



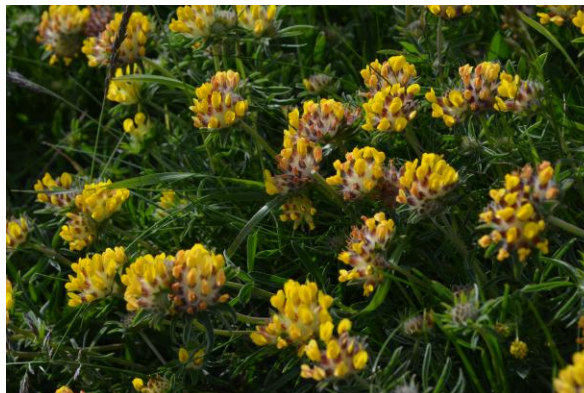
Butterfly
Conservation

Tayside Biodiversity Partnership



BIODIVERSITY
THE VARIETY OF LIFE

SMALL BLUE in ANGUS – 2012 SURVEY SUMMARY



Compiled by Duncan Davidson, East Scotland Branch, Butterfly Conservation

Introduction

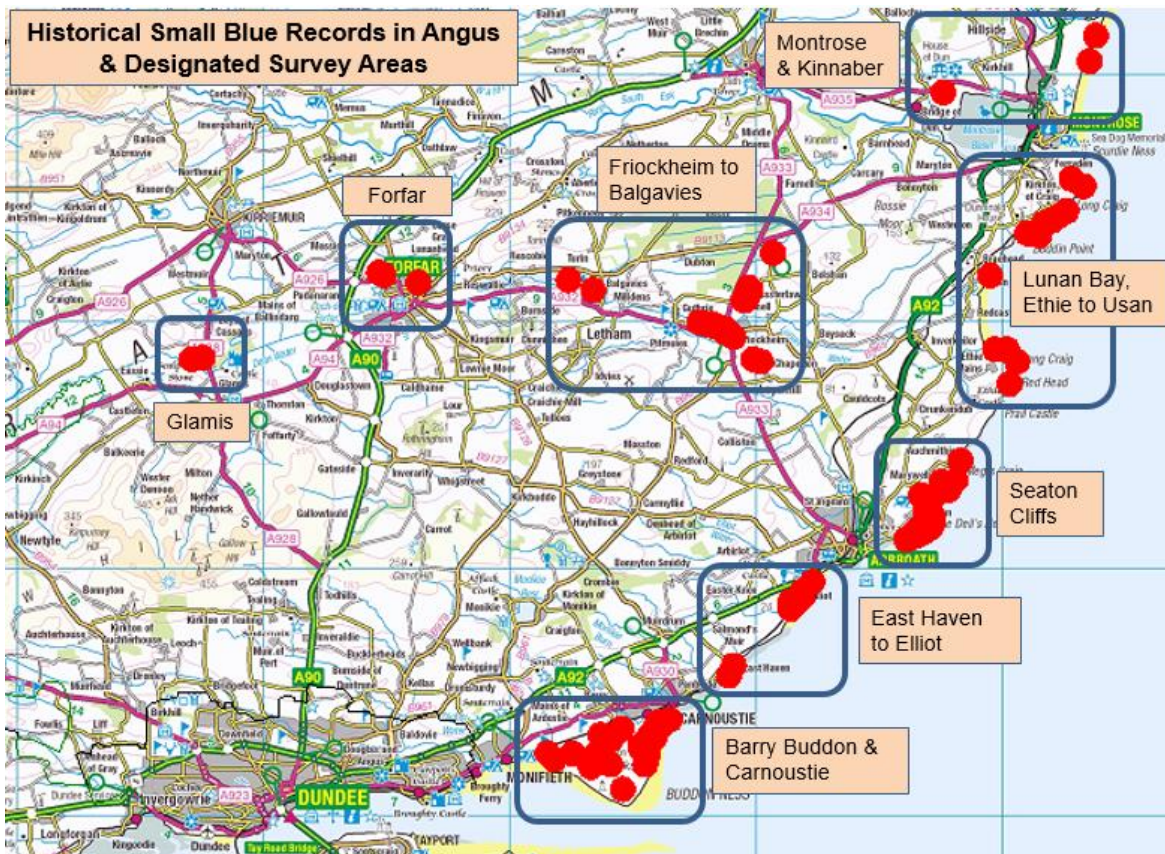
The Small Blue is a UKBAP priority species, which has suffered severe declines in recent decades. This project was set up to help understand the butterfly's status in Angus and to achieve the following aims over a five year period:

