubhouse, and because they 'invest' time in juniors who then leave. Other clubs have many more juniors and are prepared to accept more – because they recognise that juniors are the lifeblood of the club, and that it is often only a small proportion of junior members who play frequently in any case.

Information gathered from our questionnaires and site visits confirmed:

- the lack of any consistent approach towards juniors among members' clubs, with policies varying widely and initiatives often depending on the commitment of individuals who are prepared to take on the role of junior convenor;
- the importance of the club professional at many members' clubs in terms of junior coaching – there is an element of 'commerciality' in this, but also a lot of personal commitment of unpaid time and effort by some of the pros involved;
- a generally more positive approach at commercially-operated golf facilities – both golf courses and ranges – where young people are seen as a specific market for the services of coaching staff and as long term customers of the course or range; there are also fewer restrictions on when juniors can play at commercially-run courses than at members' club courses.

## **Monitoring**

With this survey providing a 'snapshot' of the financial and physical condition of Scotland's golf facilities, and with a sound database and classification system now in place, these financial and physical conditions should be monitored on an annual basis.

This can be done by selecting a representative sample of facilities whose operators are prepared to:

- provide annual financial and management information – audited accounts, membership and waiting list details, etc;
- allow inspection visits to their courses (visits to clubhouses would not be required) or to provide copies of annual course reports by their own consultant agronomists (STRI etc).

As with the *National Golf Tourism Monitor*, this data would then be analysed to provide **sportscotland** with a national picture (and regional/management type subdivisions) of trends in key aspects of the financial and physical condition of golf facilities, and to provide the participating operators with an indication of how their circumstances compared to the averages.

### **Golf Participation and Demand**

More effective forward planning, both by **sportscotland** nationally and by the operators of golf facilities in Scotland, would benefit from *better information on patterns of golf participation and prospects for golf demand*. This national audit has focused on the supply side – the characteristics of golf facilities and information provided by their operators. However, it is clear that:

- the information that operators can provide about the levels and patterns of use of their facilities, and about how these patterns of demand may be changing, is often unreliable and anecdotal;
- there is now a ‘*demand deficit*’ in many parts of Scotland, with too many golf course facilities chasing too few golfers, to the extent that the continuing existence of some facilities – and certainly their ability to maintain and reinvest in their facilities – may be at risk if they cannot attract more customers, and hence revenue.
- Social trends, including the projected rapid decline in the number of 5-14 year olds in the Scottish population over the next 10 years or so, will have a significant effect on levels and patterns of demand for golf.

The last national survey of golf participation and potential demand in Scotland was in the *Study of Golf in Scotland* for the then Scottish Sports Council in 1990/91. The intervening decade has seen rapid growth, and some diversification, in the supply of golf facilities in Scotland (as highlighted in this report), while **sportscotland**’s ongoing *Sports Participation Survey* appears to indicate some recent upturn in the number of adults participating in golf after a decade of relative stability. These basic participation figures, of course, may ‘disguise’ changing patterns in the frequency or type of golf participation, which are just as significant to future planning as the numbers of participants.

Overall, however, the evidence of declining golf club waiting lists and, in some cases, declining membership numbers, suggests the emergence of the ‘*demand deficit*’ referred to above, which could threaten the existence of some smaller rural clubs in particular, while there may be anecdotal evidence of patterns of participation changing in response to the wider availability of pay-as-you-play golf on ‘open access’ courses and the limited time many people have available. These factors may be leading to some shift from ‘club golf’ to ‘recreational golf’, whereby people give up a club membership



(because they do not play often enough to justify their subscription and are not interested in competitive golf), and instead play their golf ‘informally’ at different courses and with different people.

With a number of new golf facilities being designed and operated to meet the emerging demands for ‘*fast golf, friendly golf, family golf*’ as identified in the 1997 EMAP/Henley Centre *Golf Futures* report, but with no clear evidence of whether trends like the often-assumed increase in participation and demand for women’s golf are actually happening, there is a need for new national and regional information on the demand side – both to assist operators to provide the right kinds of facilities and to provide the basis for well-targeted national and local efforts to stimulate demand in order to address the ‘demand deficit’. Without this stimulation of demand (and therefore revenue), some golf facilities may have to cease operating, while others will steadily decline in standard because their revenue base will not support adequate ongoing maintenance, far less upgrading and re-investment.

A recent survey by Mintel for the Professional Golfers’ Association appears to confirm the high number of golfers in the UK who are not club members, as well as yielding new evidence on the profile of golfers and their patterns of participation. This is the kind of survey work that should be carried out in more depth in Scotland, with questions designed specifically to help bodies like **sportscotland** and the SGU at national level, and golf facility operators at local level, plan and provide more effectively for the growth in golf participation that Scotland needs.

Provision of this kind of new research information on participation and demand, combined with ongoing efforts to stimulate demand through initiatives like the *Scottish Junior Golf Partnership* and the *clubgolf* strategy in particular, could therefore be just as important a role for **sportscotland** as providing information and advice on the maintenance and management of facilities. Many golf facility operators are likely to see ongoing maintenance and management as their responsibility at an individual facility level, while recognising that they do not have the expertise or the resources to carry out market research or strategic development of the kind outlined above. (This is implicitly acknowledged in the statement in the Sport 21 2003-2007 consultation document *Time to Speak Up*, to the effect that: “Research and evaluation studies will continue to be an important part of **sportscotland**’s work”).

*One of our key recommendations is therefore that, for the golf sector, this supply audit should be matched by new **sportscotland** research on participation and demand, if national strategies and local facility operators are to be effective in planning and providing for future golfing needs and aspirations among the Scottish population.*

## **Summary**

The strategic issues highlighted above suggest that there is a positive role for **sportscotland** to play in giving leadership to the golf sector in the follow-up to this national audit – and that this leadership should take the form of better research information on participation and demand, the monitoring of financial performance, and the co-ordination of advisory services and new development initiatives.

With the co-operation of golf facility operators themselves, a twin-pronged approach -

**sportscotland** growing the game through market research and development initiatives, while the environmental agencies tackle the problem of wet golf courses through technical studies and advice – offers the best way forward for the *Home of Golf*.

**Appendix A**  
**General Questionnaire**

**Appendix B**  
**Golf Courses Questionnaire**

**Appendix C**  
**Clubhouses Questionnaire**

**Appendix D**  
**Golf Range Questionnaire**

## **Appendix E**

### **Short Courses Questionnaire**

**Appendix F**  
**Case Studies**



# National Audit of Scotland's Golf Courses and Ancillary Facilities

## Case Studies

### Introduction

The following 6 case studies represent a cross-section of the 30 facilities visited. Each case study is based on a particular golf course and clubhouse, but with elements of other similar facilities incorporated as appropriate, in order to give as typical a profile as possible of that facility type.

The case studies are identified in terms of the classification of facilities described in the body of the report, and also by management type (club, commercial, or municipal), to enable individual facility operators to identify the case study that most closely matches their own situation. Table 3 from the report is repeated below to show the criteria for the classification of facilities:

*Table 3: Basis of Classification of Scotland's Golf Course Facilities*

| <b>Indicator</b>           | <b>Class 1</b> | <b>Class 2</b> | <b>Class 3</b> | <b>Class 4</b> | <b>Class 5A</b>  | <b>Class 5B</b> |
|----------------------------|----------------|----------------|----------------|----------------|------------------|-----------------|
| Total annual income (£000) | 500+           | 350-499        | 250-349        | 150-249        | <150<br>18 holes | <150<br>9 holes |
| Weekday green fee (£)      | 50+            | 30-49          | 20-29          | 16-19          | <16              | <16             |
| SSS                        | 72+            | 70-71          | 68-69          | 66-67          | 66               | 65              |

Nevertheless, and as highlighted in the report, the circumstances of each course and clubhouse are unique, and the case studies should not be taken as representing the situation as it applies at any particular facility.

