



Tayside Biodiversity Partnership



SMALL BLUE NEWSLETTER - 2019



Small Blue © Tayside Biodiversity Partnership

The weather was not kind to our Small Blue butterflies in Angus during 2019 - it was quite cold and windy during June, with few sunny days. These conditions make it more difficult to find the butterflies as they spend more time sheltering in surrounding vegetation as opposed to fluttering about when it is warm and sunny. The hot spell in June 2018 may have also scorched some Kidney Vetch plants, producing poor feeding conditions for the caterpillars and thus reducing the number of butterflies emerging in 2019. Records for the various sites are shown in the Appendix (page 11). Our provisional plans for 2020 are shown in Appendix 2 (page 17).

Main achievements for 2019

1. There were Kidney vetch (KV) counts at Seals Cave, Carnoustie Golf Links, Barry Buddon, Elliot Links and Glamis. It is hoped that by monitoring KV populations we can react to any declines by planting or sowing local provenance seeds – thus maintaining the suitability of the sites for Small Blue.
2. We have established a good working relationship with the Barry Buddon ecologist and Landmarc which maintains Barry Buddon. It is important that this traditional stronghold for the Small Blue (SB) is maintained and the environment enhanced where possible. Landmarc has carried out some clearing/seed sowing in areas that have potential to support the SB; further activities are planned for 2020.
3. Well-grown Kidney Vetch plants were planted at Elliot Links and Carnoustie.
4. Transect routes were established at Glamis and Carnoustie.
5. The butterfly was found on the cycle track between Monifieth and Carnoustie: two patches of KV were found on the route. This is possibly an area that could be improved.



Kidney Vetch © Tayside Biodiversity Partnership

6. Scottish Small Blue Week 2019 – this was officially launched in Angus with a guided walk of the Carnoustie, Elliot Links and Seal’s cave sites.
7. In December our project ‘Back from the Brink - Saving our Small Blue’ received the prestigious RSPB Nature of Scotland’s Community Initiative Award. Catherine Lloyd and Kelly Ann Dempsey attended the ceremony and received the Award on behalf of the Small Blue Interest Group. The project was started in early 2012 and is still ongoing such is the urgent need to safeguard Britain’s smallest butterfly.



8. Our project also received the UK Biodiversity Project Award from ALGE (Association of Local Government Ecologists) as part of ALGE’s special Silver Anniversary Awards.

@ Simon Williams

Award photos @ C A G Lloyd



Kidney Vetch Planting

In 2019 KV planting was carried out at Carnoustie and Elliot Links. At Carnoustie the KV population had crashed so it was important to increase the population. By planting in the area adjacent to a Barry Buddon SB colony it was hoped to get an SB colony established in this area.



At Elliot Links it was hoped further KV planting would help the recently found colony there to expand.

In March approximately 100 plants - and some KV seed donated by Scotia Seeds - were put in with help from the Carnoustie Links Golf Club and Woodlands Primary School. The School continues to be the Angus School Species Champion for the Small Blue.

Planting and seed sowing at Carnoustie in the area adjacent to Barry Buddon



Planting and sowing on the sea wall bank at Carnoustie



In September KV plants grown by Carnoustie's Food is Free were planted out at Carnoustie. This time we were trying to create a link between the colony by the Barry Burn and the colony at Barry Buddon. Again the activity was supported by the Carnoustie Golf Links and Woodlands Primary School. Thirty plants and some seed were also planted at Elliot Links in March and more plants were put in during the Angus Coastal Festival in September.