- gain a definitive view of the distribution of the butterfly and its foodplant, Kidney Vetch
- identify new and potential sites
- generate awareness with landowners and others
- develop plans for the conservation and extension of colonies

2012 was the first year of the project, when it was planned to survey historical sites and identify potential action sites. As a first step, the county was divided into survey areas and volunteers chose particular areas of interest. This was initiated at a volunteer training day in Arbroath, where there was a enthusiastic turnout of 14 volunteers.

The following survey areas were designated:

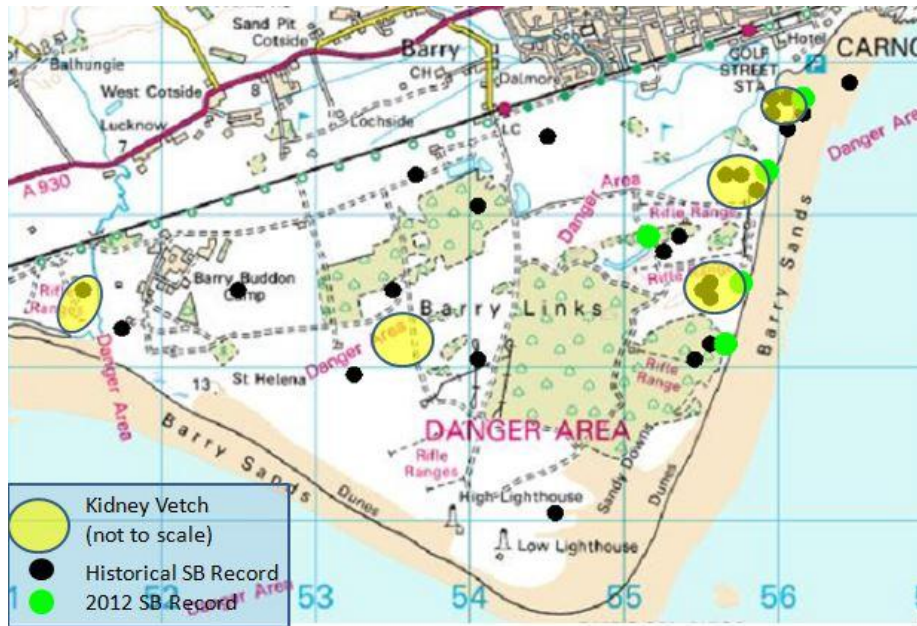
- Barry Buddon & Carnoustie
- East Haven to Elliot
- Seaton Cliffs
- Lunan Bay, Ethie to Usan
- Montrose & Kinnaber
- Friockheim to Balgavies
- Forfar
- Glamis



Barry Buddon & Carnoustie

Because Barry Buddon is a military site, access can be difficult and it was planned that survey work would take place during the annual visit arranged through Dundee Nats and others, on 24 June. In the event, there were five separate sightings of Small Blue and one volunteer recorded Kidney Vetch in a number of other areas.

It took one volunteer five visits to Carnoustie dunes before he saw a handful of Small Blue butterflies on 19 June, so sometimes perseverance is required. It might be that the adults were only starting to emerge in mid-June, in contrast to the sites in Berwickshire, where the first adult was seen on the 16th of May.



Actions for 2013:

- Continue to monitor eastern colonies
- Re-survey historical sites
- Confirm any other areas of Kidney Vetch

East Haven to Elliot

Before the 2012 survey, the only records from this area were from 1999 and earlier. Since the survey was carried out, we learned of 2010 and 2011 records at a “new” site some distance from the historical records.

