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Royal Lytham & St Annes

A guide to the environmental management of the links





Introduction

Welcome to the 2012 Open Championship at Royal Lytham & St Annes which, this year, will host its 11th Open. Whilst the golf will be the main attraction for

visitors, we hope you will also take time out to enjoy the landscape in which the game is played, and the wildlife that shares this special tract of land with those vying for the Claret Jug.

What makes the championship course at Royal Lytham so special? At first glance it might seem like any other golf course in an urban environment; surrounded by housing and, one might think, with little apparent wildlife interest. The Lytham site is, however, an excellent example of fixed dune grassland. In effect, it is a relic of how the landscape used to look here before the housing was built and, as such, it protects the wildlife associated with this relatively rare type of ecosystem.

This booklet, the result of collaboration between The R&A, Royal Lytham & St Annes Golf Club and the Sports Turf Research Institute (STRI), provides a guide to the wildlife to be found on a land-bound links and the management practices which actively encourage it. The publication also considers the co-operation between The R&A and statutory agencies in order to prevent damage to habitat and wildlife in the run up to and during The Open Championship.

Positive management and encouragement of wildlife sits well with our philosophy of sustainable development and management of golf courses and our promotion of environmental stewardship for the benefit of all. To learn more, visit our website www.randa.org/thegolfcourse

The R&A is most grateful to England Golf, The Open Patrons (Doosan, HSBC, MasterCard, Mercedes-Benz, Nikon, Ralph Lauren and Rolex) and our Official Supplier, UPS, for their financial contribution towards the production of this publication. I very much hope that it enhances your visit to this year's Open Championship.



Peter Janso

Peter Dawson Chief Executive, The R&A



Golf and sustainability

Sustainable development and management of golf courses is all about preparing quality playing surfaces that support a viable golf business whilst protecting the environment and the concerns of wider society. Golf and nature can live in harmony and you can find out more about the issues related to golf and sustainability on our website

www.randa.org/thegolfcourse

The R&A works closely with many organisations within the game to promote and encourage uptake of the concept of sustainable development and management. The national governing body of the game in England, England Golf, does much to promote sustainability. With R&A funding, England Golf has developed a suite of webbased tools which include the ability for English clubs to generate an environmental policy document and to make use of a carbon calculator to assess their energy consumption. All of this, and more, can be found on their website **www.englandgolf.org/greenergolf**

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and and all

As well as being the official ecologists to the R&A Championship Committee, STRI has provided the technical expertise to service England Golf's environmental programme. STRI also manage and administer "The Golf Environment Awards", which are now in their 15th year.

Whilst the game's governing bodies can promote and encourage the uptake of sustainable practices, it is the responsibility of every golf facility to implement programmes that will bring tangible benefits to the environment. The contribution made by Royal Lytham & St Annes Golf Club towards this goal is the focus of this publication.

Background to Royal Lytham & St Annes

The Open Championship has now been held at Royal Lytham & St Annes Golf Club 11 times since first appearing on the rota in 1926. Although clearly one of the world's premier links golf clubs, Royal Lytham is also of significant historic landscape and environmental importance. It is a course renowned for its 206 well-placed and challenging bunkers and increasingly for the commitment being given to ensuring good environmental stewardship across the whole facility.



Historic significance

Royal Lytham & St Annes Golf Club was founded in 1886 with the present course constructed in 1897. The layout of the course has largely remained faithful to the original which was created by the club's first professional, George Lowe. The only significant changes were made in 1919 when Harry Colt, the pre-eminent course designer of the time, was asked to make recommendations for improvement. Over the next four years he repositioned some of the greens and tees, added numerous bunkers and lengthened the course.

At that time, the site of the championship course contained all the botanical variety which characterised this part of the Lancashire coast. The local flora consisted of over 500 recorded species, including dwarf silky willow, the dewberry, bramble, evening primrose, eyebright, bird's-foot trefoil, sea pink, bog pimpernel, small flowered gentian, centaury, wild mint, thyme, strawberry and heartsease. Many of these plants can still be found on the course and wayward golfers can find their balls nestling in the rough amongst wild orchids or some other delicate bloom.

Sheep grazed on the course from the early 1900s but were removed after the Great War before being reintroduced during the Second World War

to keep the rough down. Today's rough management involves regular monitoring and physical removal of any unwanted regenerating scrub, together with selective cutting and scarification through grassland areas to maintain thin and open surface conditions. As a consequence, the grasslands have remained as fine examples of their kind and support strong semi-natural unimproved fixed dune characteristics.