The costs included in the *golf course* tables below are the estimated amounts of expenditure, rated at 2001 prices (excluding VAT) required to fund the necessary works under each of the following headings:

#### *Ongoing Maintenance*

The typical annual course maintenance budget for a course of this type, including staff costs, machinery costs, and materials.

The work itself would include all the cutting, fertilising, aerating, bunker raking, etc necessary to present and maintain the course in good playing condition, together with minor repairs, improvements, and modifications to greens, tees, and fairways, bunkers, planted areas, drainage, pathways, course furniture, etc.

#### *Upgrading*

Capital expenditure required to undertake necessary upgradings of key elements of the golf course, such as extending tees, improving the irrigation system, significant new planting or conservation schemes, installation of pathways to prevent damage to heavily-trafficked areas, etc.

### *Replacements*

Capital expenditure required for the complete replacement of worn-out or inadequate elements of the course, including taking out and replacing greens or old drainage systems, replacing machinery, etc.

The costs included in the *clubhouse* tables are the estimated amounts of expenditure, rated at 2001 prices (excluding VAT), required to fund the items detailed under headings listed below.

### *Ongoing Cyclical Maintenance*

- Checking the elements of the buildings for damage or weaknesses.
- Cleaning gutters.
- Checking windows regularly for leaks and drafts.
- Checking doors with their finishings and ironmongery monthly for damage and making good.
- Checking plasterboarded partitions for damage and making good.
- Toilet/shower floor and wall finishes deep cleaned twice yearly. Checking for accidental damage.
- Checking showers operating properly.
- Checking daily that sanitary fittings are operating properly.
- Checking previous repair work.
- Inspect furniture, fixtures and fittings monthly for damage.
- Ensure all rubbish removed regularly internally and externally.

### *Replacement of worn out elements now until 2025: straightforward replacement:*

- Carpets and other floor finishes.
- 8. Ceiling finishes.
- Replacement of sanitary fittings.
- Replacing heating components.
- Kitchen equipment.
- Lockers replaced or upgraded.
- Bar and gantries replaced or upgraded.

### *Upgrading facilities now until 2025: improving by introducing more modern and better quality elements:*

- Roof work.
- External walling.
- Windows and finishings.
- Floor wall and ceiling finishes.
- Redecoration to internal walls.
- Redecoration to ceilings.

*Necessary replacement of facilities now until 2025: age of elements dictating replacement:*

- Roof flashings generally
- Gutters and downpipes.
- Flat roofing.
- Windows and external screens.
- Possible replacement of external render.
- Electrical rewire or upgrade.

### **Case Study 1: Class 5A Urban Municipal 18 Hole Course with Basic Pavilion Clubhouse**

#### *Golf Course*

#### *General Observations*

This case study is based on an eighteen hole municipal facility in an inner city setting. The course is parkland in nature with mature and semi-mature woodland defining northern and western boundaries and forming significant woodland features within the course layout. These features have been supplemented by recent under-planting initiatives in an effort to improve the wildlife habitat potential of the course.

Bounded on three sides by large housing schemes, the course is heavily played both by those who gain access to the course by conventional means ie via the starter's box and ticket office and others who breach the boundary walls and fencing in search of free golf.

#### *Staffing Levels*

The course is maintained by four full time greenstaff overseen by a Parks Manager . The Parks Manager has responsibility for general management of this facility as well as four others in the city. Greenstaff, although trained to a high standard, lack general motivation as a result of a lack of finance being available to enable maintenance of the course to a standard comparable with members' club courses in the area and as a result of the repeated incidents of vandalism referred to below.

#### *Agronomic Assessment*

#### *Greens*

Greens construction profiles comprise an amended local soil overlying a 'clinker' drainage carpet. The turf is *Poa annua* dominated with areas of *Agrostis* surviving on the periphery of most putting surfaces. Good turf cover has been retained on all surfaces by maintaining the height of cut at 5mm and above. Generally the profile was coping well with removal of surface water, although one green showed all the classic symptoms of water-logging . This green and surround was the subject of repeated flooding from a nearby water source outwith the boundaries of the course . Negotiations with neighbouring landowners are ongoing in an effort to rectify the problem at source.

### *Tees*

Average teeing area per hole was measured at less than 250m<sup>2</sup>. (Modern architectural practice suggests an average of 400m<sup>2</sup> would be more appropriate for a course of this type). The tees are constructed using screened indigenous soils over a formed sub-base. Drainage has been added to some of the complexes in recent years in an effort to reduce the rate of deterioration. Turf cover on the tees was generally poor and standing water was evident throughout. Players, in an effort to avoid teeing off in very slippery and muddy conditions, have taken to playing from drier areas on adjacent fairways, thereby spreading the wear pattern well beyond the immediate tee box area. This trend not only adds to the management workload of the greenstaff, but also has safety implications as safety fencing designed to trap mis-hits off the tees are ineffective against the same type of errant shot from an alternative tee position on the fairway.

The long term solution to this problem is a tee reconstruction policy whereby tee complexes compliant with current USGA specifications are introduced on a phased basis. At the time of reconstruction every effort should be made to maximise the teeing area without compromising safety considerations or the character of the golf hole. In this respect, the local authority would be well advised to employ the services of a qualified golf course architect.

### *Fairways*

The fairway drainage system is a combination of tile drains supplemented by recently introduced PVC piped drains on noted problem areas. There is evidence that machinery trafficking has damaged significant stretches of the tile system, and also that other runs on this system have been blocked by intrusion of tree roots from the boundary trees and mature copses within the body of the course. This has resulted in large areas of standing water on crucial fairway areas such as landing zones and green approaches. Drain runs which have not been physically damaged in this way are however largely failing to function at capacity due to the infilling and piping of positive outfalls and the subsequent removal of regular rodding from the maintenance regime.

### *Maintenance System*

The local authority does not employ turf agronomy consultants, nor does it operate a 'Management Plan' system. This results in bulk purchases of consumable items which are used on *all* golf courses under Council care. The products purchased therefore do not necessarily address the specific requirements of this parkland site. This procurement system equally extends to purchase and hires of maintenance equipment. This has resulted in damage to drainage systems, for example, through the use of aeration equipment which was entirely unsuitable for the site.

Similarly, operations such as aeration, fertilising, and top-dressing are carried out on a rota system around all the Council's courses. This means that any given operation on this course will be carried out on a certain allocated day or period of days. Often when labour and equipment arrive at this course to carry out the operation, weather and/or ground conditions are unsuitable. Current policy is that the operation will be

carried out within the allocated time frame even if contrary to the advice of the Head Greenkeeper. When this situation arises, not only can the process be wasteful and ineffective, it can also result in damage to the infrastructure of the course. Putting overall management of the course including budgetary control and implementation of a course management programme in the hands of the Head Greenkeeper should largely eliminate the problem.