Kidney Vetch planting with Food is Free-grown plants © C A G Lloyd



Creating a new area for Small Blue at Carnoustie

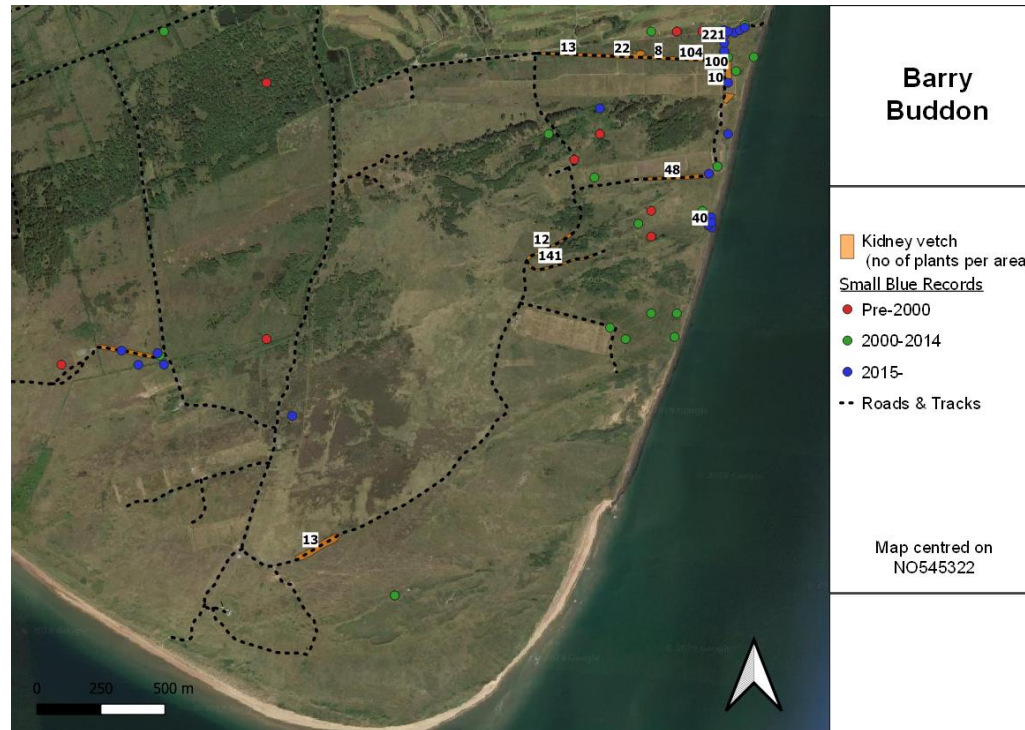
Kidney Vetch Surveys

Plant counts took place at Barry Buddon, Carnoustie, Elliot Links and Seal's Cave on Seaton Cliffs. It is hoped that by monitoring the KV population we can react to any decline by sowing or planting KV. It will also be interesting to see over time what correlation there might be between KV and SB populations.

Barry Buddon

The bulk of the Kidney Vetch is in the north-east corner of the site. Most of it grows on stony tracks or on verges that are regularly cut by the Ministry of Defence. Outwith the mown verges more lush grasses are rampant and have created a habitat where KV cannot compete. The north-east corner has some areas that may have been hard surfaces in the past which have low soil fertility which allows KV to flourish. Parts of the area are also protected from the wind which helps provide shelter - the other key requirement for SBs.

The KV in the south-west area was not counted and there may be other areas of KV within the site.



Elliot Links

The butterfly was only rediscovered here 3 years ago - probably surviving on less than five KV plants. The number of plants is now 100+ but the site is under some threat from vigorous Lyme grass and will need some management intervention in the next few years.

Carnoustie



The Carnoustie site has now been divided into four sections which comprise the newly-established transect route.



Section 1 has been the main area for SBs for the last few years. By planting in Sections 2, 3 and 4 it is hoped the population can spread southwards from Section 1 and northwards from the Barry Buddon colony which is just to the south of Section 4.

Seaton Cliffs Seals Cave

The KV population has declined dramatically at this site over the past few years with plants only remaining at the north end of the track down to the east of the main path. We were planning to plant in this area but a visit in September showed there were over 200 seedlings growing throughout the rest of the site. Possibly the wetter spring/summer of 2019 allowed the dormant seeds to germinate and flourish.

Glamis

Glamis currently holds the largest SB population in Angus. The site has been divided into five sections to allow a transect to be carried out.



Three of the sections - 3, 4 and 5 - are along the old railway track but have differing habitats. Section 5 is partially tree-lined with quite lush grassy banks; Section 3 has lower fertility but has a lot of encroaching Broom (this was flailed by the Estate early in 2019 which will hopefully allow the KV to increase). Section 4 is similar to Section 3 but does not have any Broom. Section 4 has also seen an increase in KV over the last few years. Section 1 is a farm track with some KV growing in the centre of the track. Section 2, an old sand pit, is a haven for SBs with thousands of KV plants, shelter and a range of nectar sources.

Small Blue Walk – 1st June 2019

The weather was not ideal for finding butterflies but a good number of people turned up for the event. There were no SB sightings at Carnoustie but we found Small Coppers and Small tortoiseshell caterpillars. There were several moths to brighten up the morning including Mother Shipton, Sandy Carpet, Cinnabar, Grey Pug and Triangle Plume.



Sandy Carpet © B Prater



From L to R: Triangle Plume © B Prater / Small Copper / Mother Shipton



The visit to Elliot Links also failed to produce any Small Blues. The butterfly is usually late in appearing at this site and at the time of our visit none of the KV was in flower. There were several Small Heath flying around and one dandelion was home to many Cocksfoot moths.

Cocksfoot Moth on a Dandelion © B Prater

Our final site of the of the day came up trumps with 6 SBs found in a sheltered spot near the main path. This is a favourite spot for males to gather. The lenses came out and considerable time was spent by some of the group trying to get the perfect picture!