Evening primrose



Golfing significance

Prior to this year's Championship, Royal Lytham has played host to no less than 10 Open Championships, two Ryder Cups and numerous other major tournaments including the Women's and Seniors Open Championships.

The Lytham Trophy, a notable event on the amateur golf calendar which was first played in 1965, is held every year during the first weekend in May. The club also hosts major tournaments every two to three years, bringing significant numbers of visitors into the town.

Royal Lytham & St Annes is one of the premier links courses in the world not because of its beauty, surrounded as it is by suburban housing and flanked by a railway line, but for its golfing appeal. It is a links that is a long way from the sea, yet close enough for the sea breeze to have an effect on your game. Bernard Darwin, the celebrated golf writer, described Lytham as "a beast of a course". He went on to say that "no one could fail to be impressed by its inherent difficulties". More recently, in 2001, Mark James (the 1999 Ryder Cup Captain for Europe) complimented the course by writing: "It provides the perfect combination of width of fairways, length of rough and pace and quality of greens".

Lytham is the only Open venue to start with a par 3 and although the course may not be the longest, with its 206 bunkers peppering the fairways and surrounding the greens, it is one where careful and accurate play is essential.

Landscape significance

One of the first things to strike visitors to Royal Lytham is its distance from the coast, over a kilometre from the sea as the crow flies. The golf course provides a glimpse of the landscape that would have existed before the expansion of the town. Moreover, it is because of the presence of the golf course that a remnant of the historic landscape has been preserved. The course provides a window into the past and remains important from an archaeological and an historic landscape perspective.

Wildlife conservation at Royal Lytham & St Annes

Lancashire County Council has listed the golf course as a Biological Heritage Site; a non-statutory designation which gives recognition to the nature conservation importance of the site to the region.



What are Biological Heritage Sites?

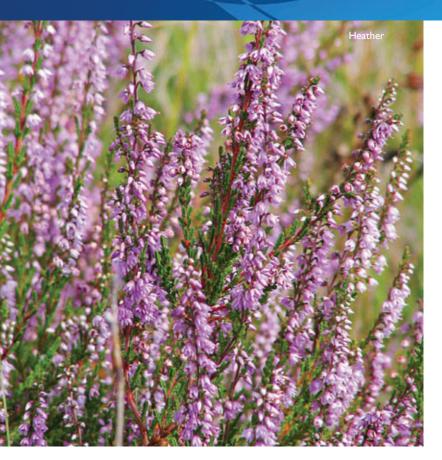
Biological Heritage Sites give recognition to the most important non-statutory wildlife sites in Lancashire. They are considered to be of at least county importance for the habitats, species, geological or geomorphological features they support, such as the fixed dune and associated species-rich grasslands present at Royal Lytham. Many Biological Heritage Sites provide a refuge for rare and threatened plants and animals and are a major part of the wider strategies in place to conserve the biological richness of Lancashire. They cover over 25,000 hectares which represents 8% of the area of the county.

Royal Lytham is a superb example of a fixed dune grassland ecosystem supporting a range of semi-natural acid to calcareous unimproved grassland habitat types. One of the key features here is the dune heath, represented by acid loving grasses and the unmistakable ling or heather. This is a rare habitat which was once much more common, but which has been largely lost or fragmented through built development. The best examples of this habitat type are to be found behind the 6th tee, along the right of the 7th fairway, left of the 10th approach, through the 11th and 12th carries and to the right of the 14th and 15th holes.

Along the left of the 6th and 8th holes are some of the best examples of acid grassland, with smaller areas in carries on 1 and 6. These are all characterised by the dominance of sheep's fescue and mat grass, with harebell commonly seen during late summer.

Heather to the right of the 7th fairway





The rough at Lytham varies from the finer wispy and more playable grasslands running along the edges of the fairways (particularly through the outward holes), to the dense and tussocky grasslands dominating the deeper rough. Such variation in condition allows for both wild flowers and ground-nesting birds to flourish. The coarser and denser grasslands are also a home to smaller rodents which provide an

important food source for birds of prey such as kestrel.

The dunes to the left of the 3rd. 8th and 10th holes. and those on the 9th, are species-rich, supporting both acid and calcareous elements. Dewberry, harebell, rough and autumn hawkbit, common mouse ear. bird's-foot trefoil.





restharrow and yarrow are all quite common. These provide a good environment for butterflies such as the gatekeeper, small copper and common blue. The principal grasses in these areas include sweet vernal-grass, red fescue and marram. Creeping willow is an important component of the lower lying hollows.