#### *Vandalism*

Despite being bounded by security fencing or stone walling on most of the site perimeter, the open spaces of the course is used by some members of the public for dog walking, picnicking barbecues, and in some cases soccer.

Drinking and drug taking has been witnessed by staff who have been threatened on any attempt at intervention.

Staff would not therefore recommend the use of this course by children or unaccompanied females as their safety could not be assured. This problem could be addressed by improvements to perimeter fencing and employment of security staff to patrol outwith greenstaff working hours.

#### *Summary*

This venue provides a large population with affordable golf. However, a lack of capital investment over recent years has resulted in a decline in the fabric and infrastructure of the course. This decline has been accelerated through a management policy which centralises purchasing and maintenance systems so that regimes have become generic for all Council courses rather than site specific as would be the norm in the members' club or commercial sector. In this respect, the expertise and local knowledge of the greenstaff is also overlooked to the detriment of the course.

#### *Ongoing Course Maintenance and Capital Spend Required for Period to 2025 (£000)*

| <b>Ongoing maintenance (annual)</b> | <b>Upgrading</b> | <b>Replacement</b> | <b>Total capital</b> |
|-------------------------------------|------------------|--------------------|----------------------|
| 113.5                               | 110.3            | 175.7              | <b>286.0</b>         |

#### *Phasing of Required Course Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 340.5                      | 102.0                      | <b>442.5</b>             |
| 2006-2010     | 567.5                      | 116.0                      | <b>683.5</b>             |
| 2011-2015     | 567.5                      | 0.0                        | <b>567.5</b>             |
| 2016-2020     | 567.5                      | 53.0                       | <b>620.5</b>             |
| 2021-2025     | 567.5                      | 15.0                       | <b>582.5</b>             |
| <b>Total</b>  | <b>2610.5</b>              | <b>286.0</b>               | <b>2896.5</b>            |

The way forward proposed for the course would be to implement a 5-10 year capital investment scheme based on servicing and upgrading the drainage system on the course coupled with a tee remodelling and reconstruction programme. The vandalism problem could be partially addressed through improvements in perimeter security but equally it would appear that the safety of females and children wishing to play outwith working hours could only be achieved through deployment of course rangers on site.

### *Clubhouse*

The pavilion (3000 square feet) is a 1970s building, typical of that time, constructed principally of load bearing blockwork, holding up flat roofs. Recognisable features include deep timber fascias, facing brick cladding, plain plywood doors, high level windows, a raised housing for the water tank and a section of glazed curtain walling by the main entrance. No significant alterations have been made to the building. The general fabric is ‘tired’ and suffers from the poor quality of materials used at the time of construction. As a consequence, the replacement of the flat roof and doors and windows are items to be attended to in the short term.

### *Ongoing Clubhouse Maintenance and Capital Spend Required for Period to 2025 (£000)*

|                            | <b>Ongoing cyclical maintenance</b> | <b>Replacement of worn-out elements</b> | <b>Upgrading facilities</b> | <b>Replacement of facilities</b> | <b>Total capital</b> |
|----------------------------|-------------------------------------|---|-----------------------------|----------------------------------|----------------------|
| Roof                       | 0.15                                |   |                             | 25.00                            | <b>25.00</b>         |
| External walls             | 0.10                                |   |                             | 5.50                             | <b>5.50</b>          |
| Windows and external doors | 0.10                                |   |                             | 11.50                            | <b>11.50</b>         |
| Internal walls             | 0.10                                |   |                             |                                  |                      |
| Floor finishes             | 0.10                                | 8.00                                    | 10.00                       |                                  | <b>18.00</b>         |
| Ceiling finishes           | 0.10                                | 4.00                                    |                             |                                  | <b>4.00</b>          |
| Plumbing and drainage      | 0.15                                | 4.50                                    | 5.00                        |                                  | <b>9.50</b>          |
| Heating                    | 0.25                                | 7.50                                    |                             |                                  | <b>7.50</b>          |
| Electrical and lifts       |                                     | 3.00                                    |                             | 4.50                             | <b>7.50</b>          |
| Kitchen equipment          |                                     | 0.50                                    |                             | 1.25                             | <b>1.75</b>          |
| Fittings and furnishings   | 0.05                                | 3.25                                    |                             |                                  | <b>3.25</b>          |
| Bar fittings               |                                     |   |                             |                                  |                      |
| Roads and parking          | 0.10                                |   |                             | 2.50                             | <b>2.50</b>          |
| <b>Total</b>               | <b>1.20</b>                         | <b>30.75</b>                            | <b>15.00</b>                | <b>50.25</b>                     | <b>96.00</b>         |

*Phasing of Required Clubhouse Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 3.60                       | 22.75                      | <b>26.35</b>             |
| 2006-2010     | 6.00                       | 29.50                      | <b>35.50</b>             |
| 2011-2015     | 6.00                       | 17.50                      | <b>23.50</b>             |
| 2016-2020     | 6.00                       | 10.25                      | <b>16.25</b>             |
| 2021-2025     | 6.00                       | 16.00                      | <b>22.00</b>             |
| <b>Total</b>  | <b>27.60</b>               | <b>96.00</b>               | <b>123.60</b>            |

**Case Study 2: Class 5A Rural/Parkland Municipal 18 Hole Course with Club Clubhouse**

*Golf Course*

*General Observations*

This 18-hole development lies on an elevated site in East Central Scotland. The course is parkland in nature with a range of mature specimen trees and recently introduced plantations delineating the fairways and providing shelter belts on the higher more exposed areas of the site. The course is constructed on a clay based soil and uses a range of open ditch systems as the principal method of drainage. The course was closed to play for 42 days of the 2001/2002 season as a result of flooding, thick fog, or frost.

*Staffing Levels*

The course has five full time staff maintaining the course with options to draw on other Council staff by way of back-up when additional work such as ditch clearing and introduction of supplementary drainage is required . All full time greenstaff are either trained or undergoing training at a local greenkeeper training college.

*Agronomic Assessment*

*Greens*

The greens profile comprises an amended top-soil overlying a gravel carpet (10-20mm crushed stone) and drained by a tile pipe system at 5m centres. The turf sward is *Poa annua* dominated with fine leaved *Agrostis* species surviving on the more elevated and drier greens.

Greens have not been constructed with a 'smiler' drain with the result that those which lie at the bottom of slopes are prone to surface flooding. The effects of the flooding are prolonged in that substantial depths of thatch impede the percolation of surface water through the profile. The local authority have commissioned an agronomy consultant to review the options in relation to the rebuilding of the worst affected greens to full USGA specification, and consideration is being given to the re-siting of two of the lower lying greens.

### *Tees*

The course has an average teeing areas of 450m<sup>2</sup> per hole. The tees are constructed using an imported sandy rootzone over a sub-base formed using indigenous material. The size and management regime for tees appears adequate in that no major wear or deterioration problems were evident even toward the end of a busy playing season. Also greenstaff have been innovative in their approach to installation of pathways, standing areas and step arrangements, so that, despite the wet ground and heavy soil conditions, teeing areas have retained good turf cover, and have coped well with wear and player trafficking throughout the season.

