



## REPORT ABOUT THE GREENS SOUTH COURSE

Dear Members Due to the different comments about the current situation with the greens on the South Course, specially holes 13, 14 and 16, We would like to inform you about the reasons ,what measurements have been adopted and how long we expect it will take to see our greens in the conditions that they have been through the year

We want also to inform, that since the first time we have had discussions both within the field Committee, and with subject matter experts, to take the right decision, to deal with the circumstances that have taken place in 2015.

We would like to inform Members that the work schedule and maintenance planning of the Golf of the Real Club de Golf Guadalmina courses, has been that we have been the same that we ha been using for several years successfully, **however weather conditions this year have been exceptional, nevertheless we think that this situation is contained, and not worse.**

**Species affected** This disease affects specially to POA, AGROSTIS AND RYE GRASS Symptoms Normally appears together with other fungus Pythium, Helminthosporium o Rhizoctonia.

Turf became first orange and later brown



**Symptoms** can appear any time of the year but specially in July and August, each individual plant turns into orange / brown and loses density



From above greens seems brown with irregular patches. At the bottom part of the leaf the plant shows a necrotic symptoms, and the black aggregates of the mycelium of the fungus can be seen with an ordinary magnifying glass



**Conditions that promote the appearance of the disease** Cloudy skies hot and humid summers, this disease can also affect turf at early winter or spring specially if they are very humid Necrosis at bottom part of the plant increases if grass suffers very low mowing conditions and to heavy treading or lack of nitrogen fertilization.

**Control by using** The appropriate products, according to the regulations from the Environmental Department, which have been restricted severely for golf courses.

## **FACTORS WHICH HAVE PROMOTED THIS SITUATION RECYCLED WATER**

As you know in Guadalmina used two sources of supply for irrigation, water stored in Las Medranas Lake, which is primarily used for irrigation of the North Course and Pitch & Putt, and recycled water from la E.D.A.R. of Cancelada ( Estepona ) used to irrigate the South Course. This is one of the reasons why the North course Green are not affected, because we use mainly water from Las medranas Lake.

In summer the recycled water was supplied with high doses of sodium chloride (NaCl) dissolved in water, produced by the intrusion of seawater into the main pipe of the integral sewage water system for the Costa del Sol. The use of this water increased a "salinisation" of the soil that block the plant at the roots level. When plants get blocked it does not absorb nutrients and became less healthy in the case of the South Course greens this situation fact has affected the weakest specie,

## **THE POA. POA ANNUA A WEAK PLANT WITH A YEARLY LIFE TIME**

Poa annua is a grass variety , which as its name suggests, has a life cycle for a year. The winter annual life cycle is both the strength and the weakness of this grass, it is a strength because it is a mechanism for survival, POA grass avoids the stress of summer by simply producing seeds and dying. In the summer this grass tends to disappear, especially if weather conditions are not suitable for maintenance, this plant needs plenty of water available at the roots level, a disadvantage of this species includes its shallow root system and provide the required amount of water during the hot months is practically impossible with the rate of "evaporation" caused by warmer temperatures. This specie is not a creeping bentgrass like other plants such as the "Pencross", L93, A4, pennlink ... etc, is NOT a kind of Agrostis stoloniferous, POA does not reproduced by rhizomes and stolons , unlike it comes to individual plants from seeds. This characteristic means that when an area with POA is affected by a disease, neighbouring plants can not come to repair the affected plants, you can see dry patches and areas without grass.

**ANTRACNOSIS A SUMMER FUNGUS DISEASE** In summer with humidity and high temperatures, to prevent a potential fungus disease we have been using since last June recommended products in turf grass management practices by the USGA.

## **SOLUTIONS AND SHORT TERM MEASURES**

**CHANGING THE RECYCLED WATER** First measure was to reduce the use of recycled water adding water from Las Medranas Lake

**CHANGE OF FUNGICIDE PRODUCTS** Change of fungicide products, as recommended we have changed to different to avoid resistance, despite the fact that due to the new regulations about use of chemical product the variety of these products I getting reduced, the disease is currently under control

**RE-TURFING THE MOST SEVERE AFFECTED AREAS** As soon as the temperatures have dropped down and with less players on the course, and after the last tournament arranged on the South course, we will start a re - turfing program to replace the grass in the most affected areas on greens.

**HOLE CORING AND SEEDING** During the week commencing on September 7<sup>th</sup> on our normal maintenance program we will hole core the greens and seed them with L93 which is an *Agrostis stolonifera*, know as a creeping bentgrass, more resistance. In this occasion we will incorporate double doses than normal.

We hope that this information has clarified the situation, and we want you to transmit confidence, that the Maintenance Staff of the Real Club de Golf Guadalmina is trained to monitor and solve these problems.

We regret, especially for those members who are not usually at Guadalmina, whom have had to suffer this circumstances, will nevertheless enjoy your game of golf despite these problems.

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