(L) Small Blue found at Seaton Cliffs ; (R) SB at Seaton Cliffs



*Newsletter Compilation and Editing:
Glyn Edwards, Catherine Lloyd - Feb 2020*

Review of Records 2011-2019

The graphs below show trends for each of the main sites with regard to

Number of recorders - this is the number of people who have sent in records in that year.

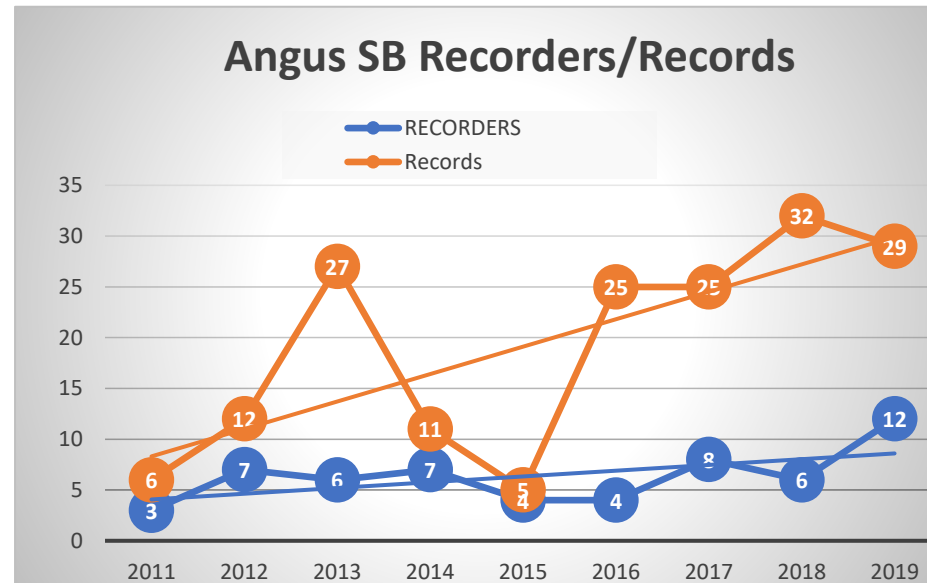
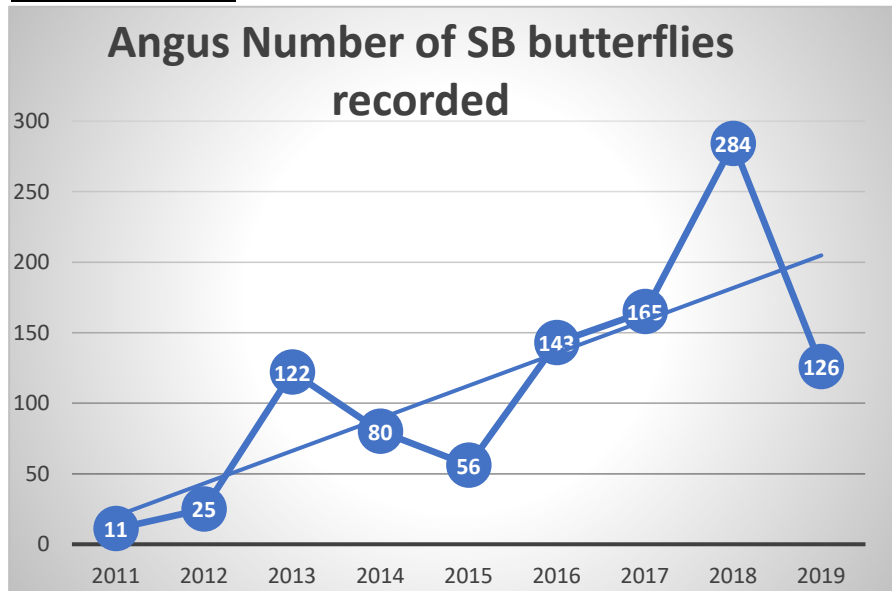
Number of records - this is the number of records received for each year.

Number of butterflies recorded - this is the total number of butterflies recorded at the site, though it is possible that the same butterflies have been recorded on more than one occasion.

Peak number of butterflies - this is the highest number of butterflies seen on any one site visit and represents the minimum number of butterflies present on the site. The actual number present will be somewhere between the peak and the total butterflies recorded.

