

2nd Operation Pollinator Assessment at St Andrews – Strathtyrum & Eden Courses



St Andrews

Report Date: 27th August 2013

Consultant: Bob Taylor



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Date of Visit: 20th August 2013

Visit Objective: To assess progress following set up of Operation Pollinator areas and to provide comment and further recommendations to guide the club further.

Present: Mr Bob Taylor - STRI

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Introduction

- St Andrews Links Trust led by the Director of Greenkeeping have been extremely pro-active over a number of years with conservation management projects, particularly grassland management projects including various heather and grassland trials including trials with yellow rattle all being conducted at intervals over the courses.
- The St Andrews Links Trust agreed to set up a series of areas to promote conservation grassland for pollinating invertebrates on both the Strathtyrum and Eden Courses. One area was set up in 2011 to the left of the 17th hole two additional areas have been developed through Operation Pollinator in 2012. These include an additional area to the left side of the 17th hole Strathtyrum and the left side of the 12th hole Eden Course. All areas were assessed during this visit with additional recommendations provided. My comments are provided below.

Existing Area left of 17th hole Strathtyrum

- The area left of the 17th is now quite well established supporting wild carrot, birds foot trefoil, ribwort plantain, vipers bugloss, maiden pink, Bush vetch, rough hawkbit, white clover, harebell, restharrow, self-heal, common sorrel with grasses including sweet vernal grass, false-oat grass and upright bent. The majority of the flowers were sown but clearly have established from the underlying seed bank.

Management

- We agreed that the established area could be used as a source of seed for new areas to be developed at intervals over the course possibly to the right or left of the 12th hole (Strathtyrum). With this in mind it would be beneficial to top the sward by 100mm over the course of the next 2 – 3 weeks (whilst ground and climatic conditions remain favourable). This is to be set to one side for no more than 1 day whilst the recipient areas are prepared. Follow up following seed collection by cutting the seed heads back to around 50mm ensuring all brash and arisings are collected.
- No additional work will be required through this area.



Established area of pollinator grassland to the left of the 17th hole – Strathtyrum Course.

Newly Prepared Area Left Side of 17th Hole - Strathtyrum

An area of pollinator habitat has been developed adjacent and east of the existing grassland area. Mechanical work being completed here during October 2012. Seeding was delayed to November 2012.

Principal forbs included yarrow, hares-foot, lesser stitchwort, wild carrot, red clover, white clover, restharrow and yellow rattle. Perennial ryegrass was a dominant grass through a significant section of the grassland.



Establishing area of grassland to the left of the 17th hole - Strathtyrum

Management

We agreed that over the course of the next 2 – 3 weeks management will be required and should involve cutting to 50mm over the entire area. The northern 50% of the grassland should be treated with the chemical Rescue to remove the dominant perennial ryegrass. No application of Rescue is required through the remaining southern section of this grassland. Overseed again through this area of grassland during mid-late September using the recommended seed mix at a rate of 3-5g/m². Mix the seed with sand to ensure even coverage.

Note: one handful of sand is likely to be around 35gms so mixing the small amount of wildflower seed with the requisite number of handfuls of sand to cover the whole area will allow broadcasting by hand at 35gm².

Additional Notes

- Before leaving the areas to the left of the 17th hole (Strathtyrum Course), we discussed the possibility of extending the trial eastwards further in and towards the tree line implementing similar works to those carried out through 2012 i.e. cutting back, the use of Rescue, scarification and overseeding and top dressing. The seed here could be sourced locally i.e. from the more established trial area.

Left of the 12th Hole – Eden Course



Markedly improved grassland following mechanical and chemical works

- A massive improvement was noted to the left of the 12th hole on the Eden Course in terms of grassland condition following the cutting, scarification and Rescue work that was implemented late 2012. This area was extremely dense supporting a high predominance of false oat grass, cocksfoot and perennial ryegrass.
- At the time of this visit white clover, hare's foot, rough hawkbit, yarrow and Bush vetch were all well represented. I understand that a second treatment of Rescue was employed in June 2013 which did prove successful in further checking and reducing sward vigour.



Grassland to the east of the practice ground to the left of the 17th on the Eden Course

Management

- As indicated above, the area of grassland to the left of the 12th hole on the Eden Course/left of the 17th on the Eden Course has improved considerably through the mechanical and chemical work. It may again be necessary to cut back to 50mm over the course of the next three or so weeks. Rescue will need to be re-applied through the back 50% or so i.e. back and towards the gorse. The remaining 50% of the grassland running from the centre to the playing line requires no further treatment.
- Implement a further overseeding treatment through all areas this autumn period.

Going Forward

- Possibility exists given the success of the works to extend the trials to new additional areas through the 13th, 2nd/16th on the Strathtyrum and to the left of the 11th hole and right of the 12th hole on the Strathtyrum Course.



Left of the 12th hole on the Strathtyrum Course

- Some of the areas including left of the 12th hole already support yellow rattle, this species has been introduced by the green staff and is now quite well established. It would here if extending the operation pollinator grassland areas be necessary to first top the sward selectively by 100mm concentrating through the areas of yellow rattle, the aim being to collect the seed for reuse. Lay the seed to one seed on a tarpaulin whilst continuing.
- Having completed the above, cut the sward back to within 25-50mm at ground level and remove all arisings. Brush the sward to reduce any laid growth.
- Leave the area for one week before applying Rescue in accord with the label and manufacturers recommendations, scarifying some 20 days or so thereafter to remove all dead and dying growth.
- The yellow rattle collected at the start of the above work would I feel best be removed and resown into new areas of grassland i.e. not receiving any intensive scarification work or indeed within grasslands already scarified. It will not be possible to store the seed for reuse in these areas given the length of time lapsing between initial cutting and final scarification work.

Summary

Individual pollinator grassland extends to 400m left side of the 17th hole on the Strathtyrum Course (established area). 540m through the newly establishing section (same area) and a total of 1,360m left of the 17th on the Eden Course. Total area therefore of pollinated grassland in 2013 exceeds

2,300m². Additional areas being proposed include a further 650m² between the 12th & 13th holes on the Strathtyrum Course and approximately 1,500m² left of the 12th hole on the Strathtyrum Course.

Work has been very effective undertaken with considerable skill such that all areas now support good favourable invertebrate interest. It will be of benefit to reassess the grassland at St Andrews in 2014 where upon emphasis mid-summer should be given to the actual species of bee and other invertebrates using these areas (dedicated invertebrate survey).

Should any questions arise or should any clarification be required on any aspect of your on-going operation pollinator work then do not hesitate to contact me.

Signed

A handwritten signature in black ink, appearing to read 'R S Taylor', is positioned below the 'Signed' text. The signature is fluid and cursive, with a large loop at the end.

Bob Taylor
Ecology & Environment Manager

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