Golf Course 2030
EIGCA Conference 01.05.19
The R&A in 2019

Georgia Hall becomes R&A Ambassador

Women’s British Open champion Georgia Hall will support The R&A’s drive to inspire more women, girls and families into playing golf by becoming its latest ambassador.

www.randa.org
• The Open
• 9 Hole Challenge
• Rules Modernisation
• Distance Insights
• Women’s Golf Charter
• Golf and Health
• OnCourse®
• Golf Course 2030
An industry roadmap addressing challenges from, and taking opportunities presented by, the changing climate, resource constraints and regulation to secure optimal golf course condition and playability for current and future generations.
Why course condition and playability?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions of greens</td>
<td>11.9</td>
</tr>
<tr>
<td>Price of membership/play</td>
<td>11.3</td>
</tr>
<tr>
<td>Design of golf course</td>
<td>10.6</td>
</tr>
<tr>
<td>Condition of fairways</td>
<td>10.6</td>
</tr>
<tr>
<td>Condition of tees</td>
<td>8.7</td>
</tr>
<tr>
<td>Aesthetics of golf course</td>
<td>8.4</td>
</tr>
<tr>
<td>Clubhouse condition/facilities</td>
<td>7.8</td>
</tr>
<tr>
<td>Condition of bunkers</td>
<td>7.5</td>
</tr>
<tr>
<td>General speed of play</td>
<td>7.3</td>
</tr>
<tr>
<td>Clubhouse ambiance</td>
<td>6.3</td>
</tr>
<tr>
<td>Quality of practice facilities</td>
<td>5.8</td>
</tr>
<tr>
<td>Food and beverage service</td>
<td>5.5</td>
</tr>
<tr>
<td>Items available in the golf shop</td>
<td>2.9</td>
</tr>
<tr>
<td>Quality of golf shop merchandising</td>
<td>2.8</td>
</tr>
<tr>
<td>Golf buggy availability</td>
<td>2.1</td>
</tr>
</tbody>
</table>
Why 2030?
Changing climate and weather patterns
Changing climate and weather patterns

Arctic
- Temperature rise much larger than global average
- Decrease in Arctic sea ice coverage
- Decrease in Greenland ice sheet
- Decrease in permafrost areas
- Increasing risk of biodiversity loss
- Intensified shipping and exploitation of oil and gas resources

Coastal zones and regional seas
- Sea-level rise
- Increase in sea surface temperatures
- Increase in ocean acidity
- Northward expansion of fish and plankton species
- Changes in phytoplankton communities
- Increasing risk for fish stocks

North-western Europe
- Increase in winter precipitation
- Increase in river flow
- Northward movement of species
- Decrease in energy demand for heating
- Increasing risk of river and coastal flooding

Mediterranean region
- Temperature rise larger than European average
- Decrease in annual precipitation
- Decrease in annual river flow
- Increasing risk of biodiversity loss
- Increasing risk of desertification
- Increasing water demand for agriculture
- Decrease in crop yields
- Increasing risk of forest fire
- Increase in mortality from heat waves
- Expansion of habitats for southern disease vectors
- Decrease in hydropower potential
- Decrease in summer tourism and potential increase in other seasons

Northern Europe
- Temperature rise much larger than global average
- Decrease in snow, lake and river ice cover
- Increase in river flows
- Northward movement of species
- Increase in crop yields
- Decrease in energy demand for heating
- Increase in hydropower potential
- Increasing damage risk from winter storms
- Increase in summer tourism

Mountain areas
- Temperature rise larger than European average
- Decrease in glacier extent and volume
- Decrease in mountain permafrost areas
- Upward shift of plant and animal species
- High risk of species extinction in Alpine regions
- Increasing risk of soil erosion
- Decrease in ski tourism

Central and eastern Europe
- Increase in warm temperature extremes
- Decrease in summer precipitation
- Increase in water temperature
- Increasing risk of forest fire
- Decrease in economic value of forests
Europe IN FLAMES as huge wildfires rage out of control in Portugal, France and Spain

RAGING wildfires are tearing through south western Europe with large areas of Portugal, France and Spain ablaze.