In our 2012 survey, one volunteer checked from West Haven up to the Hatton Waterworks and found no Kidney Vetch at all:

West Haven to Craigmill Burn (NO575348 to NO581351). In the first field, nearest West Haven, there is lush growth up to 1m tall. In the second field, there is thin low growth, possibly recovering from herbicide treatment.

Craigmill Burn to Easthaven (NO588356). No KV found, though low vegetation, 15-45cm high, with patches of disturbed sand.

East Haven to Hatton Waterworks (NO606372). Mown grass at East Haven car park and by the access road to houses. The area between the burn and houses at East Haven has lush grasses and nettles etc to 1m high. The dunes have long grass to half a meter with little prospect of KV. Disturbed soil by the new cycle path might be possible for planting KV. There is shorter grass in the hollows behind the dunes towards Hatton Waterworks, but no KV found.

Interestingly, the 2010 and 2011 records are from NO607374, just beyond the end of the 2012 survey line. The area is described as a small flush 90m east of the concrete railway hut, south of the railway line close to the fence. The recorder goes on to say that the best patches of KV were to be found opposite Hatton Works, just behind the dune and on the tops of a number of the free draining mounds scattered throughout the area.

Another volunteer surveyed the area from Elliot southwards. Again, there was no sign of any Kidney Vetch. However, what looked very promising was the amount of disturbance being created with the cycle path works. There might be an opportunity to re-seed the path edges and this has been discussed with Angus Council. We'll know more about any plans through 2013.



Actions for 2013:

- Re-check the area round the 2011 Small Blue record
- Confirm plans for seeding cycle path works and identify any other similar opportunities.

Seaton Cliffs

A comprehensive survey was carried out by SWT in the area from Victoria Park to Seaton Den. There is a lot of Kidney Vetch throughout that stretch of coast, but much of it is inaccessible, being on steep cliff faces. However, some is on the flat cliff tops and there was some excitement when the surveyor took a photo of what looked very much like an egg on one flower head. Alas, our resident expert declared that it was not.

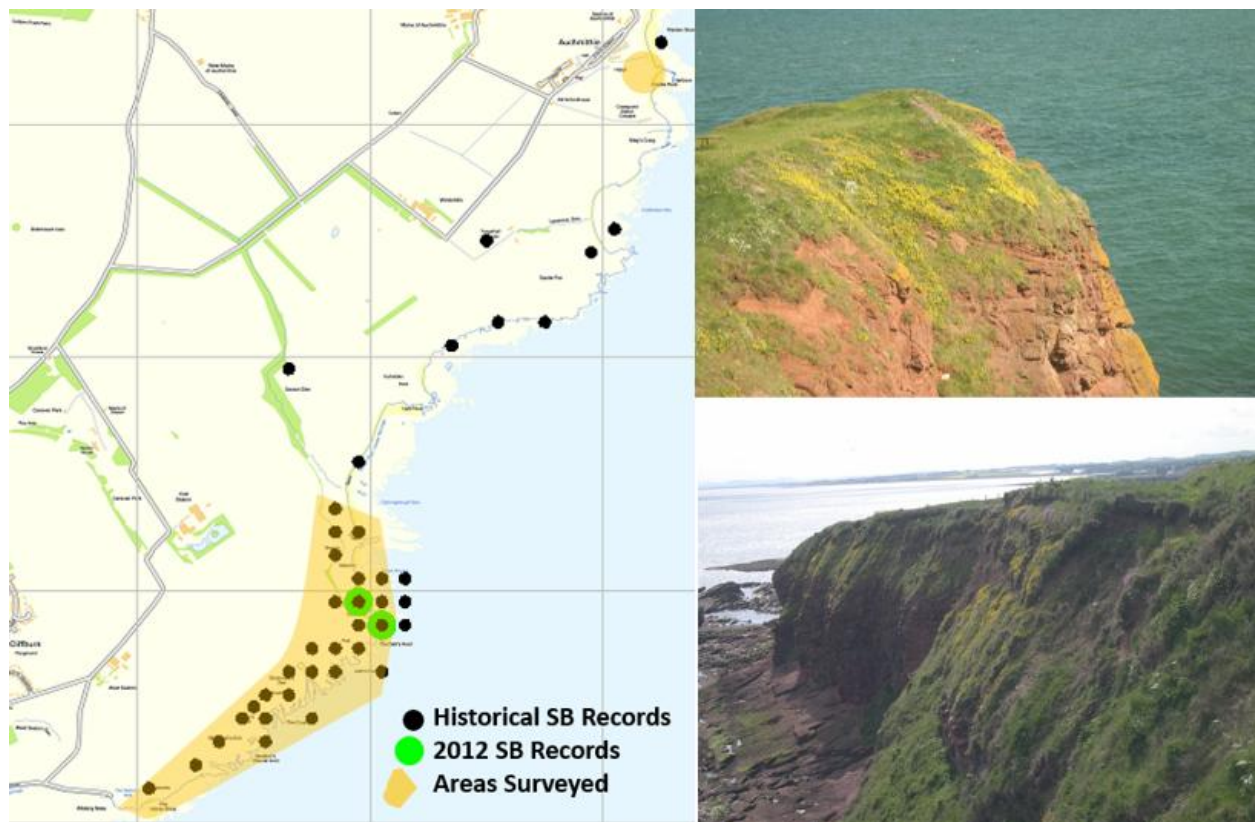
There is a weekly butterfly transect carried out along the same stretch of coastline and in 2012, Small Blue butterflies were observed as follows:

