



BIGGA
ESSAY
COMPETITION

David Gillon, Assistant at Tulliallan GC,
won the Under 25 Category in the BIGGA
Essay Competition with this entry

POA ANNUA FRIEND OR FOE?

Every greenkeeper in the British Isles has come across poa annua at some stage of their career. They all have very different opinions about it and almost all have very different ways of dealing with it ... or maybe even eliminating or controlling it.

I was always led to believe that poa annua was the pest of all fine turf grasses. All through my college years the subject had always arisen in the classroom.

Sometimes it was the tutors revealing their opinions, or simply we greenkeepers expressing our own views between ourselves.

My own views on poa annua vary, as I know that it can be a pest to all we greenkeepers due to the rapid way in which it can take over from some fine turf grasses that don't have the same stubborn and substantial growing pattern that poa annua itself has. I also know that it can be controlled and managed well enough so that it

can perform closely with some species of fine turf grasses.

Due to the climatic conditions in this country poa annua can have a varied look throughout the season. In late springtime it has a lush green colour which can lead to it being mistaken for a species of bent grass. In summer time it will start to flower and seedheads will appear on the golf greens. The obvious effect this can have on the golf greens is made quite clear to we greenkeepers, by the every-day golfers who pay their annual fees and expect absolute perfection. The lovely lush green and smooth putting surfaces of the springtime are now, bumpy and inconsistent and fingers are pointed towards the greenkeepers. The paying customers ie members are wanting to know why in the summer the greens seem to be rolling worse than in the spring.

When autumn and winter approaches the effects of poa annua

change once again, towards the end of the autumn the last of the seedheads disappear and again the greens are smooth, but not for long as the leaves are now the problem. Golfers find leaves equally as difficult to putt over as they do the bumpy seedheads.

We begin to wonder if we can ever please these 365 day a year, SKY TV watching Masters Syndrome golfers, who expect us to deliver perfectly manicured smooth rolling putting surfaces all year round, just like the Augusta venue.

Due to all the global warming we now have longer cutting seasons. This doesn't stop what will happen every winter to the poa annua grass - discoloration.

Yellowing of the grass isn't aesthetically pleasing to the eye and it can lead to more pressure from the golfing members who probably don't know their Lolium Perenne from their Ralph Lauren, but still they decide to voice opinions as to what they would do with this problem grass species in the same situation.

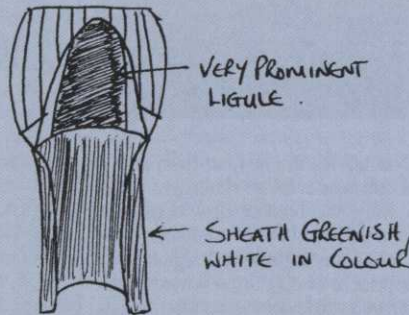
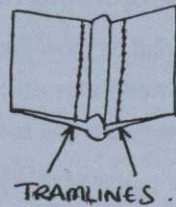
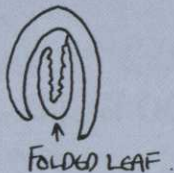
I realise that all of these problems with poa annua (the pest) are very annoying, but I also have some strong feelings towards accepting this type of grass as part of a greenkeeper's every day species that has to be worked with. If managed and worked in the correct way then most of these problems can be controlled.

A good management programme is essential on poa annua to help in keeping the putting surfaces pleasing to everyone.

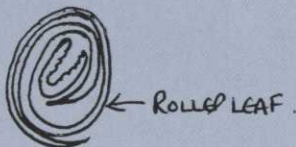
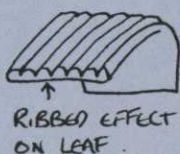
My own plans would consist of a regular aeration programme to relieve any compaction that might influence this type of grass, also a scarifying programme, along with controlled verti-cutting and grooming as this will help reduce the spread of the poa annua and also remove its seedheads along the way. A balanced feeding, top-dressing, brushing, rolling and watering programme is also essential as this helps the poa annua to keep its colour and appearance of fine turf grass species.

If, along with these specified programmes, you over-seed using a good blend of fescue and bent you would find that your amount of poa

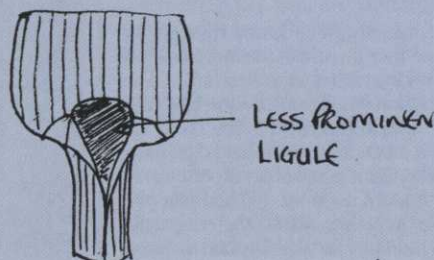
POA ANNUA



AGROSTIS CASTELLANA (HIGHLAND BENT)



LEAF IS DULL ON BOTH SIDES



New mini-loader is the Bobcat
look at the news and the very
the first industry

annua would drop considerably keeping it at a more desirable working rate and also leaving it easier to control. To me if you reduce your poa annua to around 20% of your green sward and remove most of its seedheads then there should be no problem with it matching the quality of some bent grass putting surfaces.