### *Fairways*

Fairways and semi-rough are maintained to a high standard despite difficulties in accessing the holes at the highest point of the course during wet conditions. Greenstaff have experimented with a range of gang units and systems for mowing this terrain as wet summers have previously meant periods of reduced access for trailed gangs at a time of peak grass growth. The drainage system for fairways relies heavily on the open ditch system to provide a positive outlet. These open ditches require a sizeable input from staff in terms of maintenance time . However the ditches have proved more effective than piped systems in coping with flash flood water coming off the higher ground on the site as well as providing an aesthetic back-drop to several holes. Also the open ditches offer potential habitat for wildlife particularly on the less intensively mown areas immediately outwith the fairways.

### *Maintenance System*

The course is regularly visited by an agronomy consultant who has compiled a 5 year renovation/development plan for the course (The course is currently in the second year of the plan – a phase involving the review of green reconstruction options referred to above.)

The course carries a comprehensive complement of machinery on-site and can draw on centrally pooled specialist equipment from within the local authority`s Central Parks Management Department when required. Ordering of fertilisers, pesticides and other necessary consumables is at the discretion of the Head Greenkeeper who will consult the agronomist if any deviations from the course management plans are deemed necessary.

### *Summary*

This 18-hole course constructed on heavy soils loses days to play principally as a result of flooded greens. Management are set to address this problem through the re-siting, reconstruction or introduction of additional drainage to problematic greens through implementation of a 5 year development plan drawn up in association with a consultant agronomist. Recent introduction of extensive pathways, hard-standing and steps in and around teeing areas has resulted in retention of good turf cover throughout the season despite a series of relatively wet summers.



*Ongoing Course Maintenance and Capital Spend Required for Period to 2025 (£000)*

| <b>Ongoing maintenance (annual)</b> | <b>Upgrading</b> | <b>Replacement</b> | <b>Total capital</b> |
|-------------------------------------|------------------|--------------------|----------------------|
| 113.5                               | 150.3            | 64.7               | <b>215.0</b>         |

*Phasing of Required Course Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 340.5                      | 98.0                       | <b>438.5</b>             |
| 2006-2010     | 567.5                      | 30.0                       | <b>597.5</b>             |
| 2011-2015     | 567.5                      | 72.0                       | <b>639.5</b>             |
| 2016-2020     | 567.5                      | 0.0                        | <b>567.5</b>             |
| 2021-2025     | 567.5                      | 15.0                       | <b>582.5</b>             |
| <b>Total</b>  | <b>2610.5</b>              | <b>215.0</b>               | <b>2825.5</b>            |

*Clubhouse*

The building (6500 square feet) was constructed around 1975, and is mainly of loadbearing blockwork construction, with elements of a framed structure over the larger elements. The roofs are a mixture of pitched and flat. The pitched elements are finished with concrete tiles. External wall finishes are a mixture of render and stained timber boarding. The building has not been extended, but refurbishment of the social elements has taken place. The intrinsically poor quality of building materials at the time of construction has resulted in the flat roof covering being replaced with a better quality membrane in the recent past.

The windows and external doors and timber cladding are all beginning to show signs of decay and will require total replacement within the mid part of the period.

*Ongoing Clubhouse Maintenance and Capital Spend Required for Period to 2025  
(£000)*

|                            | <b>Ongoing cyclical maintenance</b> | <b>Replacement of worn-out elements</b> | <b>Upgrading facilities</b> | <b>Replacement of facilities</b> | <b>Total capital</b> |
|----------------------------|-------------------------------------|---|-----------------------------|----------------------------------|----------------------|
| Roof                       | 0.05                                |   |                             |                                  |                      |
| External walls             | 0.10                                |   |                             | 18.00                            | <b>18.00</b>         |
| Windows and external doors | 0.10                                |   |                             | 16.00                            | <b>16.00</b>         |
| Internal walls             | 0.15                                |   |                             | 38.00                            | <b>38.00</b>         |
| Floor finishes             | 0.15                                | 21.00                                   | 25.00                       |                                  | <b>46.00</b>         |
| Ceiling finishes           | 0.10                                | 5.00                                    |                             |                                  | <b>5.00</b>          |
| Plumbing and drainage      | 0.15                                | 8.00                                    | 10.00                       |                                  | <b>18.00</b>         |
| Heating                    | 0.40                                |   |                             |                                  |                      |
| Electrical and lifts       |                                     | 3.00                                    |                             |                                  | <b>3.00</b>          |
| Kitchen equipment          | 0.10                                | 6.00                                    |                             | 6.00                             | <b>12.00</b>         |
| Fittings and furnishings   | 0.10                                |   |                             |                                  |                      |
| Bar fittings               | 0.05                                | 10.00                                   |                             |                                  | <b>10.00</b>         |
| Roads and parking          | 0.15                                | 10.00                                   |                             |                                  | <b>10.00</b>         |
| <b>Total</b>               | <b>1.60</b>                         | <b>63.00</b>                            | <b>35.00</b>                | <b>78.00</b>                     | <b>176.00</b>        |

*Phasing of Required Clubhouse Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 4.80                       | 9.00                       | <b>13.80</b>             |
| 2006-2010     | 8.00                       | 50.00                      | <b>58.00</b>             |
| 2011-2015     | 8.00                       | 66.00                      | <b>74.00</b>             |
| 2016-2020     | 8.00                       | 42.00                      | <b>50.00</b>             |
| 2021-2025     | 8.00                       | 9.00                       | <b>17.00</b>             |
| <b>Total</b>  | <b>36.80</b>               | <b>176.00</b>              | <b>212.80</b>            |

**Case Study 3: Class 2 Rural Commercial 27 Hole Course with Clubhouse**

*Golf Course*

*General Observations*

This 27 hole commercially run facility is located in a rural setting within an hour's driving time from the central belt of Scotland. The facility was purpose-designed and built to appeal to a clientele with a range of golfing ability from the beginner through to the low handicap player. The facility comprises an 18-hole parkland course (6454yds) , a short 9 hole course, and a covered driving range all serviced from a centrally located clubhouse facility. The site is largely south facing in aspect and the

course is built on free draining soils which until relatively recently had been intensively farmed.

### *Staffing Levels*

The facility has a full complement of trained greenstaff who are able to combine the duties of routine course care with the additional requirement for tree planting and management of water features consistent with the ongoing development of a new golf facility. The management of the facility do employ the services of a consultant agronomist and are in regular contact with the course architect in relation to any issues or modifications which affect the layout or playability of the course. Greenstaff have recently taken possession of a purpose-built machinery shed for maintenance of equipment, storage and preparation of materials and general staff welfare.

### *Agronomic Assessment*

#### *Greens*

Greens were constructed to a USGA-type profile although the rootzone comprised an amended local top-soil mixed on-site through the construction. The design style of the greens features heavy contouring and tiering on many of the greens with pronounced peripheral mounding which in some cases run onto the putting surface. The turf on the greens comprises *Poa annua* and *Agrostis tenuis* in equal proportions with some residual *Fescue* plants surviving in the greens` periphery.

The main problem identified by greenstaff has been settlement of putting surfaces through the early years post-opening, suggesting a lack of consolidation of rootzone through the construction phase coupled with a degree of rootzone migration into the blinding and drainage carpet layer of the profile. The greenstaff in association with the course architect will seek to address this problem through the introduction of additional rootzone material under the indigenous turf to re-establish design levels. Also the heavy contouring of the greens has resulted in development of 'dry patch' on more prominent areas of the putting surface. Future strategies to combat this problem are likely to include an up-grading of the existing automatic irrigation system to ensure better coverage and extension of the system to facilitate watering of approaches and surrounds.