7 June – 1 at Seal's Cave, NO670418

26 June – 1 at Mason's Cove and 2 at Doo Cave, NO669419

3 July – 2 at Doo Cave

The coastline north of Seaton Den was not surveyed, until Auchmithie. There are several large patches of KV reported on the cliffs above the path leading from the village to the harbor (NO681442).



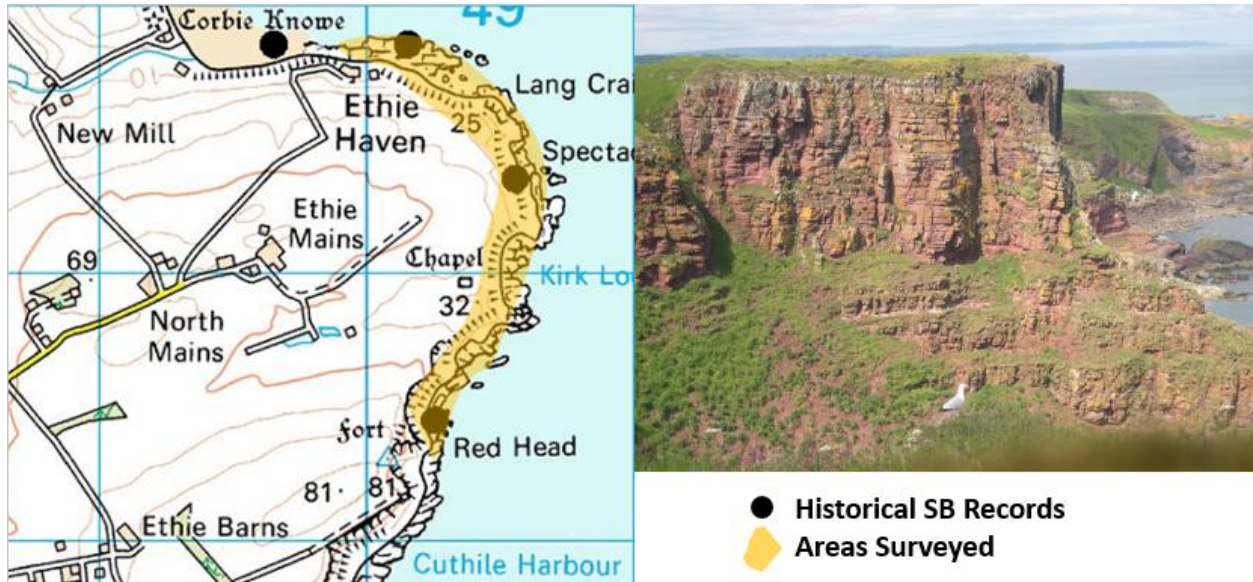
Actions for 2013:

- Continue monitoring Seaton Cliffs
- Extend survey area between Seaton Den and Auchmithie
- Check Auchmithie KV for Small Blue.

