

Dunfermline Golf Club Pitfirrane

GOLF COURSE MANAGEMENT PLAN

October 2015

SECTION A

INTRODUCTION, PURPOSE AND PRINCIPAL OBJECTIVES

1. Introduction

The following document has been drawn up by members of the Greens Committee of Dunfermline Golf Club and has been formally adopted by the Council of the Club.

The document is split into the following sections...

- Section A – Introduction, Purpose Principal Objectives and Course Background
- Section B – Course Administration
- Section C – Course Maintenance Policies
- Section D – Course Development Programme
- Section E – Environmental Management Plan

2. Purpose

2.1.To specify the responsibilities and procedures for the management of the golf course at Dunfermline Golf Club.

2.2.To outline the key elements to allow the course to be maintained and developed to agreed standards.

2.3.The Course Management Plan having been agreed by the Council and Greenstaff should be strictly followed and supported.

2.4.The Course Management Plan will be reviewed regularly by the Greens Committee and if any modification is required it will be done following consultation and agreement with the Council.

3. Principal Objectives

3.1.To continue to maintain the golf course, in the playing season, to the high standard set in previous years. This will be measured by course walkrounds, feedback, photographic evidence and regular measures such as soil moisture readings, record of thatch control and other agreed measurements.

3.2. To improve drainage throughout the course.

3.3. To implement an ongoing tree management strategy which will maintain develop and manage the existing woodland throughout the course

- 3.4. To promote the finer bent grasses and reduce pesticide, water and fertiliser use by implementing appropriate cultural and mechanical operations.
- 3.5. To manage the course in accordance with the R&A definition of sustainability.

Agreed By: (For Greenstaff)

..... (For Committee)

Date

SECTION B

COURSE ADMINISTRATION POLICY

The Greens Committee will comprise of the...

- Head Greenkeeper
- Green Convenor
- Nominated members of the Council
- Any club members deemed to have experience relevant to this function
- In addition members with specific expertise may be seconded for particular projects

The Greens Committee will meet monthly – in addition meetings may be arranged for the following reasons :

- Shortly after the AGM to review the course maintenance policy for the forthcoming season.
- In August / September to discuss and select projects from the Course Development Plan for the Winter Programme.
- End of January to consider the course maintenance budget and capital equipment requirements. Finance reviews will be undertaken every quarter.

1. The purpose of the Greens Committee is :

1. To review the Course Administration and Maintenance Policy on an annual basis and make recommendations to the Council for change or modification as deemed necessary.
2. To consider and recommend to the Council a 5-year rolling Course Development Plan. The winter work programme will consist of projects outlined in this Plan. This will ensure all Course Development projects completed are within the overall club policy and in the long-term interests of the Club and its members.

3. To analyse machinery upkeep and breakdown costs and monitor viability and make recommendations to the Committee with regard to replacement and purchase of new equipment to meet future needs – based on the machinery asset register.
4. To consider on an annual basis the budget for course upkeep prior to the end of the financial year so that a realistic budget can be set and controlled by the Council.

2. Roles & Responsibilities

2.1. Role of Green Convener

- To liaise - on behalf of the Council - with the Head Greenkeeper on all matters relating to the maintenance of the golf course.
- To oversee the maintenance of the course to ensure that agreed standards are maintained and agreed policy implemented.
- To report to the Council at monthly meetings on matters effecting the course.
- To call meetings of the Greens Committee at specified intervals – usually monthly.
- To meet regularly with the Head Greenkeeper, generally at least once per week, as many meetings to be held on the course as possible, so that current conditions and problems can be viewed and discussed.
- To advise the Match Secretaries (Men and Ladies) and Club Secretary of the existence of such playing or other conditions on the course which require protection by local rule or otherwise.
- To oversee the implementation of the Winter Programme in accordance with the Course Development Plan and any other changes to the course when authorised by the Council.
- To ensure that the policies and guidance in regard to course closure and use of winter greens are consistently applied.
- To advise the Council of the staffing level and the training needs required to maintain standards and implement the Course Administration and Maintenance Policy.

2.2. Role of Head Greenkeeper

- To maintain the course in accordance with Golf Course Maintenance Policy.
- To manage the greenkeeping staff and discharge the duties as defined in the Head Greenkeeper job description.
- To determine the daily work programme and allocate tasks to the green staff accordingly – based on business needs and priorities.
- To ensure that the greenkeeping operation in all respects is carried out in accordance with the Health and Safety Policy of the Club.