#### *Tees*

Teeing areas, as with the greens, have shown a degree of settlement post construction. This has given problems to greenstaff in relation to mowing and in the provision of an even irrigation pattern. The problem is being addressed through a regrading programme which is being carried out in-house. The tee areas average 400m<sup>2</sup> per hole and have been designed with ease of management in mind, ie steep banks have been avoided and the surfaces of tees are rounded accommodating mowing using ride-on equipment. The tee areas generally are well able to cope with the wear, and pathways and hard-standing areas have been provided in certain problematic areas.

### *Fairways*

Fairways have developed and filled in well reflecting the use of modern aggressive turf cultivars in the construction of the course and the quality of the indigenous soil on the site. The stone-burying method used to form the fairways appears to have further enhanced the natural free draining properties of this soil, hence the provision of irrigation supply to the approaches is being considered. The overall area of fairways has been considerably reduced from that specified in the original design. This has been achieved though the introduction of a graded rough mowing policy along with the placement of significant numbers of semi-mature tree to supplement the whips planted through the grow-in year prior to opening. This approach has succeeded in creating the ambience of a mature golfing venue in a new-build situation.

### *Maintenance System*

The Course Manager heads up a 5 man full-time team to manage the 27 holes. Casual summer labour is sometimes required for cutting and range maintenance duties at peak season. The Course Manager has overall say in the day to day management of the course and he reports to a management board on a fortnightly basis. The Course Manager has access to a consulting agronomist and the course architect to discuss management policy and structural changes to the course as required.

### *Summary*

The venue has been purpose-designed and maintained to meet the requirements of a clientele with a range of golfing ability. The quality of the site in terms of aspect and soil type has meant that the course has not suffered by closure due to wet weather to the same extent as other courses in the area - indeed it is in extremely dry conditions that this venue tends to encounter difficulties. The course management structure whereby the Course Manager has ultimate say on management issues appears to be an effective and efficient model.

### *Ongoing Course Maintenance and Capital Spend Required for Period to 2025 (£000)*

| <b>Ongoing maintenance (annual)</b> | <b>Upgrading</b> | <b>Replacement</b> | <b>Total capital</b> |
|-------------------------------------|------------------|--------------------|----------------------|
| 204.0                               | 64.0             | 36.0               | <b>100.0</b>         |

### *Phasing of Required Course Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 612.0                      | 15.0                       | <b>627.0</b>             |
| 2006-2010     | 1020.0                     | 25.0                       | <b>1045.0</b>            |
| 2011-2015     | 1020.0                     | 15.0                       | <b>1035.0</b>            |
| 2016-2020     | 1020.0                     | 15.0                       | <b>1035.0</b>            |
| 2021-2025     | 1020.0                     | 30.0                       | <b>1050.0</b>            |
| <b>Total</b>  | <b>4692.0</b>              | <b>100.0</b>               | <b>4792.0</b>            |

### *Clubhouse*

The main building (4000 square feet) was built in the past few years, and is mainly of simple load bearing block work construction. The roof is simple, pitched with a concrete tile finish. The materials are of good quality and none of the external elements will require replacement within the period. The ongoing running costs will also be assisted by the levels of thermal insulation introduced as a result of current practice and the consideration that has been given to passive solar gain. The capital spent on the clubhouse and the immediate surrounds seems to have resulted in trimming the costs in the car parking and external areas. Financial management in the coming years will allow consideration of the costs of on-going maintenance against the capital outlay of a more permanent surface – macadam, paving blocks or the like.

#### *Ongoing Clubhouse Maintenance and Capital Spend Required for Period to 2025 (£000)*

|                            | <b>Ongoing cyclical maintenance</b> | <b>Replacement of worn-out elements</b> | <b>Upgrading facilities</b> | <b>Replacement of facilities</b> | <b>Total capital</b> |
|----------------------------|-------------------------------------|---|-----------------------------|----------------------------------|----------------------|
| Roof                       | 0.20                                |   |                             | 6.00                             | <b>6.00</b>          |
| External walls             | 0.05                                |   |                             | 4.00                             | <b>4.00</b>          |
| Windows and external doors | 0.10                                |   |                             |                                  |                      |
| Internal walls             | 0.05                                |   | 11.00                       |                                  | <b>11.00</b>         |
| Floor finishes             | 0.10                                | 18.50                                   |                             |                                  | <b>18.50</b>         |
| Ceiling finishes           | 0.05                                |   | 5.00                        |                                  | <b>5.00</b>          |
| Plumbing and drainage      | 0.10                                | 4.50                                    |                             |                                  | <b>4.50</b>          |
| Heating                    | 0.25                                | 2.00                                    |                             |                                  | <b>2.00</b>          |
| Electrical and lifts       |                                     |   |                             |                                  |                      |
| Kitchen equipment          | 0.10                                | 6.00                                    |                             |                                  | <b>6.00</b>          |
| Fittings and furnishings   | 0.10                                |   |                             |                                  |                      |
| Bar fittings               | 0.30                                |   |                             |                                  |                      |
| Roads and parking          | 0.15                                | 6.00                                    |                             |                                  | <b>6.00</b>          |
| <b>Total</b>               | <b>1.55</b>                         | <b>37.00</b>                            | <b>16.00</b>                | <b>10.00</b>                     | <b>63.00</b>         |

#### *Phasing of Required Clubhouse Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 4.65                       | 5.00                       | <b>9.65</b>              |
| 2006-2010     | 7.75                       | 13.50                      | <b>21.25</b>             |
| 2011-2015     | 7.75                       | 12.50                      | <b>20.25</b>             |
| 2016-2020     | 7.75                       | 10.00                      | <b>17.75</b>             |
| 2021-2025     | 7.75                       | 22.00                      | <b>29.75</b>             |
| <b>Total</b>  | <b>35.65</b>               | <b>63.00</b>               | <b>98.65</b>             |

## **Case Study 4: Class 3 Links Club 18 Hole Course, Short Course, and Clubhouse**

### *Golf Course*

#### *General Observations*

This facility lies on classic links terrain on the north-east coast of the country. The venue has an 18 hole layout comprising all the classic features to be expected on a course of this type, ie large greens with heavy undulations, relatively narrow fairway set in front of long carries and extensive areas of rough comprising species-rich grassland to the inland aspect and marram grasses on the coastal reaches.

The recently constructed 9-hole course (now used as a six-hole training course with practice facilities) is formed on agricultural land to the west of the 18-hole course. The two courses are separated by a main road.

#### *Staffing Levels*

The greenkeeping team comprises a Head Greenkeeper in charge of four other staff. The grading and contouring of the site dictates the use of pedestrian mowing equipment on many holes, and priority is given to maintenance of the 18-hole course. Indeed, it was pressure on the staff's time which prompted the club's committee to downsize the 9-hole course to a junior six hole course with practice facilities.

#### *Agronomic Assessment*

Greens on the 18-hole course are *Poa annua* dominated. As a result of a range of green construction initiatives within the club, the profiles within the 18-holes vary from classic links through to a soil-based rootzone overlying beach-won gravel. This variation requires a range of green specific management regimes which again has put pressure on the greenstaff in terms of timing of fundamental maintenance activities such as top-dressing, fertilising, and watering.