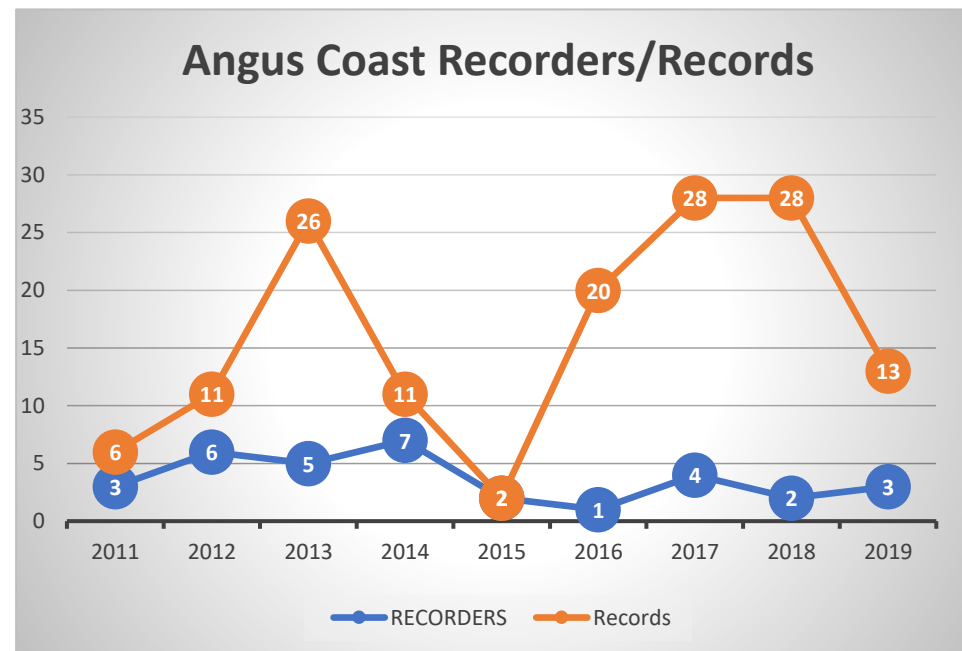
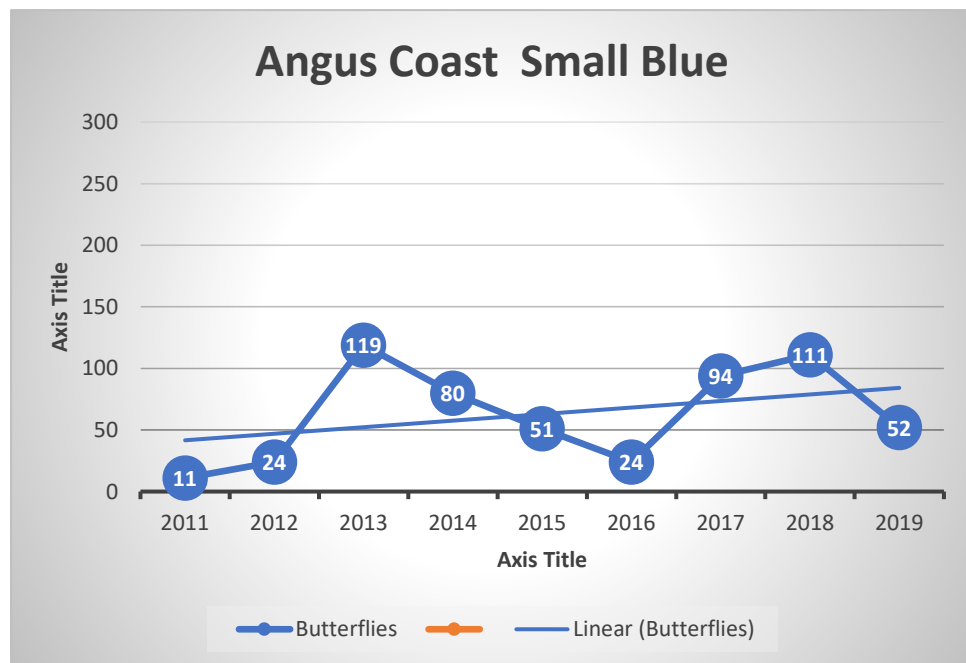
There is no data available regarding site visits on suitable days when no butterflies were seen.

All Angus sites



Overall the number of people submitting records is increasing slightly. This may be because more people are visiting the sites or that regular visitors are now submitting records on iRecord which is easier to use than submitting records via the standard record sheet.

BUT when you take Glamis out of the equation and look at the Coastal sites the number of people sending in records is low and the initial impetus of the project seems to have been lost over the past four years. Not enough survey work is being carried out and without this it is impossible to get an accurate status of SB on the coastal sites.