- To keep abreast of developments in greenkeeping machinery and processes and input to the formulation of the capital equipment rolling programme as directed by the machinery asset register.
- To liaise with the Green Convenor, as necessary, on all matters affecting the course and any staff disciplinary matters.
- To liaise with the Secretary on administrative matters.
- To maintain records as necessary – such as Health and Safety, COSH machinery service records, training records, course condition measurements and work activity records.

4. Health and Safety

- 4.1. The Club's arrangements to comply with Government legislation are detailed in our Health and Safety Policy and Manual.
- 4.2. The contents of the Manual are binding upon the Council and all the Greenstaff.
- 4.3. The policy and paperwork should be reviewed annually.
- 4.4. The Greenstaff are provided with all necessary personal protective equipment (PPE). It is incumbent upon the staff to wear the equipment for those tasks specified.
- 4.5. Greenstaff must only undertake work for which training has been provided. They must not undertake any work they consider to be unsafe – risk assessments to be undertaken on any activity that may cause concern.
- 4.6. All green staff - when using all equipment and machinery - will be aware of and follow the recommended operating instructions.

5. Capital Equipment Provision

- 5.1. To provide for replacement of capital equipment and equipment upgrading, the Club operates a five-year 'rolling' programme. This is an integral part of the Finance Committee remit and will be directed and informed by Greens Convenor. The Finance Committee will consist of the Club convenors and will meet regularly to review Club budget position.
- 5.2. The Green Convener will be a member of the Finance committee.
- 5.3. Anticipated expenditure - as indicated by the machinery replacement programme – will be set aside each year for the express purpose of funding the purchase of major items of greens equipment as indicated by the machinery replacement programme. In addition any requests for additional equipment will be reviewed by both Greens Committee and then the Finance committee along with other requests for capital spend.

6. Control of Revenue Account Expenditure

- 6.1. The greens expenditure budget shall be set at the start of the financial year taking account of the previous years' spend and any anticipated changes to the spend pattern.
- 6.2. Expenditure shall be monitored on a monthly basis by means of the 'expenditure to budget' control exercised by the Finance Convenor. Variance to budget will be investigated.
- 6.3. The Head Greenkeeper has the authority to purchase consumable items such as sand, seeds and fertilisers and sanction machinery repairs. He is, however, accountable for operating within budget constraints. In this regard close liaison with the Green Convenor is necessary.

7. Record Keeping

7.1. The Head Greenkeeper should maintain a record of...

- All fertilisers, pesticides, fungicides and herbicides applied to the course. The record should contain details of date of application, quantity applied, area treated and personnel carrying out the application. Such records must satisfy all requirements of the relevant Pesticide Legislation.
- Date of placing of order and receipt of major purchases including sand, fertilisers and pesticides.
- Items of machinery sent for overhaul and repair and details of the work carried out. A detailed service and repair record should be maintained for each major item of machinery.
- Staff training carried out internally and externally.
- Any accident or incident affecting the health, safety or well-being of the staff.
- All products such as pesticides bearing a COSH hazard warning sign. Details of quantities stored should be available at the Chemsafe.
- Personal Protection Equipment issued to staff and details of periodic inspection.
- Course measurements such as moisture readings, green speed, firmness of greens and thatch levels.
- All records are to be available for regular checks and these checks will be minuted at Greens meetings.

7.2. It is proposed that a system is put in place to record regular staff activity on the course to inform resource estimates.

8. Training

8.1. Training of staff should be considered as 'on-going' and the Club will assist in any reasonable way in their participation in greenkeeping related courses.

- 8.2. Qualified staff should be encouraged to attend lectures, demonstrations and seminars on greenkeeping matters considered to be of potential benefit to the Club and will be allowed time off work, normally with pay, to do so. Following attendance staff should create a short report on any points that are relevant to the club with recommendations - if appropriate - and to their own personal development plans.
- 8.3. It shall be a condition of employment that apprentices attend 'college' and successfully pass relevant examinations or assessments. Progress will be reviewed on an individual basis and will be assessed by Head Greenkeeper and Greens Convenor.
- 8.4. The Club shall pay all, or part of, the membership subscription of fully qualified staff to BIGGA and will encourage active participation in BIGGA matters.

9. External Consultants

- 9.1. The Club subscribes to the Sports Turf Research Institute and receives a copy of the STRI Turfgrass Bulletin. Advice can be obtained in writing or by telephone.
- 9.2. A decision should be taken on an annual basis in regard to an Advisory Visit by a STRI or any qualified agronomist to provide support and advice to the Head Greenkeeper and his staff
- 9.3. Following the visit of a STRI agronomist and receipt of his report it will be necessary to review Section C of this document to take account of any recommendations made.