The club committee, recognising the difficulties which have arisen as a result of this inconsistency of build, intend to rebuild at least two of the greens to a recognised links specification. In this respect the club have already sought the advice of a course agronomist and a golf architect.

The greens on the 9-hole course comprise 5 of traditional links make-up and a further 4 which were constructed to USGA specification. Both these green types on this course have retained high proportions of fine leaf *Agrostis* and *Festuca* species. It is noteworthy in this context that the greens on this course are not mown as closely or as often as the greens on the 18-hole course.

Greens on both courses have been the subject of severe attack from leatherjackets (*Tipula ssp*) over the past three years and greenstaff have reported an increased requirement for pesticide usage generally.

### *Tees*

Tee complexes are relatively small, averaging 200m<sup>2</sup> per hole. There is little opportunity to expand given the compact nature, particularly of the 18-hole course, without the added requirement to realign fairways and carry areas. The greenstaff therefore place great emphasis on members' responsibilities in relation to divot repairs.

### *Fairways*

As would be expected on a links site, fairway drainage is generally good throughout. This site however has two holes which are regularly waterlogged as a result of a high water table. The table rises to above ground level on these fairways in the aftermath of rain or when pumped drainage schemes on adjacent farmland are not functioning. The problem occurs on the opening and closing holes of the 18-hole layout effectively closing the course for medal play. Various drainage schemes have been installed to combat the effect of the rising table, but none of these has been fully effective.

The solution currently being reviewed by the club is to relocate the opening and closing holes within the boundary of the course. This operation will require the eventual relocation of the clubhouse to take account of the new layout. The club are currently commissioning a costing exercise to review the options for change.

The club have also initiated a policy of path construction from tees through carry areas to fairway edge. This work is carried out in an effort both to combat the problem of rising water tables in these areas and to protect the species-rich grassland which is thriving there. The course is on occasion troubled with wind blown coastal erosion whereby large quantities of dune sand are deposited on the course. The club are careful to keep all machinery traffic movements away from the coastal fringe in an effort to ensure the binding and stabilising effect of the turf and *marram* matrix in these areas is not damaged. Future extension of the course into these peripheral areas is unlikely for the same reason.

### *Maintenance System*

The club employ the services of a course agronomist who has worked closely with the Head Greenkeeper in the compilation and implementation of a five year course development plan. The emphasis of this plan in the short term will be to standardise green profile construction on the 18-hole course and to address the problems associated with the high water table. The club do not use the services of an ecological consultant, but the Head Greenkeeper adopts an environmental approach to encouraging the development of species -rich grassland where appropriate.

### *Summary*

This links course is facing the prospect of course realignment as a result of rising water tables in the area. This realignment is likely to require the relocation of the clubhouse. With increasing workload on staff in maintaining the 18-hole links course the club have accepted a reduced level of management on the 9-hole course adjacent, with seemingly no reduction in the amount of players using either course. The club have a 5 year development plan which, in its initial phases, will seek to standardise

the profile of greens on the links course.

*Ongoing Course Maintenance and Capital Spend Required for Period to 2025 (£000)*

| Ongoing maintenance (annual) | Upgrading | Replacement | Total capital |
|------------------------------|-----------|-------------|---------------|
| 131.0                        | 79.0      | 70.0        | <b>149.0</b>  |

*Phasing of Required Course Expenditure for Period to 2025 (£000)*

| Period       | Ongoing maintenance | Capital expenditure | Total expenditure |
|--------------|---------------------|---------------------|-------------------|
| 2003-2005    | 393.0               | 50.0                | <b>443.0</b>      |
| 2006-2010    | 655.0               | 84.0                | <b>739.0</b>      |
| 2011-2015    | 655.0               | 0.0                 | <b>655.0</b>      |
| 2016-2020    | 655.0               | 0.0                 | <b>655.0</b>      |
| 2021-2025    | 655.0               | 15.0                | <b>670.0</b>      |
| <b>Total</b> | <b>3013.0</b>       | <b>149.0</b>        | <b>3162.0</b>     |

*Clubhouse*

The building (7000 square feet) has reached a critical point in its life. Built around the turn of the last century, significant extensions have been added from time to time in response to pressing need, rather than as part of a proper plan. They include an extension to the lounge, an extended locker room and steward's accommodation. The basic structure is simple load bearing brickwork with a rendered finish supporting mainly pitched roof finished in small clay tiles. The added portions of the building are a mixture of a flat roof, a monopitch, and a dual pitch roof, none of which match the original. The lounge bar was refurbished in the 1970s and is looking dated. Although the building is sound, a total, expensive, overhaul will be required shortly. The question of whether to refurbish and perpetuate the mish-mash of buildings or rebuild in a corporate fashion is currently under active consideration.



*Ongoing Clubhouse Maintenance and Capital Spend Required for Period to 2025  
(£000)*

|                            | <b>Ongoing cyclical maintenance</b> | <b>Replacement of worn-out elements</b> | <b>Upgrading facilities</b> | <b>Replacement of facilities</b> | <b>Total capital</b> |
|----------------------------|-------------------------------------|---|-----------------------------|----------------------------------|----------------------|
| Roof                       | 0.30                                |   | 36.00                       | 36.00                            | <b>72.00</b>         |
| External walls             | 0.10                                |   |                             |                                  |                      |
| Windows and external doors | 0.15                                |   |                             | 30.00                            | <b>30.00</b>         |
| Internal walls             | 0.10                                |   | 7.50                        |                                  | <b>7.50</b>          |
| Floor finishes             | 0.05                                | 12.00                                   |                             |                                  | <b>12.00</b>         |
| Ceiling finishes           | 0.05                                |   | 3.75                        |                                  | <b>3.75</b>          |
| Plumbing and drainage      | 0.20                                |   |                             |                                  |                      |
| Heating                    | 0.30                                |   |                             |                                  |                      |
| Electrical and lifts       | 0.25                                |   |                             |                                  |                      |
| Kitchen equipment          | 0.10                                | 9.00                                    |                             |                                  | <b>9.00</b>          |
| Fittings and furnishings   | 0.05                                | 18.00                                   |                             |                                  | <b>18.00</b>         |
| Bar fittings               |                                     | 10.00                                   |                             |                                  | <b>10.00</b>         |
| Roads and parking          |                                     |   |                             |                                  |                      |
| General                    |                                     |   | 330.00                      |                                  | <b>330.00</b>        |
| <b>Total</b>               | <b>1.65</b>                         | <b>49</b>                               | <b>377.25</b>               | <b>66.00</b>                     | <b>492.25</b>        |

*Phasing of Required Clubhouse Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 4.95                       | 395.25                     | <b>400.20</b>            |
| 2006-2010     | 8.25                       | 59.25                      | <b>67.50</b>             |
| 2011-2015     | 8.25                       | 9.25                       | <b>17.50</b>             |
| 2016-2020     | 8.25                       | 16.26                      | <b>24.50</b>             |
| 2021-2025     | 8.25                       | 12.25                      | <b>20.50</b>             |
| <b>Total</b>  | <b>37.95</b>               | <b>492.25</b>              | <b>530.20</b>            |

**Case Study 5: Class 3 West Central Scotland Parkland Club 18 Hole Course and Clubhouse**

*Golf Course*

*General Observations*

This 18-hole parkland course is situated in the West of Scotland on the fringes of the greater Glasgow area. The venue is a members' club and has been established for over 80 years without major remodelling over this period. The course is constructed on heavy soils and lies within a high rainfall area. The site is surrounded by housing and

industrial developments on all boundaries with little options for expansion. The course has a high number of active playing members with little provision in the competition calendar for accommodation of course closure as a result of weather or vandalism.