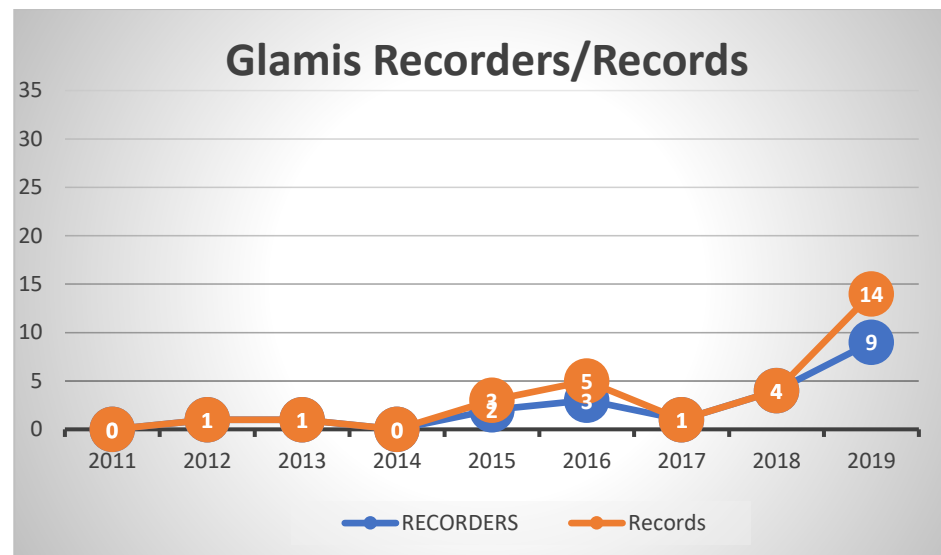
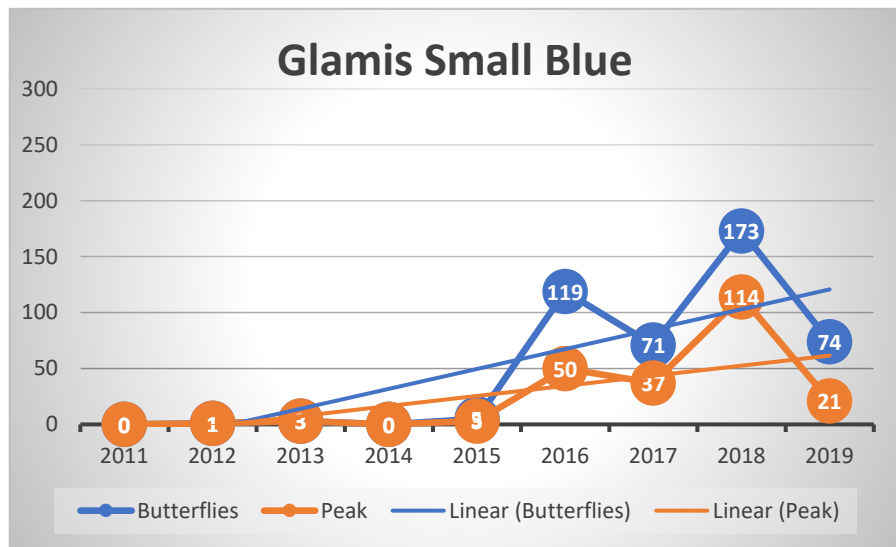
Similarly the number of butterfly records received is increasing. At the launch of the SB programme in 2013 there were a few recorders who visited several sites.

Glamis

Glamis is currently the most populated site in Angus. The site can be split into two parts - the sandpit and the old railway line track. The sandpit has 2-3,000 KV plants and is the area where the highest SB population can be found. The area is still used for some sand excavation and is thus at some risk. Small scale works are probably a good thing as they expose ground suitable for colonisation by KV. There are also banks to the south of the sandpit that could be

colonised by KV, though it may need some human intervention to achieve this. The railway track extends for approx. 2km and has some large areas (500+ plants) of KV with suitable shelter and nectar sources for the SB. The estate owners are willing to and have flailed encroaching Broom in this area.