Lunan Bay. Ethie to Usan

There were no butterflies seen on this stretch of coastline. However, much of the habitat seems eminently suitable and some of the more accessible areas should be visited again in 2013.

The Red Head and Ethie area has a good coverage of Kidney Vetch, but much of it is inaccessible, on sheer cliffs. Even the patches on top are close enough to the cliff edge to pose a serious danger to volunteers. There is no obvious path and further surveys are inadvisable.

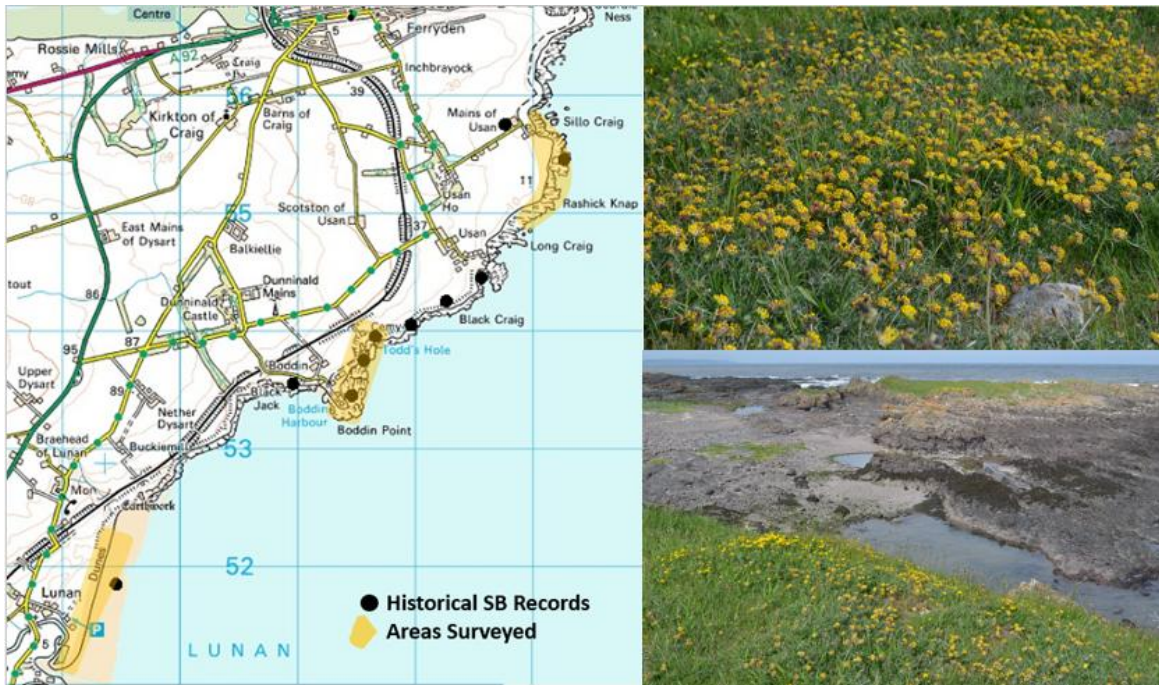


From Red Castle (NO688511) to beyond Lunan (NO693522), covering the area of 1993 Small Blue records, there was no evidence of any Kidney Vetch. The sand dunes are almost bare, with patches of Marram grass and little else.

Boddin Point holds a reasonable amount of Kidney Vetch. The largest area is on a cliff edge at NO711535, but is dangerously inaccessible and cannot practically be checked for Small Blue. The promontory itself has been comprehensively mapped almost to individual plants. There are numerous instances of single plants, with small patches of up to several square meters at NO713535, NO714533, NO713533 and NO712534. It is debatable whether the plants on the promontory are sufficient to support a Small Blue colony, but it is easily accessible and is worth further visits.

The shoreline south of Mains of Usan Farm holds large quantities of Kidney Vetch. There are particularly good growths on and around the two partial tidal islets at NO731554. Further isolated patches can be found south to NO7304507. Again the Usan area is easily accessible and worthy of further examination.