### *Staffing Levels*

The course is managed by five trained staff headed up by a Course Manager. The Course Manager reports to a Greens Convenor who chairs a greens committee. This committee draws on the expertise of non-committee members within the club on an ad hoc basis when matters affecting the fabric of the course or which could have significant impact on the club's finances are being considered. The club also have a comprehensive recording procedure for all matters relating to routine course management and one-off projects.

### *Agronomic Assessment*

#### *Greens*

Greens construction profile conform to a 'clinker build', ie a clay base formation draining into a tiled pipe system, topped with clinker or ash overlaid with a good quality loam rootzone. Heavy trafficking from players and maintenance machinery coupled with play during waterlogged or semi-waterlogged conditions has seen a decline in the efficacy of this type of build to the extent that many of the greens have become unfit for play and almost impossible to maintain using conventional ride-on machinery. Greens which manage to retain turf cover through the growing season have developed a thatch problem leaving putting surfaces which are extremely slow for play and are unresponsive to maintenance.

The club is considering a reconstruction programme aimed at replacing the worst affected greens with a USGA profile. This procedure has already been carried out for one green site on the course with a degree of success. Apart from the potentially very high cost implications for the club adopting this programme, the club have to consider the problems of importing large quantities of construction materials on-site via a residential area and the transport of these materials across the golf course without a road or hard-standing network.

#### *Tees*

Tees in the main are sited on elevated positions and hence remain reasonably dry and playable despite being formed from indigenous material only. Pathways and hard-standings have been recently introduced to alleviate the effects of trafficking in these areas. The problem of lack of vigorous growth on some tees as a result of shading has been addressed by implementation of a selective pruning policy drawn up for the club by a consultant in this field.

#### *Fairways*

The tile drainage system on fairways is being renewed on an on-going basis. There was evidence of the tile system collapsing on some fairways, and signs that aeration equipment had shattered the system where drain runs came close to the turf surface.

Also the greenstaff have had a recurring problem with ingress of tree roots from new plantations into the drainage system thereby reducing the carrying capacity of the drains.

Also in relation to drainage, the course system relies on a stream running across the course as the main positive outlet. If water levels rise in this outlet the system backs up causing flooding even outwith periods of heavy rainfall. This problem has arisen as a quarry operation above the course also feeds surface run-off into this burn system maintaining levels in this system at artificially high levels for extended periods. The club's committee intend to open dialogue with SEPA with regard to the rights of the club on this matter. No other positive outlets are available to the club due to the residential and commercial developments along the boundary of the course.

### *Vandalism*

As in the case of the municipal courses in the area, the course is regularly targeted by vandals. Damage caused ranges in severity from theft of flag poles through to deliberate attempts to damage trees and to block the course drainage system causing widespread flooding. Little can be done to protect the course outwith playing hours, and the club rely heavily on the vigilance of members living locally to alert staff to potential acts of vandalism.

### *Management System*

The club have excellent lines of communication between staff, committee members and ordinary members. The practice of co-opting ordinary members with particular areas of expertise onto greens committee has proven very beneficial to the club as a whole.

Also the greenstaff have access to a range of consultants advising on agronomy, tree management, habitat creation, and health and safety issues, thereby ensuring management and work practices are in keeping with current trends and legislation.

### *Summary*

This course's infrastructure in term of green construction and drainage is nearing the end of its useful life and the club will require to adopt a comprehensive policy of reconstruction and replacement. This work will have implications both for the club members in relation to the playability of the course through the execution of the renovation, and for local residents in terms of transport of heavy plant and materials through their area onto the course. The club will require to find a lasting solution to maintaining water levels in the main drain outlet through negotiation with neighbouring enterprises and consultations with the appropriate agencies in advance of carrying out major reconstruction works.

### *Ongoing Course Maintenance and Capital Spend Required for Period to 2025 (£000)*

| <b>Ongoing maintenance<br/>(annual)</b> | <b>Upgrading</b> | <b>Replacement</b> | <b>Total capital</b> |
|---|------------------|--------------------|----------------------|
| 131.0                                   | 121.25           | 197.75             | <b>319.0</b>         |

*Phasing of Required Course Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 393.0                      | 105.0                      | <b>498.0</b>             |
| 2006-2010     | 655.0                      | 110.0                      | <b>765.0</b>             |
| 2011-2015     | 655.0                      | 40.0                       | <b>695.0</b>             |
| 2016-2020     | 655.0                      | 0.0                        | <b>655.0</b>             |
| 2021-2025     | 655.0                      | 64.0                       | <b>719.0</b>             |
| <b>Total</b>  | <b>3013.0</b>              | <b>319.0</b>               | <b>3332.0</b>            |

*Clubhouse*

The clubhouse (5000 square feet) consists of a cluster of buildings, the main one of which is two storeys and accommodates the steward on the upper floor. This building is 100 years old with a slate roof, clad in a mixture of render and old red facing brick. The locker rooms occupy a single storey building, that may pre-date the two storey block. The complex has been altered and extended in response to changing needs throughout the development of the club. A single storey, flat roofed section links the two main elements. The building has been well maintained and although some elements will require significant expenditure during the period due to coming to the end of their natural usefulness – the slate roof for example - it is the elements of more recent structures and additions that will require more immediate attention. Windows and external doors have been well maintained. Due to the restricted nature of the site, there is little scope to contemplate re-building and an ongoing progressive programme of maintenance and improvements is envisaged.

*Ongoing Clubhouse Maintenance and Capital Spend Required for Period to 2025  
(£000)*

|                            | <b>Ongoing cyclical maintenance</b> | <b>Replacement of worn-out elements</b> | <b>Upgrading facilities</b> | <b>Replacement of facilities</b> | <b>Total capital</b> |
|----------------------------|-------------------------------------|---|-----------------------------|----------------------------------|----------------------|
| Roof                       | 0.25                                |   | 15.00                       | 20.00                            | <b>35.00</b>         |
| External walls             | 0.15                                |   |                             | 16.00                            | <b>16.00</b>         |
| Windows and external doors | 0.05                                |   | 2.50                        | 5.00                             | <b>7.50</b>          |
| Internal walls             | 0.05                                |   | 9.00                        | 5.00                             | <b>14.00</b>         |
| Floor finishes             | 0.05                                | 34.00                                   |                             |                                  | <b>34.00</b>         |
| Ceiling finishes           | 0.10                                | 6.50                                    | 5.00                        |                                  | <b>11.50</b>         |
| Plumbing and drainage      | 0.50                                | 7.00                                    |                             |                                  | <b>7.00</b>          |
| Heating                    | 0.30                                | 4.00                                    | 5.00                        | 2.00                             | <b>11.00</b>         |
| Electrical and lifts       |                                     | 2.50                                    |                             |                                  | <b>2.50</b>          |
| Kitchen equipment          | 0.25                                | 15.00                                   |                             |                                  | <b>15.00</b>         |
| Fittings and furnishings   | 0.10                                | 13.50                                   |                             |                                  | <b>13.50</b>         |
| Bar fittings               | 0.05                                | 15.00                                   | 22.50                       |                                  | <b>37.50</b>         |
| Roads and parking          | 0.10                                |   |                             |                                  |                      |
| <b>Total</b>               | <b>1.95</b>                         | <b>97.50</b>                            | <b>59.00</b>                | <b>48.00</b>                     | <b>204.50</b>        |

