

GOLF (governing bodies) AND BIODIVERSITY

The R&A (www.randa.org/)

- The R&A produce a guide to the environmental management for wildlife conservation on the links that is the venue for each year's Open Championship, one of the four major championships in world golf. The R&A has 9 venues it uses for The Open and, since 2000, each has been covered at least once by this publication. The 2010 publication on St Andrews has been forwarded by email and it shows the work being done to conserve the links grassland, heather and gorse to enhance biodiversity. The booklet is supported by Natural England and the English Golf Union when The Open is held in England and by Scottish Natural Heritage and the Scottish Golf Union when it is in Scotland.
- Published a book with the RSPB in 2009, 'Birds and golf courses: a guide to habitat management'. This provides practical guidance on the management of links, heathland, grassland and downland, parkland, woodland, hedgerows and scrub, wetlands and buildings to encourage more birdlife on our courses. It features case studies on 24 courses who are managing proactively in this way and a further 8 studies on those who are communicating their good practice.
- The R&A has a website, www.bestcourseforgolf.org, which is dedicated to best practice and the promotion of sustainability.

English Golf Union (www.englishgolfunion.org/)

- From 2002 to 2009, the EGU heavily subsidised an ecological and environmental advisory service (supplied by STRI) to 220 golf clubs across England. This was supported by Natural England and The R&A. 100 of the 4,000 SSSI sites in England are exclusively or mainly golf courses, they are "special for wildlife because they have been managed as golf courses for 100 years rather than despite being managed as golf courses" (Dr Tom Tew, Chief Scientist, Natural England. The advisory service set clubs targets for habitat enhancement. 75% achieved their targets amounting to:
 - The planting of 19,470 native trees
 - The thinning of 119.9 ha of woodland
 - The removal of 3,858 non-native trees
 - The introduction of 10,127 m of hedgerow
 - The creation of 544 ecopile (dead wood) stacks
 - The erection of 467 bird/owl/bat boxes
 - The conversion of 151.6 ha of fairway or semi-rough to deep rough grassland
 - The introduction of 31 wild flower areas to encourage bumblebees
 - The restoration or creation of 22.05 ha of heather
 - The introduction of 6060 gorse plants
 - The creation of 20 new ponds
 - The improvement of 126 existing ponds
 - The creation of 8,200 m of deeper grassland buffer zones around ponds and ditches
 - The clearance of 2,580 m² of invasive species
 - The creation of 14 compost facilities

All of these facts and figures, together with guidance on habitat management and 7 case studies, are available in an EGU publication, 'The English Golf Environmental Advisory Service'.

- The EGU has developed an online 'carbon calculator', with support from The R&A. Its member clubs can work out their carbon footprint in the clubhouse and on the course. A demonstration area is available if you scroll down the 'Club' drop down and select 'zNemisys' and type in 'nemisys' as the password at

www.englishgolfunion.org/carbon-calc.asp?code=0001000100010036

German Golf Association (www.golf.de/dgv/)

- Operates the 'Golf und Natur' environment programme which was initiated in 2005. It is, essentially, a practical management toolkit for golf courses, which emphasises:
 - Nature and landscape
 - Maintenance and playing quality
 - Health and safety
 - Communication and infrastructure

The programme is currently run in cooperation between the following organisations:

- German Golf Association
- BfN (*Bundesamt für Naturschutz*), The Federal Agency for Nature Conservation
- GVD (*Greenkeeper Verband Deutschland*), German Greenkeepers Association
- GMVD (*Golf Management Verband Deutschland*), Golf Management Association of Germany
- DQS (*Deutsche Gesellschaft zur Zertifizierung von Managementsystemen*), German Society for Certification of Management Systems
- University of Hohenheim provide scientific support

DQS act as professional external auditors to certify the achievement of meeting agreed standards. If a club achieves this, they are presented with a certificate which is valid for 2 years from the date of issue. There are three levels of award; bronze, silver and gold. Across Germany, there are currently 27 clubs which have achieved the bronze award, 18 which have achieved silver and 15 which have achieved gold.

At a recent award ceremony, attended by The R&A, Golf Club Hubbelrath in Düsseldorf was presented with the gold award. It has an excellent record in nature conservation and landscape management, including:

- Comprehensive surveys of flora and fauna have been conducted
- Approximately 30 Red List species
- 60 species of breeding birds
- 3 hectares of land reserved as wild-flower meadow, which is only mown twice a year
- Breeding and nesting grounds for the Kingfisher (*Alcedo atthis*)
- The Red-Listed European Roller or 'Blauracke' (*Coracias garrulous*) which has declining populations across Europe, and which was thought to be almost extinct in the area, has been sighted in the perimeters of the club's land
- Abundant species of butterflies
- Water bodies supporting small fish, amphibians and dragonflies
- Various species of owls and bats
- Orchards supporting rare fruit trees (fruit trees are highly protected in Germany and are the focus of considerable conservation attention)