10. Communication with Members.

1. Members must be informed of any application of a chemical substance with a hazard to health.
2. Members should be warned in advance of any course maintenance operation that is likely to disrupt play e.g. Verti-draining or hollow coring. This is the responsibility of the Secretary in conjunction with the Green Convener / Head Greenkeeper.
3. The contents of the Winter Programme should be communicated to Club members. Similarly the membership should be made aware of the Course Management Plan and, periodically, the progress on its implementation.
4. The members should be made aware of the Club arrangements to discharge its obligations to Health and Safety legislation and matters that affect them personally.
5. It is also important that members be made aware of the fact that to maintain the course to the desired standard, work may have to be undertaken at times that will cause inconvenience and disruption to play, e.g. aeration and top dressing programmes. However green staff will endeavour to keep disruption to a minimum.
6. All players should give priority to green staff so that daily course preparation can be completed in the shortest possible time. Players are to ensure that it is appropriate for them to play without endangering the green staff and should not play to a green if work is in progress on that green.

7. Green staff will – when working on a green – stand aside when appropriate and signal when they are ready for a ball to be played to that green.

11. Course Development

1. A 5-year rolling programme for Course Development should be drawn up by the Greens Committee and endorsed by the Council.
2. Each year projects outlined in the Course Development programme will be selected and carried out as the Winter Work Programme.
3. The content of the annual Winter Work Programme should be made available to Club members.

12. Competition Days

1. The Head Greenkeeper will be consulted on the collation of the annual fixture list – it is suggested a meeting is held with Gents and Ladies match secretaries, Club Secretary and Head Greenkeeper prior to the publication of the fixture list. It is then the Head Greenkeeper's responsibility to ensure that satisfactory arrangements and preparation are made for all competitions held at the Club.
2. For all competitions in the playing season the greens will be cut on the day of the competition. Otherwise the greens will be cut during the preceding day and 'switched' on the morning of the competition. This decision will be at the discretion of the Head Greenkeeper. For selected competitions such as Opens and Finals the greens will be hand cut.
3. New holes will be cut at the discretion of the Head Greenkeeper - following course inspections.
4. Under normal circumstances it is expected that new holes will be cut for each competition. If there is rain in the early morning of the competition a check should be made for flooding. Any holes under water - or likely to become under water - should be changed to drier ground.
5. The presence of all flagsticks should be checked.
6. All bunkers should be raked.
7. In compliance with the Standard Scratch Score and Handicapping requirements no tee marker should be more than 10 yards in front of the DISTANCE POINT and the total reduction in playing length must not exceed 100 yards.
8. On days of heavy dew 'switching' should be carried out as follows:
 - Green surrounds - to remove tyre marks from greens cutting machinery and disperse residual cuttings and moisture.

13. Use of Pesticides

1. Pests should be controlled as far as possible by cultural and mechanical means.

2. When application of a pesticide is necessary, i.e. incidence is beyond the stated tolerance threshold, spraying must be strictly controlled in compliance with the Pesticide Regulations using approved substances.
3. Spraying must only be done by persons deemed 'competent' under the provisions of the regulations using approved personal protection equipment.
4. Spraying should not be carried out in windy conditions and contamination of watercourses must be strictly avoided in accordance with a 'no spray zone' policy i.e. spraying should not be carried out within 20 feet of a watercourse.
5. A notice must be posted notifying members and visitors of the hazard on each occasion a substance with a health hazard is applied.

14. Closure of the Course

1. The only reason for course closure should be as a result of adverse weather conditions.
2. The Head Greenkeeper and all qualified green staff have full authority for declaring the course closed and for its re-opening. A copy of the policy on course closure and the use of winter greens is attached at **Annex 1**
3. In the absence of an authorised member of staff the decision to close or re-open the course the decision will be taken by the Professional based on guidance/ advice from the green staff. Course closure policy guidance - as detailed at **Annex 1** - is available to members.
4. In the event of closure, notices should be displayed to inform members and should, where possible, indicate the time of the next course inspection. This should be by email and use of the website.
5. A log is kept by the Head Greenkeeper of all course closures and the reasons.

15. Security

1. All relevant security measures must be deployed at the end of each working day – all sheds locked shutters down and secured.
2. The workshop and sheds must be locked when not in use and the shutter doors closed when greenstaff are operating on the course.
3. Keys must not be left in the ignition of any vehicle when unattended.

16. Storage

1. All hazardous chemicals must be stored in the Chemsafe, the contents and quantities of which must be listed and displayed. Only staff with current spraying qualifications – PA1 and PA6 - will have keys to the Chemsafe.
2. Fertilisers should be stored on pallets and kept off the ground in the green sheds in a dry and frost free area.