By SIMON OSBORNE
PUBLISHED: 12:34, Tue, Sep 6, 2016 | UPDATED: 13:26, Tue, Sep 6, 2016

82 die in Europe's worst floods for decades

By ANTHONY FRANCE, COLIN ADAMSON and HUMFREY HUNTER, Evening Standard
Torrential rains across central Europe have led to the worst flooding in decades, claiming the lives of 82 people.

At least 58 died in the Black Sea area at the weekend, where thousands of Russian tourists were caught out by floodwaters that swept cars and tents out to sea.

Europe will soon be hit by deadly 'once-in-a-century' extreme weather every year

Severe wildfires, river floods and windstorms will affect certain areas of the continent every year

Peter Young | @peteryoung | Sunday 24 April 2016 16:55 BST | 1333 comments

Europe hit by one of the worst droughts since 2003

Much of the European continent has been affected by severe drought in June and July 2015, one of the worst since the drought and heat wave of summer of 2003, according to the latest report by the JRC’s European Drought Observatory (EDO). The drought, which particularly affects France, Benelux, Germany, Hungary, the Czech Republic, northern Italy and northern Spain, is caused by a combination of prolonged rain shortages and exceptionally high temperatures.
This map shows the average exposure of water users in each country to water stress, the ratio of total withdrawals to total renewable supply in a given area. A higher percentage means more water users are competing for limited supplies. Source: WRI Aqueduct, Gassert et al. 2013
Regulation
Sustainable use of pesticides

The main purpose of this web-portal is to provide:
- key information on the sustainable use of pesticides and
- links to relevant information contained on official websites in the Member States.

There is a search function to help find the links you are looking for.

Main Actions

More information on main actions.
Bee-harming pesticides banned in Europe

EU member states vote in favour of提议 of a ban on neonicotinoid pesticides.

Have your say: is the EU right to ban pesticides?

A bee collects pollen from a sunflower in Ullenhove, the Netherlands. EU states have voted in favour of a proposal to restrict the use of pesticides linked to serious harm to bees. Photograph: Michael Kooren/Reuters

Europe will enforce the world's first continent-wide ban on widely used insecticides alleged to cause serious harm to bees, after a European commission vote on Monday.
Pesticides

• Green Deal sport and golfcourses
  ❖ Temporary exemption on the ban until 2020
  ❖ Show a very strong reduction in pesticide use (pesticide-free)
  ❖ Excellent proof for any exceptions thereafter, if any (no guarantee)
  ❖ Innovation: identify bottlenecks and find solutions
Scenarios

Business as usual... to worst case.
1. Bring together stakeholder group
2. Identify main issues, agree process and structures
3. Undertake gap analysis to highlight and prioritise guidance, new technologies, adaptation and innovation
4. Formulate Action Plans to plug gaps in knowledge, identify solutions and raise awareness of problems likely to be faced
5. Implement Action Plans and monitor progress using data
6. Communicate and educate
7. Report on progress and success in addressing priorities
8. Overcome challenges
GB&I Timeline

2018

September  Industry stakeholder meeting in Manchester
GB&I Industry stakeholders

The R&A
England Golf
Confederation of Golf in Ireland
Scottish Golf
Wales Golf
BIGGA
GCSAI
GCMA
CMAE
UK Golf Federation
PGA
EIGCA
STRI
RIPTA
GEO Foundation

European Tour
Ladies European Tour
SRUC Elmwood
Myerscough College
Crop Protection Association
Agricultural Engineers Association
Irrigation Consultants
British Society of Plant Breeders
Turfgrass Growers Association
Amenity Forum
University of St Andrews
BASIS
Labosport
FEGGA
GB&I Industry stakeholders