*Phasing of Required Clubhouse Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 5.85                       | 31.00                      | <b>36.85</b>             |
| 2006-2010     | 9.75                       | 35.50                      | <b>45.25</b>             |
| 2011-2015     | 9.75                       | 49.00                      | <b>58.75</b>             |
| 2016-2020     | 9.75                       | 35.50                      | <b>45.25</b>             |
| 2021-2025     | 9.75                       | 53.50                      | <b>63.25</b>             |
| <b>Total</b>  | <b>44.85</b>               | <b>204.50</b>              | <b>249.35</b>            |

**Case Study 6: Class 5B Rural Club 9 Hole Course with Clubhouse**

*Golf Course*

*General Observations*

This rural upper moorland 9-hole venue has been formed largely through the mowing in of indigenous grassland with a modicum of earthworks to create green sites and landing areas. The course is built on light sandy soils which are free draining. Greens and tees are all formed from indigenous material although in the case of the greens a supplementary drainage base has been added at some point in the club's history.

### *Staffing Levels*

This course employs two full-time staff with an occasional requirement for casual summer labour.

### *Agronomic Assessment*

#### *Greens*

Greens retain a good covering of indigenous fine textured grasses. Each green however has a relatively small putting surface (around 200m<sup>2</sup> per green). Wear on the greens therefore is seen as the main course management problem. This problem is further compounded by the fact that several of the greens are heavily contoured or, in the case of one green, stepped. This results in few options being available to greenstaff for changing of pin positions. The greens can be watered via a manual system. However, with only two staff to maintain the course, it has proved difficult to effectively irrigate the greens, with the result that turf cover is often lost during prolonged dry spells.

One green is prone to flooding from storm water coming from the hill land surrounding the course and this green also has a tendency to lie frozen for much of an average winter. The club are considering the remodelling and reconstruction of this green to USGA specifications.

#### *Tees*

Tee area is less than 100m<sup>2</sup> per hole. The nature of the contours on the site and the relatively compact layout of the course does not allow much scope for the future extension of the tees, and the club rely heavily on the use of artificial turf, in order to preserve the natural tees for competitions and peak season usage.

#### *Fairways*

The fairways are all free draining but are narrow in nature and are formed through the mowing in of indigenous grassland. In order to protect these areas from wear and to facilitate movement around the course (given that players have to negotiate several significant climbs and descents through the course of a round), the club have an ongoing programme of path construction. This programme will be the club's main target for capital expenditure over the coming 4-5 year period. This construction work is being carried out by volunteers drawn from the membership.

#### *Management System*

The club operate a conventional management system whereby the Head Greenkeeper reports to a greens convenor who in turn keeps the main committee advised of course management policy. The club does not employ agronomy or wildlife development consultants.

### *Summary*

This club has a requirement to remodel and extend some greens. Opportunities to increase much-needed teeing ground are limited because of the compact nature of the site. The club have an ongoing programme of path installation which will improve safety and reduce wear on the course. This programme will use up much of the clubs capital reserves over the coming 4-5 year period.

#### *Ongoing Course Maintenance and Capital Spend Required for Period to 2025 (£000)*

| <b>Ongoing maintenance (annual)</b> | <b>Upgrading</b> | <b>Replacement</b> | <b>Total capital</b> |
|-------------------------------------|------------------|--------------------|----------------------|
| 29.0                                | 31.15            | 78.85              | <b>110.0</b>         |

#### *Phasing of Required Course Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 87.0                       | 27.0                       | <b>114.0</b>             |
| 2006-2010     | 145.0                      | 22.0                       | <b>167.0</b>             |
| 2011-2015     | 145.0                      | 0.0                        | <b>145.0</b>             |
| 2016-2020     | 145.0                      | 25.0                       | <b>170.0</b>             |
| 2021-2025     | 145.0                      | 36.0                       | <b>181.0</b>             |
| <b>Total</b>  | <b>667.0</b>               | <b>110.0</b>               | <b>777.0</b>             |

### *Clubhouse*

The original building is a small range of stone built buildings with pitched slate roofs and valley gutters, partly occupied by the steward's house. An extension build around 30 years ago of a timber framed 'system' with flat roof and composite cladding almost doubles the size of the accommodation (to 3000 square feet) and houses the lounge facilities. The buildings have not been well maintained and as a consequence fundamental issues of refurbishment require to be addressed in the immediate future.

*Ongoing Clubhouse Maintenance and Capital Spend Required for Period to 2025  
(£000)*

|                            | <b>Ongoing cyclical maintenance</b> | <b>Replacement of worn-out elements</b> | <b>Upgrading facilities</b> | <b>Replacement of facilities</b> | <b>Total capital</b> |
|----------------------------|-------------------------------------|---|-----------------------------|----------------------------------|----------------------|
| Roof                       | 0.15                                |   | 17.50                       | 7.00                             | <b>24.50</b>         |
| External walls             | 0.05                                |   | 5.00                        | 8.00                             | <b>13.00</b>         |
| Windows and external doors | 0.10                                |   |                             | 12.00                            | <b>12.00</b>         |
| Internal walls             | 0.05                                |   | 5.00                        |                                  | <b>5.00</b>          |
| Floor finishes             | 0.05                                | 17.00                                   | 2.00                        |                                  | <b>19.00</b>         |
| Ceiling finishes           | 0.05                                |   | 2.50                        |                                  | <b>2.50</b>          |
| Plumbing and drainage      | 0.10                                | 4.00                                    |                             |                                  | <b>4.00</b>          |
| Heating                    | 0.15                                |   |                             | 8.00                             | <b>8.00</b>          |
| Electrical and lifts       |                                     | 0.50                                    |                             |                                  | <b>0.50</b>          |
| Kitchen equipment          | 0.05                                | 8.00                                    |                             |                                  | <b>8.00</b>          |
| Fittings and furnishings   | 0.05                                | 8.00                                    |                             |                                  | <b>8.00</b>          |
| Bar fittings               | 0.05                                | 6.00                                    |                             |                                  | <b>6.00</b>          |
| Roads and parking          | 0.10                                |   |                             | 10.00                            | <b>10.00</b>         |
| <b>Total</b>               | <b>0.95</b>                         | <b>43.50</b>                            | <b>32.00</b>                | <b>45.00</b>                     | <b>120.50</b>        |

*Phasing of Required Clubhouse Expenditure for Period to 2025 (£000)*

| <b>Period</b> | <b>Ongoing maintenance</b> | <b>Capital expenditure</b> | <b>Total expenditure</b> |
|---------------|----------------------------|----------------------------|--------------------------|
| 2003-2005     | 2.85                       | 31.50                      | <b>34.35</b>             |
| 2006-2010     | 4.75                       | 26.00                      | <b>30.75</b>             |
| 2011-2015     | 4.75                       | 29.00                      | <b>33.75</b>             |
| 2016-2020     | 4.75                       | 13.00                      | <b>17.75</b>             |
| 2021-2025     | 4.75                       | 21.00                      | <b>25.75</b>             |
| <b>Total</b>  | <b>21.85</b>               | <b>120.50</b>              | <b>142.35</b>            |