3. Sands, top dressings and path covering materials should be stored in the compound provided, ensuring that the various materials are kept apart. Where practicable top dressing should be kept as dry as possible.

17. Resources

1. The indicative staffing level to provide a course maintained to the desired standard is six full time staff comprised of the following:
 - Head Greenkeeper.
 - Deputy Head Greenkeeper.
 - Three qualified Greenkeepers.
 - One Apprentice.
 - Part time handyman/groundsman
2. In addition staff will be seasonally employed part time (April – September) to support the permanent staff and will carry out other tasks as required.
3. Regular review of staffing levels will be conducted by the Greens Convenor.

18. Complaints

1. No complaint on any matter relating to the conduct of the staff or condition of the course should be made directly, or by innuendo by members or visitors to any member of the Greenstaff.
2. All complaints and comments should be made to the Secretary or Green Convener.
3. Where appropriate, such complaints shall be requested in writing and brought before the Greens Convenor or Council for their consideration.

SECTION C

GOLF COURSE MAINTENANCE POLICY

The mission statement of course management at Dunfermline Golf Club is...

'To provide the best possible year round playing surfaces in an environmentally friendly manner and within the budget constraints of the Club.'

1. Greens

1.1.Maintenance objectives

- The aim of the maintenance programme is to provide firm, smooth and true greens that remain playable throughout the majority of the year and are economically and

environmentally sustainable. To fulfil this aim, we encourage the finer bent grasses at all times.

1.2.Promoting the finer grasses:

- The Club is committed to encouraging the finer grasses such as bent on the greens and the reduction in the proportion of annual meadow grass. This will reduce the vulnerability of the greens to climate change, stricter pesticide legislation and tighter water use. It will also provide consistent year round golfing surfaces where possible.
- Regular aeration work is required to relieve compaction and reduce organic matter/ thatch. This work is fundamental to the maintenance programme for drainage improvement and root development. The intention is to continue to promote the finer leaved disease tolerant bentgrass and reduce the annual meadowgrass which should provide uniform consistent year round putting surfaces.
- To promote these grasses, the following policy for the management of the greens has been agreed

1.3.Fertiliser and irrigation

- The main aim is to keep productivity as low as possible. This means restricting water and fertiliser inputs to a minimum, i.e. only enough to provide uniform growth.
- Fertiliser is only applied to keep the surfaces uniform - never to provide good colour.
- Unless otherwise advised by our agronomy advisors, fertilisers in general will be nitrogen based with little or no phosphate.
- Fertilisers used will be predominantly organic in nature, e.g. seaweed based. The last fertiliser application should be made no later than mid-September.
- Watering should not be carried out with the intent of producing soft amenable 'targets'. It will only be applied to keep the turf alive.
- To optimise water penetration and provide uniform surfaces, wetting agents will be used.

1.4. Aeration and top dressing

- Regular aeration will be carried out throughout the year by an appropriate method. An outline aeration programme is documented below but the intensity and frequency of work is subject to weather and ground conditions.
 - Frequent slit tining between October and March
 - Weekly rolling/ turf iron during the playing season
 - Monthly/6-weekly solid tining during the playing season
 - Verti-draining in the early autumn and early spring
 - Hollow coring in the autumn - as necessary. The autumn operation should be carried out during strong growing conditions. This means no later than mid-September to aid quicker recovery.

- Top dressing will consist of medium course sand - Regular laboratory analysis will be carried out to monitor its quality.
- The aim is to apply 100 - 120 tonnes of top dressing sand to all 18 greens during the course of the growing season. Regular light dressings should be applied in summer and heavier applications directly after coring operations.
- Graden work will be introduced from 2015 to address issues with organic matter on our greens. We aim over forthcoming years to reduce the percentage of organic matter (thatch) in our greens by 1.5% per year – to eventually achieve a level of organic matter of 6 – 10 mm .
- Top dressing should be applied so the material can be rapidly absorbed into the turf. It should be gently worked into the base of the turf using means to minimise damage to the turf.
- After every coring operation the holes should be filled with fresh top dressing.

1.5.Surface refinement

- To promote the finer grasses it is essential to minimise the disturbance pressure on the turf.
- Mowing will be carried out when required, which during strong growth could be daily - utilising both triplex machines and hand machines
- A sensible height of cut will be applied, at which healthy stress-free turf can be maintained.
- Gentle verticutting will be implemented as required - this should never be aggressive and should be complemented with light grooming and brushing.
- Light top dressing mentioned earlier will provide a smooth and true surface.
- Moisture readings will be undertaken regularly on all greens to update and inform our ongoing programme to reduce organic matter – over the forthcoming years we aim to achieve our moisture level targets during the playing season of between 22% and 28 %. NB At 3 July 2015 the average moisture level is 38%.