The R&A
England Golf
Confederation of Golf in Ireland
Scottish Golf
Wales Golf
BIGGA
GCSAI
GCMA
CMAE
UK Golf Federation
PGA
EIGCA
STRI
RIPTA
GEO Foundation

European Tour
Ladies European Tour
SRUC Elmwood
Myerscough College
Crop Protection Association
Agricultural Engineers Association
Irrigation Consultants
British Society of Plant Breeders
Turfgrass Growers Association
Amenity Forum
University of St Andrews
BASIS
Labosport
FEGGA
EIGCA representation

• Gareth Williams

• Dr Keith Duff
GB&I Timeline

2018

September Industry stakeholder meeting in Manchester
Agree on Priority Issues (2019-2022)
GB&I Priority issues (2019-2022)

• How do we make Golf Course 2030 relevant and compelling to key audiences, engaging golf facilities and golfers?

• Course condition and playability, with particular emphasis on putting surfaces – measurement, standards, education

• Resources, focusing on:
  o alternatives to synthetic chemical plant protection products
  o labour (recruitment, retention, education, the changing nature of the golf course workplace)
  o sand/aggregate availability

• Water as a limited resource (too little in dry summers) and coping with too much in wet winters

• Coastal change and its impact on golf courses
GB&I Timeline

2018

September  Industry stakeholder meeting in Manchester
          Agree on Priority Issues
October   Working Party appointed
GB&I Working Party

The R&A                                      England Golf
Scottish Golf                                BIGGA
GCSAI                                        GCMA
PGA                                          EIGCA

- Review the initial analyses from stakeholders applying for the Lead role in the production of Action Plans
- Appoint stakeholders to take the Lead role in the production of Action Plans
- Review delivered Action Plans and set goals and targets for implementation
- Produce a ‘Call for proposals’ mechanism
- Consider proposals and produce a priority list of projects deserving support
- Decide if issues have been addressed satisfactorily.
<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>Industry stakeholder meeting</td>
</tr>
<tr>
<td>October</td>
<td>Working Party appointed</td>
</tr>
<tr>
<td></td>
<td>Action Plan applications</td>
</tr>
<tr>
<td>November/December</td>
<td>Action Plans awarded</td>
</tr>
<tr>
<td>December</td>
<td>Action Plan preparation begins</td>
</tr>
</tbody>
</table>
GB&I Action Plans (2019-2022)

- Making Golf Course 2030 relevant  
  GEO Foundation

- Course condition and playability  
  Myerscough College

- Resources  
  SRUC

- Water  
  STRI

- Coastal change  
  The R&A
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>Industry stakeholder meeting</td>
</tr>
<tr>
<td>October</td>
<td>Working Party appointed</td>
</tr>
<tr>
<td></td>
<td>Action Plan applications</td>
</tr>
<tr>
<td>November/</td>
<td>Action Plans awarded</td>
</tr>
<tr>
<td>December</td>
<td>Action Plan preparation begins</td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>Action Plans delivered</td>
</tr>
<tr>
<td>May</td>
<td>Action Plans published</td>
</tr>
<tr>
<td>June</td>
<td>Call for proposals against AP recommendations</td>
</tr>
<tr>
<td>October</td>
<td>Initial projects approved and commence</td>
</tr>
</tbody>
</table>
Communication

• GC2030 Action Plan to be delivered by GEO

• We will keep all industry stakeholders informed as we work through the process

• We will pursue opportunities to promote GC2030 at stakeholder events and through stakeholder publications

• We will enable stakeholders to disseminate Golf Course 2030 resources to relevant groups within their own networks using their owned media channels (websites, social media, etc)

• We will engage with Government and NGOs to raise awareness of the actions golf is undertaking to encourage sustainability and best practice
2019-2020

- Continue the GB&I process
- Learn from the GB&I process
- Engage with selected European countries
- Work through GC2030 for Northern, Central and Southern European regions
Golf Course 2030 on www.RandA.org

Thank You