The grasslands further offline, though less tidy in appearance, are extremely important with taller plants including mugwort, common thistle, large-flowered evening primrose, bladder campion and yarrow providing an ongoing food source through the spring to late summer for a diverse range of wildlife including seed eating birds such as goldfinch and pollinator insects including bumblebees and butterflies such as gatekeeper and meadow brown. Too often, such areas are cut down on our golf courses but here at Lytham they have been retained and are of great value to wildlife, particularly butterflies. The best examples of the semi-improved neutral grasslands can be found within the large triangle separating the 4th, 5th and 6th holes.

The grasslands at Royal Lytham provide an important haven for ground-nesting birds such as skylark and meadow pipit, which can be seen over many areas of the course and provide a natural soundtrack to golf during the spring and summer.







Skylark

The Skylark is listed as a species with Unfavourable Conservation Status within Europe because of a large historical decline from which it has not recovered. It is also on the Red List of species which have shown a decline of more than 50% in either breeding numbers or breeding range over the last 25 years. Skylarks are very much part of our countryside and culture and have been celebrated for centuries in our nation's music, poetry and art. The sound of the skylark high overhead on a sunny summer's day provides an unforgettable experience. It is testament to the environmental stewardship of many golf courses that they are often strongholds for this increasingly rare species.

Many other species of small bird benefit from the significant areas of gorse and broom, along with scrub and associated trees, which are found across the course. The gorse in particular provides habitat for linnet and yellowhammer, both Red Listed because of their on-going UK decline.

Linnet

Linnet numbers are falling dramatically across the UK and it is now included on the Red List of species of high conservation concern. Losses are due largely to a decline in habitat for nesting and feeding. Increases in the use of pesticides in the wider countryside have also had a serious effect. Golf courses such as Royal Lytham provide important refuges for linnet, with gorse in particular offering them ideal habitat.

Even the formal beech hedge bordering the putting green by the clubhouse provides excellent feeding and nesting habitat for smaller birds such as robin, wren, blackbird, hedge sparrow and chaffinch. Bluebells add colour within the base of the hedge and provide value for pollinating insects, particularly bumblebees.





Benefits for the golfer

It is difficult to quantify how much the bird song and wildlife on a golf course adds to the enjoyment of a golfer's round. One thing, however, is certain – the mere fact that wildlife is a key part of the golfing experience at Royal Lytham does subtly raise the enjoyment of one's game; turning a demanding round into a very enjoyable experience. This feeling of wellbeing brought about by the wildlife and landscape interests of a golf course can be the difference between a good and a great course. Royal Lytham recognises this and is working year-round to create such an ambience to ensure that golfers get a positive golfing experience.

For the environment

The R&A defines environmental stewardship as the preservation, conservation and enhancement of the natural environment through an informed management approach. Golf courses in general are neither inherently good nor inherently bad for the environment. Their impact is a direct result of the location and design of the golf course and the way in which it is developed and managed. Royal Lytham's long history of appropriate management has retained a unique landscape that allows visitors a glimpse of how it would have looked before the expansion of the town. Of special note is the way that course improvements, involving some re-modelling of the landforms in limited areas, have been done in a way that is entirely in sympathy with the natural form of the land, and cannot now be distinguished from those which were not changed. More details of this appear in the ecological management section of this booklet.

The responsibility of custodianship for such an important site requires a clear depth of understanding of the differing interests which exist and the potential or likely impacts that management can have on both habitats and species. Good environmental stewardship is vital to the long-term sustainability of golf in general, particularly as we move into an age of greater recognition and understanding of the environment and of the very positive contribution it can have on our health and wellbeing.

The following pages describe how the presence of the Royal Lytham & St Annes golf course has made a vital contribution to the biodiversity of the local area through good management. They also show how the management of a most prestigious championship course can coexist within a densely populated and heavily urbanised landscape and provide tangible benefits for the local community.

Ecological management

The process of tree ingress into grasslands is referred to as natural succession but one of the unfortunate consequences of tree development on the links is the impact it has on encouraging dense grass growth. Leaf fall leads to nutrient enrichment which promotes the growth of coarser grasses, smothering the indigenous finer grasses as well as any flowering plants within the rough. Management at Royal Lytham is geared to encouraging and regenerating the finer and sparser flower-rich dune grassland which would have been much more common along the coastline in years gone by.

For the past 12 years Royal Lytham has been granted permission by the Forestry Commission to clear-fell areas of white poplar trees within the course and to remove degenerate specimens around its perimeter. These areas have been replanted with gorse and broom which has had a positive ecological impact. One benefit has been an increase in nesting and feeding habitat for small birds including linnet which require a mosaic of habitats from dune grassland (for feeding) and scrub (for nesting). Stonechat is another uncommon bird that can be found nesting within the gorse at Royal Lytham.