1.6.Green speed

- To provide greens of a reasonable speed without imposing undue stress on the finer grasses. The object is to provide greens' readings consistent with a course of similar characteristics – **see Annex 2 for details of STRI guidelines and influencing factors.**

1.7.Hole cutting and changing

- To ensure that holes are not crowned when cut it is mandatory to use either a board or a hole cutter with a flange attachment. The position of holes for competitions is at the discretion of the Head Greenkeeper and all qualified green staff.

- If rain is forecast it would be prudent to cut holes in high spots. This should be borne in mind by staff preparing the course in the morning of competitions.
- Holes should be changed at least twice a week during the playing season.

1.8.The growing environment

- Where vegetation shades greens it is the policy to limit their negative influence by appropriate pruning/removal.

1.9.Overseeding

It is the Club policy to overseed the greens once a year with an appropriate seed mix.

2. Tees

- 2.1.The aim is to provide a firm, level and well-grassed teeing platform on each hole.
- 2.2.To accomplish this objective, the maintenance programme should involve regular aeration, controlled feeding and top dressing.
- 2.3.The mowing height is normally in the range 8-10 mm. Tees shall be mown at least twice a week.
- 2.4.Divot marks should be restored weekly using a mix of sand /seed.
- 2.5.Other than medal tees, the markers should be progressively moved back (or forward) in a planned fashion so that a teeing area once used can be top dressed, seeded and rested.
- 2.6.Full use should be made of those tees affording an alternative route to the hole so as to minimise wear and tear of the walk-off areas. This is particularly important in the winter months.
- 2.7.Permanent distance markers should be maintained such that they are clearly visible.

3. Fairways

- 3.1.The fairway width should not be more than forty yards at par four and five holes.
- 3.2.It is desirable to develop some shape and form to the fairway cutting and so avoid 'straight lines'. Once the desired contouring has been established it is important that the member of staff cutting the fairway preserves the agreed line. The 'agreed line' should be established before the first cut of the season.
- 3.3.The need for fairway weed control should be assessed on an annual basis. Spot or localised treatment is much preferred to an overall application. It is preferable that spraying is carried out at the start of the growing season before weeds flower and seeds form. This should minimise the incidence of weeds the following year.

- 3.4. Likewise the need for worm control should be assessed on an annual basis. It is particularly important that worm casting be controlled in the autumn if necessary - to avoid muddy fairways and weed seed 'beds'.
- 3.5. In periods of wet weather and vigorous growth it may be necessary to disperse grass cuttings to provide presentable playing and aesthetic conditions. Paths to be cut to remote areas to dispose of grass cuttings and all staff to adhere to these arrangements.
- 3.6. Deep aeration will be required on at least an annual basis to improve surface drainage. Scarification and vertidrainage may also be required.
- 3.7. Irrigation application may be required in periods of excessive dry weather. Irrigation should only be applied to keep the turf alive.

4. Bunkers

- 4.1. Bunkers should be raked 5 times weekly during the playing season. Any stones or other debris should be removed. Regular bunker maintenance should also be undertaken on the practice bunker.
- 4.2. A constant monitor should be kept on the level of sand in the bunkers and on their 'playability'. The need for topping up a bunker with sand should be brought to the attention of the Head Greenkeeper by those members of staff maintaining bunkers on a daily basis. The level of sand in bunkers should be on average 100 mm – compacted to 50 mm
- 4.3. When bunkers are 'topped up' the sand should be consolidated to reduce the likelihood of the ball 'plugging'
- 4.4. Approved bunker sand with a controlled particle size from a reputable supply source should be used – medium course irregular shape 0.25 – 1mm lime free.
- 4.5. The design of the bunkers should be in accordance with the character of the course – shaped contoured bunkers for a parkland course.

5. Rough and Semi Rough

- 5.1. The purpose of rough and semi-rough is to punish the wayward shot and so reward the straight hitter. This should be done mindful of the searching for golf balls and impact on the speed of play. It should be the intent to 'reward' the player playing from the fairway.
- 5.2. Semi-rough should therefore be maintained at a height - approx 1 1/25 mm - where there is an expectation that the ball will be found but the next shot will be significantly more difficult than from an equivalent position on the fairway.
- 5.3. For operational reasons rough must be maintained within a 'range'. A satisfactory range has proved to be 2-3"/ 50 – 75mm"
- 5.4. It is vitally important that care be exercised by all green staff when cutting among trees to avoid damage to the tree trunks as any damage inflicted can lead to disease and curtailment of the lifespan of any tree affected.