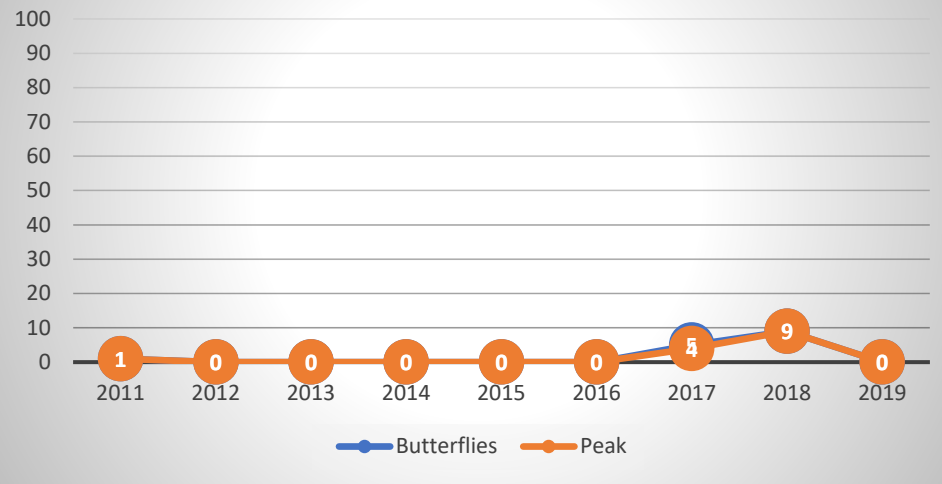
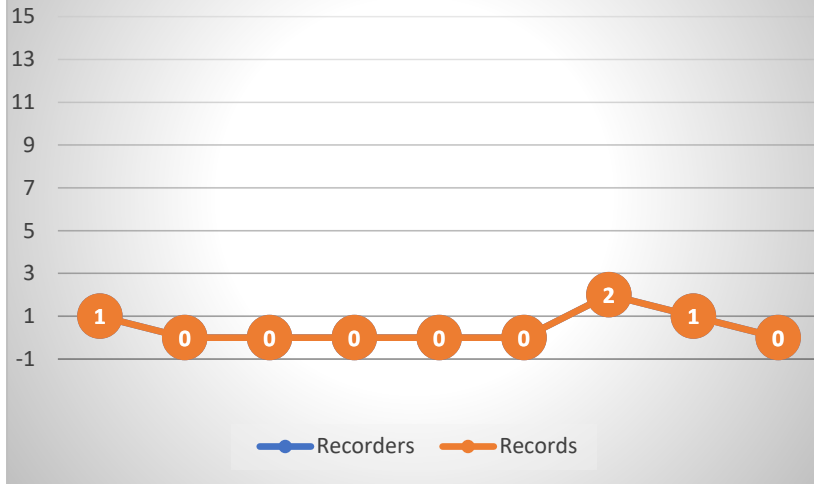
The site is now visited by more butterfly enthusiasts who send in their records. Last year we established a Transect route and trained a walker so it is hoped we can do a full transect in 2020 from mid-May to early July. Whilst 2019 was not a good year for SB - cold weather in June and very hot weather in June 2018 which may have scorched the KV. It is hoped numbers will recover in 2020.



Elliot Links

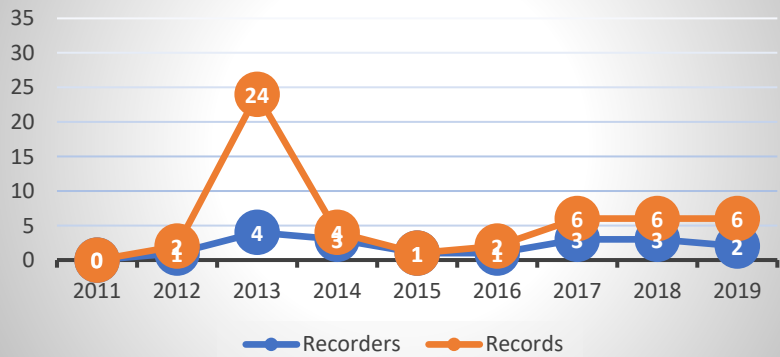
It was thought that the butterfly was extinct at this site as there were no sightings between 2012 and 2016 and it was thought that KV was no longer present at the site. However a few plants and 5 butterflies were found in 2017. This led to a KV planting in early 2018. In 2018 the recorded butterflies had increased to 9 and more KV plants and seed were put in during 2019. In June 2019 there were 104 KV plants in the area. Unfortunately in 2019 the regular surveyor was unable to visit the site and there were no recorded sightings. The site is also under threat from the encroachment of Lyme Grass and some action is required to safeguard the KV. Again we need more people to visit the site to regularly look for the butterfly.