- A quarterly publication 'Golf Wildlife' is produced by the club and distributed amongst its members to inform them of the latest environmental work being carried out on the golf courses

Scottish Golf Union (www.scottishgolf.org/)

- The SGU set up its subsidiary, the Scottish Golf Environment Group, 15 years ago to provide free advice on environmental management to its member clubs in Scotland. Over 66% of these clubs have now received a site visit. SGEG is supported by Scottish Natural Heritage and The R&A.
- SGEG has produced a number of publications which are available to download from www.sgeg.org.uk/publications.html, including:
 - Management Planning Manual (2000)
 - Nature Conservation for Golf Course Development (2004)
 - Climate Change on Scottish Golf Courses (2004)
 - Waste Management Toolkit (2004)
 - Environmental Issues in Golf Course Construction (2005)
 - Control of pests, weeds and diseases and pesticide use on Scottish Golf Courses (2006)
 - Practical Ways to improve Energy Efficiency in Golf Facilities (2007)
 - Landscape Guidelines for Golf Course Development (2007)
 - SGU Green Event Guidelines (2008)
 - Management Planning Step by Step Guide (2010)
- There are case studies on biodiversity on the SGEG website at www.sgeg.org.uk/publications.html and on the SGU website at www.scottishgolf.org/go/golf-course/nature
- SGEG operates a certification scheme for Scottish golf clubs that recognises a high standard of environmental excellence in key areas of environmental management. Nature (biodiversity) is one of 8 key areas. More information on this scheme can be found at www.sgeg.org.uk/recognition.html

Golf Environment Organization (www.golfenvironment.org/)

- Operate a global certification programme. This includes biodiversity under the heading of 'Landscape & Ecosystem', one of 6 criteria assessed. 17 clubs have achieved certification, which is independently verified by a network of environmental specialists.
- Ljunghusen Golf Club in Sweden (managed by EGA Golf Course Committee member Stig Persson) is a GEO certified course. A presentation on Ljunghusen has been forwarded by email.
- GEO certification is supported by The R&A (with funding), the English Golf Union, Scottish Golf Union and other European national golf federations (Denmark, Italy, Netherlands, Portugal and Sweden). It is also supported by the members of the EGA Golf Course Committee, i.e. the EGA, PGA European Tour, PGAs of Europe, EGCOA, EIGCA, FEGGA and CMAE. It is also recognised by UNEP.
- GEO recently launched sustainable development guidelines for golf, to which The R&A contributed 50% of the funding for their production. The target audiences for the guidelines are developers and regulatory (planning) authorities. They are

available at www.golfenvironment.org/development/sustainable-golf-development/ and they include guidance on the conservation, preservation and restoration of habitat during the design and construction phases.

There are other national federations across Europe running environmental programmes. The following brief summaries outline their work.

French Golf Federation

- The ffg's golf centre, the Golf National, was audited in 2008 by the French National Natural History Museum for biodiversity. This recorded a total of 782 species, 107 different plants (10 rare) and 72 species of bird. This compares very favourably to the arable fields which surround the Golf National. Further audits will take place every 5 years to identify changes and trends. For more information, visit <http://www.ffgolf.org/index.aspx?news=12682>
- In 2010, the ffg extended its 2006 agreement with 3 government departments (Environment, Agriculture, Sport) specifying that golf will reduce applications of water, nitrogen and pesticides by 30% over the next 5 years. Under this agreement, the French Greenkeepers Association will keep a record of every application of pesticide made to amenity turf (not just golf) across the country. For more information, visit www.ffgolf.org/index.aspx?news=14537
- The ffg has publications on 'natural' golf, water and biodiversity. It has created a website, together with AGREF (the French Greenkeepers Association) dedicated to the environment, www.ecoumenegolf.org/

Danish Golf Union

- A voluntary agreement between the DGU and the Danish Government in 2005 requires DGU member clubs to report on their water, pesticide, chemical and energy use, and their waste production, on an annual basis. This information is collated by the DGU and reported to the government.

The voluntary agreement achieved a 37% reduction in the use of pesticides by the end of 2008 (golf courses in Denmark only use 0.06% of pesticides applied in the country). This did not meet the demanding target of restricting Danish golf clubs to an annual 0.1kg active ingredient per hectare application of pesticide and talks between the DGU and the Danish Government to extend the time frame to achieve the target are ongoing.

- The DGU employ an environmental specialist who provides advice and guidance to its member clubs.

Swedish Golf Federation

- The Scandinavian golf federations fund the Scandinavian Turfgrass and Environment Research Foundation (STERF) which is undertaking research on Integrated Pest Management and multi-functional golf facilities. The SGF is the most significant funding partner.

- The SGF employs a team of experts who provide advice and guidance on course management and environmental issues.

Other national federations in Europe with staff dedicated to providing advice on course management and environmental matters:

Italian Golf Federation
Netherlands Golf Federation
Portuguese Golf Federation
Royal Spanish Golf Federation

November 2010