6. Other areas

- 6.1. The natural vegetation type to the course will be promoted at all times. This should involve any required maintenance as instructed by a qualified ecologist where appropriate.
- 6.2. It is the policy to minimise unnecessary cosmetic mowing to out-of-play areas, as this will save time and fuel. It will also provide a more naturalised look. These areas will be reviewed on a regular basis.

7. Trees

- 7.1. To allow full development of growing trees it is necessary to 'thin out' certain trees particularly in 'plantations'.
- 7.2. Natural regenerating species such as hawthorn require to be rigorously controlled.
- 7.3. Tree management should be considered annually at the setting of the Winter Programme.
- 7.4. Consideration should be given regularly to the replacement of old or dying trees in strategic golfing positions so that the replacement tree(s) can be established before the original requires to be removed.
- 7.5. Care should be exercised when planting in the vicinity of tees or greens to ensure that when the tree or shrub is fully developed it does not create excessive shade or deny the required circulation of air to the tee or green – care must be taken to allow sufficient air and sunlight from the eastern and southern aspects onto the greens and should inform the tree management plan.
- 7.6. Broad-leafed and/or conifer species such as sycamore, chestnut, cherry and Sitka spruce should be avoided. Native species such as birch, oak, Scots Pine and beech are more desirable and should be mandatory for future tree planting.

8. Irrigation System and Water Quality

- 8.1. The prime function of the watering system is to allow survival of the grasses on the greens and surrounds in times of relative drought. It should not be used to provide 'target golf'.
- 8.2. The greens and tees are the only playing surfaces irrigated at Dunfermline Golf Club. This constitutes 5% of the total playing area of the golf course - 134 acres including main course Par 3 and practice area.
- 8.3. It is not advisable to use the system in the cold dry conditions of early spring on cold wet greens – this will inhibit growth.
- 8.4. It is important that the watering system is tested in early spring to ensure that it is in working order for the forthcoming season.

- 8.5. To protect the system, it should be drained to the lowest point in autumn before the onset of frost.
- 8.6. Hand watering should be implemented as necessary to minimise the use of the automatic system – if appropriate.
- 8.7. Water quality is monitored on an annual basis and remedial action taken as appropriate to address any anomalies in PH levels.

9. Winter Golf

- 9.1. Temporary greens should only be used at times of hard frost, thawing conditions or abnormal rainfall – **see Annex 1**
- 9.2. Temporary greens should be prepared on suitable relatively flat areas of the fairway in the month of September/October. They should be progressively cut down and lightly scarified to provide acceptable putting surfaces. The green areas should be white lined to provide positive definition.
- 9.3. Alternative natural turf winter teeing grounds will be used where possible during the winter period - including medal competitions.
- 9.4. The need for fairway protection should be reviewed on an annual basis.
- 9.5. Course closure arrangements and guidance will be displayed on the Club website and at the professional's shop.

10. Traffic management and course protection

- 10.1. As detailed at 9.4 the need and date for fairway protection should be reviewed on an annual basis.
- 10.2. Provision will be made to provide alternative traffic routes for summer and winter play to spread wear evenly where possible.
- 10.3. White lines hoops and ropes shall be used to protect sensitive parts of the course. The Head Greenkeeper and Green Convenor will implement protection measures as they see fit - which may include the restriction of sit on buggies as required.
- 10.4. In order to protect the course it may be necessary to rearrange the order of play of holes or to close certain holes.
- 10.5. It is the responsibility of all golfers to repair their own and others' pitch marks, replace their divots and use divot mix where provided – this applies to the practice ground as well as the main courses.

11. Additional Duties

- The greenstaff are responsible for maintaining the paths and grassed areas surrounding the Clubhouse. The grassed areas should be weed free and grass clippings removed. It is important that these areas are routinely maintained to a high standard as they create the initial impression of the club and course.

- Collections of grass at the shoe cleaning point should be removed on a daily basis.
- The course should be 'toured' on a weekly basis (or more frequently if required) to collect discarded cans and bottles and other debris.
- Bins at tee boxes and around the clubhouse should be regularly emptied - particularly before and after weekend play.

SECTION D

COURSE DEVELOPMENT PLAN

In order to provide continuity regarding Course Development, the following provides a list of projects that have been drawn up for completion over the next 5 years.

The priority projects each year will be decided by the Greens Committee and implemented as part of the annual Winter Programme.

