Montecchia GC (Italy) confirms sustainable approach

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Golf della Montecchia was established near Padua (Italy) by a group of capable local businessmen in 1988 and is now approaching its 25th year of activity. Its Championship course, designed by the Irish architect Tom Macauley (former chairman of British Association of Golf Course Architects), hosted the Challenge Tour in 2001, 2002 and 2013 and the Alps Tour in 2010 and 2012. Throughout the years the course has been changed and improved, whilst nature has played its part in enhancing its floral heritage.
The gentle undulations of the golf course reflect the surrounding landscape of Colli Euganei, while its wetlands and grassland areas provide a perfect habitat for a rich fauna.

The golf course, whose dominant grasses were historically cool-season grasses (*Lolium perenne, Poa pratensis, Poa annua, Agrostis stolonifera*) has always been characterized by an efficient drainage system that makes it possible to play even during heavy rainy seasons.
This represents a strength in winter time, while it has always been a weakness in summertime, which is characterized by high temperatures (up to 35° C) and serious drought.
Inspite of high irrigation volumes, the golf course often experience serious injuries on playing surfaces during the summer (especially on June and July months).
Typically used remedies were plentiful irrigations, pesticide applications and costly overseedings in late summer.

In 2003, aiming for a solution, Golf della Montecchia started a cooperation with Pisa University and Italian Golf Federation Green Section: the primary objective was to identify turfgrass species more suitable to transition climates.
In 2004, an experimental nursery with warm season grasses was opened.
In parallel with this initiative, a Bermudagrass cultivar (Tifway 419) was sodded on a part of the driving range tee ground.

Results showed a good adaptability of this kind of grass, with significant reduction in water and nutrients use compared to cool season grasses and any pesticide requirement.
Bermudagrass also proved to be resistant to the cold winters typical of transition climates, providing good quality turf during the 4 months dormancy period.
The trial results were presented at the '5th World Scientific Congress of Golf' at Phoenix (Arizona) in March 2008, as well as to the 'First European Turfgrass Society Conference' held in Pisa in May 2008.
In 2010 a three years program started in order to switch the 27 hole fairways and tees (9 holes per year) from cool season grasses to Bermudagrass, using Patriot, a cultivar specifically selected in USA for transition zone.

The technique used was innovative (using small plants instead of stolons) and allowed the Bermuda to cover in just 6 weeks.
The decision to switch from cool season grasses to Bermudagrass has achieved the aim of providing better quality playing surfaces, while reducing maintenance inputs.
Fairways and tees maintenance data at the end of the process (growing seasons 2013-2015) shows significant differences compared to the maintenance data related to previous years (2007-2009), with dramatic reductions in terms of water consumption (70% less) and fertilization inputs (80% less) and eliminating the pesticide use.
From an aesthetic as well as a functional point of view, Bermudagrass fairways and tees showed a better quality than the previous cool season turf, with enthusiastic comments from golfers of every level.
The good results obtained by Golf della Montecchia in switching to Bermudagrass demonstrated the great adaptability of this grass in North Italy, where 70% of golf courses are located.
We can claim that Golf della Montecchia, located at 45.24° N latitude, is presently the northern golf course in Europe to have Bermudagrass on its fairways and tees.

This experience can lead the way for other golf courses in the transition zone that are thinking of switching from cool season grasses to Bermudagrass in order to reduce considerably the use of water and chemical products, as already requested by the Plant Protection Products Regulations introduced by the EC
At the moment, reaching the same good results of Montecchia, more than 30 new golf facilities in Italy adopt Bermudagrass and 13 golf courses converted fairways from cool season grasses to Bermudagrass are now ready to face this new situation.

Sum Up
Golf della Montecchia confirmed its commitment and his leading role on environmental issue starting other measures for enhancing its sustainability performances:

- Began a tree management plan together with the Landscape Horticulture Department of the University of Bologna;
- Started the first "Biogolf project Case study" carrying out an organic maintenance program supported by the Greens Section of IGF, the main Italian environmental organisations, GEO and Pisa University;
- Supported a new putting green study in collaboration with Pisa University concerning the adaptability of ultradwarf Bermudagrass Miniverde in Northern Italy;
- Carried out a research with Padua University to identify the best practices to naturalise the out of play areas.