The general approach of working to restore an open links landscape has also given rise to a significant increase in groundnesting birds such as skylark and meadow pipit.

Since 2001 Royal Lytham has implemented a progressive ecological management programme to enhance the Biological Heritage Site status of the course. This has not only improved the ecology of the site but has restored the original open character of the links.

Prior to the return of the Open Championship to Lytham in 2012, limited remodelling of some areas of the course has been done to maintain the challenge of the course to the elite golfer. New dune forms have been created along the 2nd, 3rd, 7th and 16th holes, some new bunkers and swales have been introduced, and the 7th green has been repositioned. All the physical re-shaping has worked very well, but is surpassed by the quality of the planting which has been done on these modified landforms, making them indistinguishable from natural environments. The re-modelled areas have been re-planted with marram and other characteristic dune grasses and have rapidly melded with the surrounding areas. This is an outstanding example of how sensitive design, founded on a strong awareness of the natural landscapes and combined with thoughtful selection of species for re-planting, can result in high quality habitats and landforms.





Turf management

Royal Lytham takes in the region of 25,000 rounds each year, providing golfers with good quality surfaces for a full 12 months. This is possible because Royal Lytham is committed to an on-going sward improvement programme to increase the proportion of indigenous links grasses, notably fine-leaved fescues and browntop bentgrass. These species require the least inputs of water, pesticides and fertiliser of all the grasses that could be used on the playing areas of the golf course and are ideally suited to the climatic extremes of wind and drought that are associated with coastal environments. Royal Lytham use sophisticated techniques to assess surface and ground conditions so that inputs can be selectively targeted and not wasted, relying heavily on cultural management practices.

Considerable effort over the last few years has been put into reducing Yorkshire fog levels on the greens by hand scarification which is thinning and controlling this undesirable turfgrass species. Routine verticutting and periodic scarification work also help to refine sward composition.

The greens are now dominated by browntop bent (30-40%) and fescue (30% or more), with annual meadow-grass and Yorkshire fog being the other main components of the sward. Tees tend to support bent with fescue and annual meadow-grass. The fairway sward supports a high fescue composition.

Modern mowing equipment is used to maintain the greens at a general height of around 4 mm, taking this down slightly to 3.5 mm for the Open Championship. Triple mowers are routinely employed for the task of cutting the greens but hand mowing is preferred during the lead up to the more prestigious events.

Fertiliser programme

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A key objective of any fertiliser programme should be to apply the minimum of nutrients to achieve optimum sward health and desirable playing quality. This means applying just enough to produce a quality playing surface and to compensate for the effects of golfer and maintenance traffic. Royal Lytham is a very traditional club and one that has not diverted significantly from the type of fertilisers that were in use when The Open was first staged here. Annual amounts of fertiliser are quite low for such a prestigious and heavily used course. A single application of lawn sand is made during early March to strengthen grass growth before more conventional fertilisers are applied as growth picks up. The fertiliser is an organic powder, spread on a little and often basis with no application exceeding 1.5 grammes per square metre. Later in the growing season as conditions on the west coast become drier, there may be a switch to a liquid form of fertiliser which performs better in summer droughts. The greens annually receive 60 to 70 kg of nitrogen per hectare. The tees may receive 80 to 100 kg/ha. The greens and tees cover no more than 2 hectares in total. The fairways which occupy by far the largest playing area, of approximately 9 hectares, receive no fertiliser inputs.

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Pesticide policy and use

Legislation governing the use of pesticides around the world is moving towards a process of managed reduction and a requirement for justification of use, alongside detailed recording of all applications. This is being adopted at Royal Lytham where there is a policy to use pesticides on a need-only basis which usually entails treatment of specific weeds and particularly bad fairy ring activity on the greens. Local application as and when problems arise reduces the annual loading of these chemicals into the wider environment, minimising the potential pollution risk whilst saving the club money. The greenstaff closely monitor the condition and quality of the course, enabling proactive cultural control of any pests, diseases and weeds.

Water resources

The availability of quality drinking water is the single largest global environmental issue. The golf course operation should not impact negatively on the quality or quantity of water that flows through and out from the course. The R&A

Water use at Royal Lytham is generally low, averaging about 5,000 cubic metres per annum. The water is sourced from an underground aquifer rather than from the mains supply and is delivered using an irrigation system with software which allows water to be applied with precision to provide more receptive areas with enough to keep the turf healthy. Even though Royal Lytham benefits from a fully automated modern irrigation system there is still a vital role for hand watering, which is employed to prevent more drought-prone areas from drying out.