1. Drainage installation/investigation/improvement

- 3rd fairway flooding at bottom of hill LHS – investigate and if necessary replace drains and feed into existing drain across the fairway.
- 7th medal tee area drain off to back of tee – install main and lateral drains.
- 12th fairway 100yards area from the green and bunkers drain over to main drains on the 13th - would require contractor support
- 14th Rough/Fairway LHS @ green – check drainage around area
- 9th Fairway - area around middle bunker
- 6th Fairway – LHS after road to cottage previous flooding problems.
- 6th RHS of fairway at wall and at RHS of green at wall
- 7th Fairway @ dogleg – liable to flooding.
- 17th Men's medal tee – see Tee levelling

2. Tee enlargement/levelling

- 5th medal tee lift re -level new turf (right hand side of tee has subsided)
- 5th normal play tee lift re -level new turf.

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- 9th Gents normal play tee lift and re-level new turf.
- 17th Gent medal tee has been very wet over the last few years, lift turf check sprinkler heads and drainage. Remedy problem rotavate add sand and return

3. Tee construction

None identified currently.

4. Bunker renovation

Annually repair and reshape bunkers - as required - throughout the course. Develop a programme of work which may include a review of current bunkers and recommendations for a future layout.

- Add steps into LHS greenside bunker at 18th or reduce level at front
- 2nd - middle bunker reshape slightly and incorporate roll down turf.
- 6th - 2 green side bunkers reshape and turf in.
- 8th- green side reshape and reduce size to create more path space down the 9th pathway.
- Consider at 9th redesign big bunker on left-hand side – possibly reshape to two bunkers - Require approval from AGM.
- 9th right hand side just before the green reduce height and reshape to try and stop banking burning off
- 12th fairway bunkers reshape and build up.
- 12th green side reshape new drainage that could incorporate with new drainage on 12th fairway.
- 14th reshape and turf both greenside
- 15th greenside reshape and turf.
- 16th two main greenside bunkers reduce size and reshape.

5. Pathway installation/restoration

- 11th path lift rubber matting clean down level path and relay with a pure rye grass turf for harder wearing re-lay the rubber matting.
- 16th lift old astro path and replace with new (same as 12th that was replaced last winter)
- 6th path lift rubber matting investigate sprinkler heads re-lay path with rye turf, rubber mat up to the edge of tee .

6. Tree Management

- Ongoing woodland management – thinning out trees and bushes to improve overall sustainability and where necessary replanting specimen trees as required.
- Thinning down and where necessary clearing away dogwood areas to allow specimen trees to flourish.
- Raise the canopy of trees within woodland areas to improve air and light - specifically:
 - Left hand side 3rd fairway, left hand side 6th fairway and left hand side 7th fairway - Dogwood removal, dead wood removal, lift up canopy and prune branches.
 - Tree at back of 11th green – remove some overhanging branches to reduce weight and the moisture on green and path and extend life of tree if possible.
 - Revisit right hand side 3rd fairway branches and dead wood.
 - 14th right hand side from tee to green tree removal branches etc.
 - 17th and 11th between area Dogwood, trees, branches etc.
 - All trees in play limbed up – regular programme year on year.
 - Tree removal round greenkeeper shed areas and clearance of all rhones.
 - Replanting trees from the 5th rough area (Oaks) to 18th and 10th
 - Planting new trees around the course (20 mature staked)
 - Create a walkway between 13th green and 5th tee to provide an option for an alternative course layout in winter.

7. Green Shed Compound Improvements/Developments

- Hard standing area to be introduced
- Install environmentally compliant wash bay area with a recycle system
- Construct or install additional storage areas
- Consider the construction of a tarmac with road access from main drive to improve access by heavy goods deliveries and to relocate sand bays and fuel area within greenshed compound.
- Review security arrangements at green shed area.

8. Materials and Methods

- 8.1. All materials used in course construction projects should be of high quality and be recommended for golf course construction work.
- 8.2. Tried and tested methods of construction, drainage or irrigation installation should be followed at all times.
- 8.3. All projects should be carried out when ground conditions are suitable and safe.
- 8.4. The relevant Health & Safety guidelines should be followed at all times in accordance with the Club's Health & Safety policy.

9. External advice

9.1 Advice should always be sought from professional external or in house consultants before any project commences to ensure the best quality results are obtained.

SECTION E

ENVIRONMENTAL MANAGEMENT PLAN

The following areas should be included in this section....

- Environmental Management Planning
- Wildlife and Habitat Management
- Landscape and Cultural Heritage
- Waste and Energy Management

Each area is entirely Club specific. Therefore, to provide sufficient detail under each heading requires thorough consultation with an appropriate qualified Golf Course Ecologist.

Ecology

In an area of parkland such as Pitfirrane, with a limited area of natural woodland within the perimeter of the course, it is an important part of the course plan to preserve the natural habitat of birds, animals and flora of the course. The woodlands cannot be left unattended – fallen trees may have to be removed and copses thinned out and invading scrub cut back.