While at Harrogate this year I had some interesting conversations with greenkeepers from Scotland, England and Ireland all of whom had very different views from myself about this supposed problem grass species.

One greenkeeper's view was to cut all of his greens at 2.5mm throughout the cutting season. This was an attempt to burn all of his poa annua out. Fairly straight forward, I thought. But I think that any greenkeepers attempting that idea would be handed their P45s and told where to go.

Another view was to stop artificially watering the putting surfaces. This also pretty straight forward, as you are letting mother nature take its own course.

But what would the paying members say? I personally don't think that they would be very happy, as not only would you have brown putting surfaces scorched by the sun, you would have an extremely expensive irrigation system doing nothing all year round.

One of the greenkeepers believed that he had never come across poa annua on his putting surfaces before, but admitted that he hadn't inspected them closely through a magnifying glass. I informed him that when I was at college I was taught that on some occasions the poa annua grass species can be mistaken for species of bent grass and that it could only be detected close up by the use of a magnifying glass.

I distinctly remembered the drawings that I was shown in college comparing the two grasses and was able to jot them down as best I could and give them to my greenkeeper friend hopefully enabling him to detect any poa annua that he might or might not have on his surfaces.

The drawings on the far left show the differences close up between the two types of grasses and referring to these hopefully will help anyone to determine whether or not poa annua exists on their golf putting surfaces.

The diagrams that I have drawn also show that when not at its flowering stage poa annua can only be identified close up through a magnifying glass, by looking for the forked tips and folded leaf. Poa annua also has a very prominent ligule and a tram lining effect on its leaf. All in all, when studied close enough this grass is actually very different from the agrostis castellana that it can sometimes be compared to.

Other greenkeepers I spoke to at Harrogate, said that poa annua is much too deep rooted and that it can have stoloning effects which can lead to a larger thatch layer.

This may be true but having an article with me explaining the real causes of thatch I was able to rubbish their claims with great backup. Coleman Ward, a professor and turf grass specialist, explained that horizontal stolon root growth will only create a greater sized thatch layer if not managed properly, ie. if you regularly groom, comb, scarify and aerate in a balanced programme this cannot cause thatch in any way. A bad management programme and also improper fertilising and watering on the poa annua grass will most definitely lead to the creating of a thatch layer. This happens due to the poa annua's thick root layer and stem which will trap cellulose and lignin between the grass blades and soil, not allowing the soil microbes any chance of breaking down the thatch layer. So once again everyone is deciding to jump on the bandwagon without having any real knowledge of the effects poa annua has to putting surfaces.

Most greenkeepers will know that poa annua is very susceptible to the turf grass disease anthracnose (*colletotrichum graminicola*), which can also be know basal rot of poa annua. This is often found on poorly managed surfaces in late summer and autumn, especially if the management is tilted towards starving out this grass species. Other influencing factors can be poor growing conditions and severe compaction which will restrict the air supply to the roots of the grass. Poor fertility is also likely to cause this disease that can easily be noticed due to the yellowing of the poa grass leaves. On the younger leaves a red tinge can be seen and if you look closely enough you will notice the black base of the plant, this means the disease is at an advanced stage. This black staining is known as acervulus and appears when the base has rotted and the grass can easily be pulled out of the surface, the acervuli involved in the reproduction of this grass plant.

All of these listed symptoms which lead to this disease can be controlled a variety of cultural control methods and also chemical control methods, so the poa annua will always fight on and on and on.

So should we all forget this aggressive attitude towards this, always under pressure, grass species and start treating it as a regular grass we are going to have to come to terms dealing with. If we manage it in a sensible and controllable manner maybe, just maybe, the stress will be reduced on all us greenkeepers and the poa annua grass might even become our future friend.

I will leave its fate for you to decide!

Four in to one does go.

PHC Flexx™

- Biostimulants
- Chelated Iron
- Micronutrients
- Beneficial Bacteria

All in one easy-to-use package

Damaged turf without treatment



Damaged turf with 3 treatments of Flexx



For higher performing greens just 'Flexx' your dialling finger & call 01799 530146



The PHC turf range are exclusively distributed by Headland Amenity
For more information
Tel: 01799 530146
Fax: 01799 530229
www.headlandgroup.co.uk