An on-site weather station informs the irrigation programme which aims to offset but not completely replace the daily evapotranspiration losses of the grass plants. This loss may be 4 to 5 mm per night but Lytham recognise that evapotranspiration replacement need only be in the order of 2 to 3 mm to maintain acceptable growing and playing conditions. All irrigation is applied in conjunction with a monthly treatment of wetting agent (on greens and tees only) to help ensure that water penetrates down into the soil profile where it will be available to the grasses. Watering at night helps reduce evaporation losses that would be much higher if water was applied during the heat of the day.

The cost of environmental stewardship

Golf courses are businesses and principles of sound financial management whilst operating efficiently in terms of energy and water use and waste management must be applied if they are to operate sustainably. The R&A

Royal Lytham & St Annes keep good records of water and chemical use and costs, and employ these for regular monitoring of performance. The club is very conscious of the benefits of being able to relate course management activities and costs to the playing quality of the turfgrass surfaces. Economies are achieved through careful use of water, fertilisers and pesticides, the implementation of best practice cultural management practices and making good use of recycled material for construction and maintenance purposes.

Social responsibilities

Golf courses cannot operate independently of the local community and often depend upon it for their very existence. This carries a major responsibility for how the course is managed, especially to prevent any negative impacts on local people and their environment.

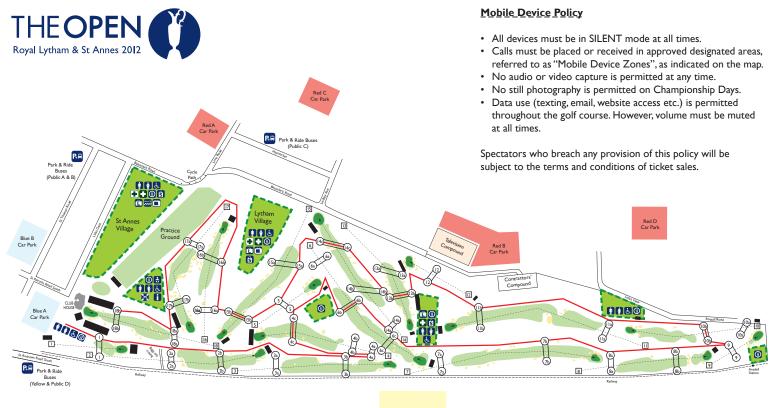
Royal Lytham is an important part of the local community and works hard to ensure that management operations are conducive to the wider environment in which they operate. The club's stewardship in managing the playing surfaces carefully and responsibly ensures minimal use of water through targeted applications, regular monitoring and effective delivery. Such an approach guarantees that water remains available within the catchment area for all its users.

The club is aware of its responsibility to minimise waste and this is achieved through targeted use of materials on the course (timely purchasing and avoiding surplus) which also reduces the disturbance impact of heavy transport on the local roads. Records are kept of all chemical applications which are kept to a minimum.

Large prestigious events are held at Lytham every two to three years which bring substantial income to the local economy, further supported by the annual Lytham Trophy. Visiting golfers often stay in Lytham St Annes, using the range of accommodation available within the area. During larger tournaments the need for accommodation and hospitality grows markedly. At the time of The Open, for example, accommodation requirements may extend as far as Liverpool to the south and beyond Blackpool to the north.

The 2012 Open will attract well over 200,000 visitors during the week of the Championship and provides massive media coverage, advertising Lytham St Annes to audiences around the world.

Royal Lytham & St Annes Course Plan



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ng Facilities 🛛 👶	Mobile Device Zone
	Official Merchandise
la	la Pharmacy
C	Police
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	Spectator Stands
ſ	Toilets

THE RED ROUTE

The 'Red Route' is for the benefit of spectators who may wish to follow a particular Game.

ROYAL LYTHAM & ST ANNES Hole Yards Par Hole Yards Par T Out 3440 34 In Out 3440 Total 7086



Bobby Jones (A) 1926



Bobby Locke



Peter Thomson 1958



Tony Jacklin 1969



Bob Charles



Gary Player

28



Seve Ballesteros 1979 and 1988



Tom Lehman 1996



David Duval 2001



Local Final Qualifying Courses







West Lancashire







Muirfield 18-21 July 2013



Royal Liverpool 17-20 July 2014



St Andrews *16-19 July 2015*







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