Certain animals and birds – such as rabbits, squirrels moles and magpies - do damage to the course and these have to be managed. When required a Pest Control operative will be contracted on an annual basis.

Trees which affect the course, particularly when overhanging tees and greens and preventing the growth of grass, will be trimmed and reduced as necessary. On some occasions felling may be necessary and this work will be implemented under the direction of the Head Greenkeeper who will always recognise the need for appropriate tree preservation. Professional advice will always be sought when appropriate.

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Tree planting or replanting will take place where and when necessary – again with professional advice as required.

Annex 1

Dunfermline Golf Club – Course Closure/Inspection Policy

WEEKDAYS

While greenkeeping staff are in attendance the decision on course closure/reopening will rest with the Head Greenkeeper. He will advise the Professional and Secretary of the current course condition and, if appropriate, the time of a further inspection and the next course update.

Potential situations which may result in course closure:

- Flooding
- Frost
- Snow
- High winds – safety issues with debris and tree damage
- Fog – safety issues with limited visibility for players and staff

The Professional will immediately advise members by e mail of the current course condition, the time that the next update is expected, and will continue to update members on any changes during the day.

The decision to play on winter greens is never taken lightly and the following factors are always taken into consideration when assessing the conditions:

The use of temporary greens preserves the surfaces of the main greens and provides an acceptable alternative to closing the course and the following criteria and factors will be considered by the green staff when making that decision:

- Frozen plant tissues are easily bruised by golfer's feet and are identified by black footprints
- Bruised and damaged grass is at greater risk of disease attack
- Playing on severely frozen or wet greens may lead to a thinning of grass cover

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- Long term damage can take place when play resumes after a sudden thaw

The purpose and use of winter greens is to protect and maintain the condition of the main greens for the playing season.

WEEKEND

At the weekend the on duty greens staff will make any decisions regarding course closure and re-opening along with the time of planned further inspections and any further action if required. This will be communicated to the Professional before the on duty greens staff leave the course. If the greens staff have recommended a further inspection this will be undertaken by the Professional (or his deputy) as will any decision to open or close the course for the remainder of that day

If the decision has been taken by the weekend on duty greens staff to use winter greens they will decide when, if at all, it will be appropriate to move to main greens. Before leaving the course they will advise the Professional of the greens status and the criteria required for making any changes. This may require a visual inspection of course conditions, later in the day, which will be undertaken by the Professional (or his deputy).

Full greens should not be used before that time. The Professional will keep members updated by e mail, and face to face communication, on the current course condition and the time of planned future inspections along with the likelihood of any changes.

If the course or greens (some or all) are flooded at the weekend when the on duty greens staff arrive they should have regard to the forecast for the morning (is there a likelihood of improvement) and what action they can take to improve the condition of the course to make it playable. This could include clearing affected greens of water and/or changing the hole positions to higher ground. They should also ensure squeegees are available and located in an easily accessible area.

SCHEDULED COMPETITIONS

Greens staff will endeavour to make the course playable, if at all possible, when there is a scheduled competition. At that time they will give an estimated time when the course might be playable. The Match Secretary (or his appointed Deputy) – Gents or Ladies as appropriate - will decide whether the competition is delayed or postponed.

The greens staff in attendance will keep the Professional and Match Secretary advised of the prevailing course conditions when changes to course status are envisaged. The Greens Convenor and Captain are also to be made aware of pending changes. The Professional should continue to update members by email when course condition status is about to change.

The Head Greenkeeper will discuss the weekend weather forecast with the on duty greens staff who will also keep themselves updated on Saturday and Sunday morning as to the current weather conditions for the weekend.

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Annex 2

Speed of Greens

FACTORS INFLUENCING GREENS SPEED

- Weather.
- Firmness and smoothness of surfaces.
- Situation- links, parkland, heathland
- Shaded greens, exposed greens, and elevated greens.
- Type of constructions – USGA greens, links greens, soil push up greens (Pitfirrane)
- Quantity of grass.
- Grass type, fescue, bents, annual meadow grass, etc

MAINTENANCE INFLUENCES ON GREENS SPEED

- Irrigation and feeding.
- Mowing and verticutting
- Heights of cuts
- Top-dressing.
- Rolling.
- Thatch management.

STRI Green Speed Guidelines

Regular Membership Play		Tournament Play
8.5ft	Fast	10.5ft
7.5ft	Medium-Fast	9.5ft
6.5ft	Medium	8.5ft
5.5ft	Medium-Slow	7.5ft
4.5ft	Slow	6.5ft