Elliot Links Recorders/Records

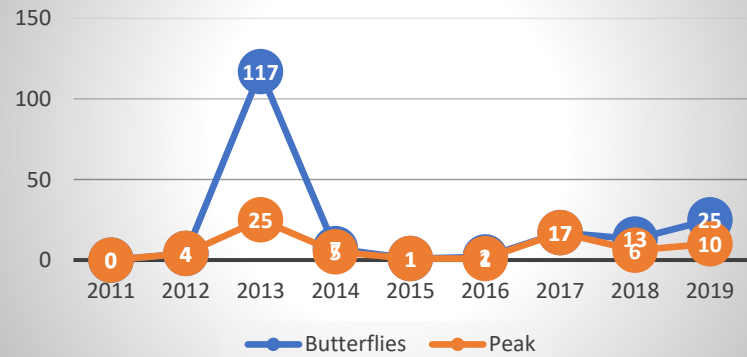


Seaton Cliffs

Seaton Cliffs Records/Recorders



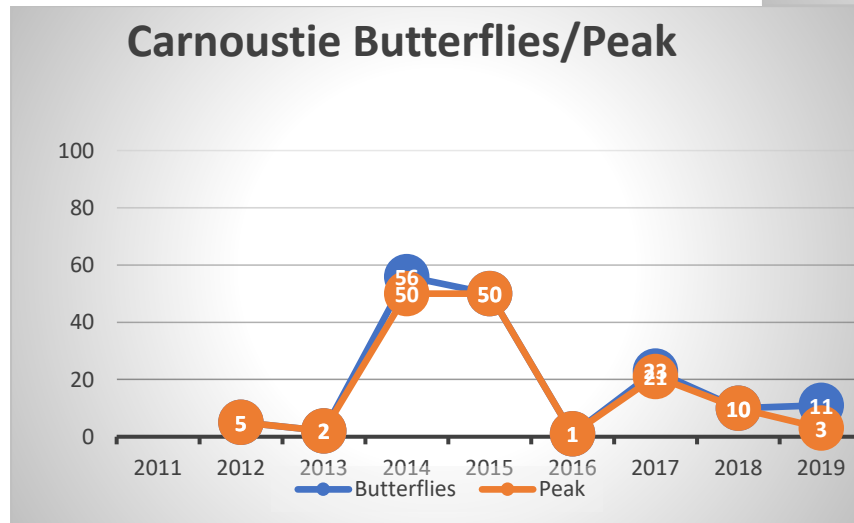
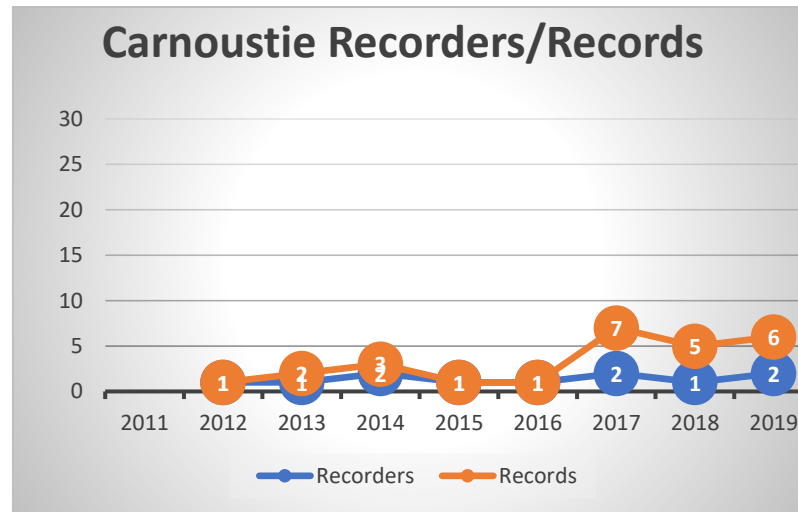
Seaton Cliffs Butterflies/Peak



Very few records have been received for this important SB site. As shown in 2013 (the launch of SB group) when we can get people out looking for SB the butterflies are there to be found. Meg Mearns did a survey in 2017. A regular surveyor is needed to focus on this site during 2020.

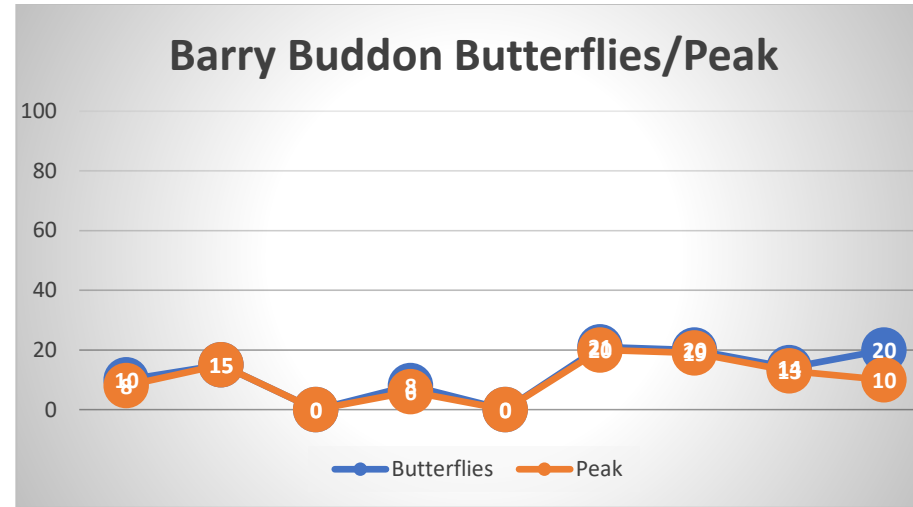
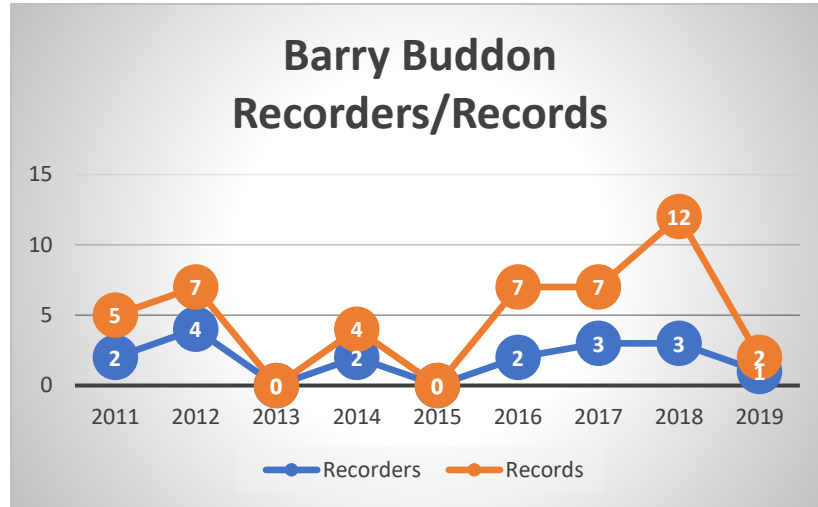
Carnoustie

Carnoustie has seen a dramatic reduction in KV which is a short lived perennial plant. Hopefully the planting/sowing over the last 18 months will redress the balance and allow the SB population to increase. Again there are very few records for the site.



Barry Buddon

Ideally a stronghold for the butterfly since there are no agricultural activities in the SB areas. Being an MoD site access is difficult so it is important that opportunities are taken when available. A fairly complete KV survey was carried out in 2019 which showed a fairly low level of KV on the site. Work is underway with Landmarc, which manages the site, to increase the KV and hopefully the SB population.



A key focus for the success of the project is the increased number of surveyors needed to check sites from the end of May until July. Accordingly, we will be offering more training sessions in 2020 in an attempt to improve numbers of recorders. We are very grateful to the community groups who continue to grow on KV plants (seed donated by Scotia Seeds) and those people willing to survey where KV is seen and how many plants there are on the different sites each year.

Project Plans for 2020

17 th January	Small Blue Celebratory Get-together, The Rookery, Carnoustie Links – refreshments and updates about our RSPB Nature of Scotland Award (the trophy and certificate will be displayed in the Links House until at least June 2020 for all to see): hosted by Carnoustie Links.
February	Scottish Pollinator's Blog on the Small Blue Success - https://scottishpollinators.wordpress.com/2020/02/03/small-blue-success/
Mid-February	Publish and circulate the 2019 Newsletter (uploaded to the Tayside Biodiversity Partnership's website and publicised on the Butterfly Conservation East of Scotland Facebook page and the Tayside Biodiversity Facebook and Twitter pages)
Ongoing	Food is Free Carnoustie – growing on more Kidney Vetch plants for the Interest Group to use
Ongoing	Landmarc continues to manage Kidney Vetch areas for Small Blue at Barry Buddon
3 rd March	Launch of the Nature of Scotland Awards 2020 with updates from the category winners from 2019
12 th March	With the RSPB, plant Kidney Vetch at three sites on Seaton Cliffs (Seahill's Farm Project)
Tbc (March)	Kidney Vetch planting along the edge of the cycle path between Carnoustie and Monifieth (in association with Monifieth EcoForce who have been growing their own KV plants from seed); other sites to be planted to be agreed in spring
21 st March	Tayside Recorders' Day, Perth Museum (article on the Small Blue surveys will be included in the Recorders' Bulletin)
3 rd April	Annual project planning meeting of the Small Blue Interest Group (Carnoustie): all welcome
29 th May to 7 th June	Scottish Small Blue Week (Butterfly Conservation Scotland in association with the Tayside Biodiversity Partnership)
During Scottish Small Blue Week (date tbc)	Guided walk/training session on Small Blue surveying
Late May – 29 th May tbc	Carnoustie Links - official launch, with Woodlands Primary School and the Small Blue Interest Group of the Coastal Butterflies interpretation board (with thanks to funding from the Carnoustie Links Community Fund)
3 rd June	Butterfly Conservation (Scotland) Small Blue Training event – butterfly identification and recording, followed by setting up a transect in Carnoustie and searching for Small Blues (no experienced required)
14 th June	Barry Buddon Open Day – Small Blue survey

CONTACTS/ INFORMATION

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Websites: Butterfly Conservation – <http://butterfly-conservation.org/842/scotland.html/> Tayside Biodiversity Partnership - <http://www.taysidebiodiversity.co.uk/get-involved/projects/projects-butterflies/>