The above is a brief summary of the Kidney Vetch survey work done at Boddin and Usan. Full details are available separately.



Actions for 2013:

- Avoid Red Head and Ethie Area!
- Ignore Lunan Bay
- Continue monitoring Boddin and Usan for Small Blue
- Extend survey area between Boddin and Usan

Montrose & Kinnaber

A couple of lengths of railway track were surveyed at the west end of Montrose Basin, near Bridge of Dun and Powmouth. Both sections looked potentially suitable for Kidney Vetch, but none was found. Some areas of disturbed soil might be suitable for seeding, for example at NO671590.

Although some Kidney vetch was found on Montrose Golf Course there were no reports of any along Kinnaber coastline. In many places, the tree line ends in steep drops to the sea and the area is not as accessible as it once was.

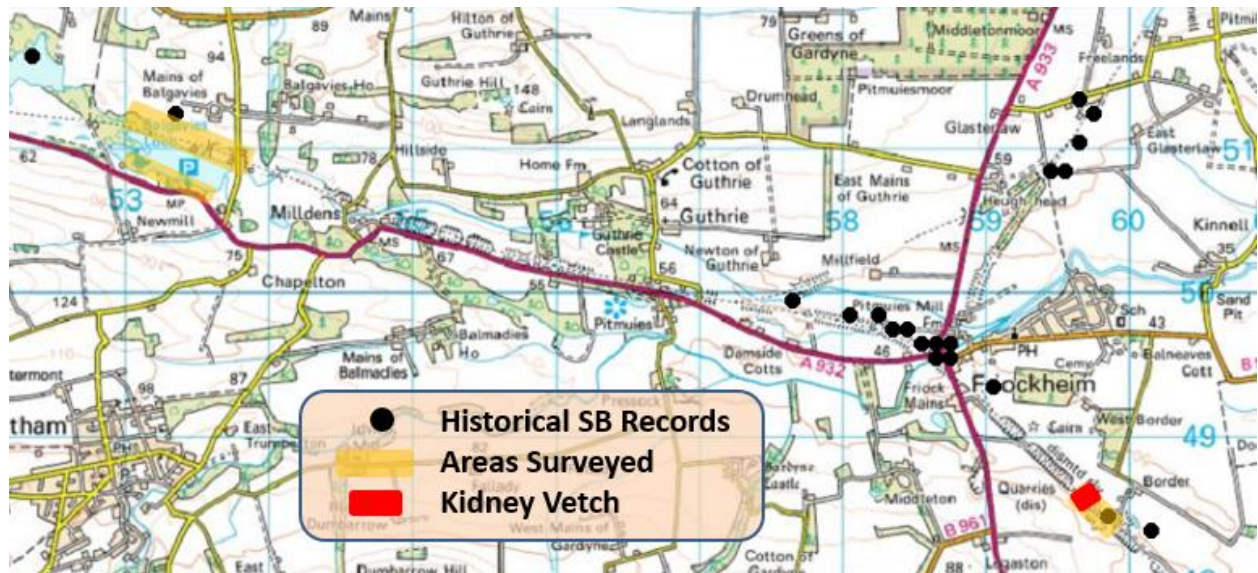
Actions for 2013:

- Continue search for KV and Small Blue in areas around historical records
- Consider seeding/planting of Kidney Vetch in suitable areas

Friockheim to Balgavies

A large expanse of Kidney vetch is centred on NO59774851, approximately 20 x 40m in size. Although there were bees, Common Blue and Ringlet butterflies, there was no evidence of Small Blue.

At Balgavies Loch, surveys were carried out along the railway line north of the loch. There was no sign of Kidney Vetch along the whole of the north side of the loch. There were thriving areas of ground ivy, nettles and willowherb, suggesting perhaps that any KV has long since been smothered. No KV in any of the likely areas to the south of the loch either.



Actions for 2013:

- Continue the search for KV and Small Blue around the areas of historic records

Forfar

The Forfar sites were not visited. They were reported as having been built upon or overgrown in 1994 and can probably be considered extinct. In any case, the area is low priority for any further work.

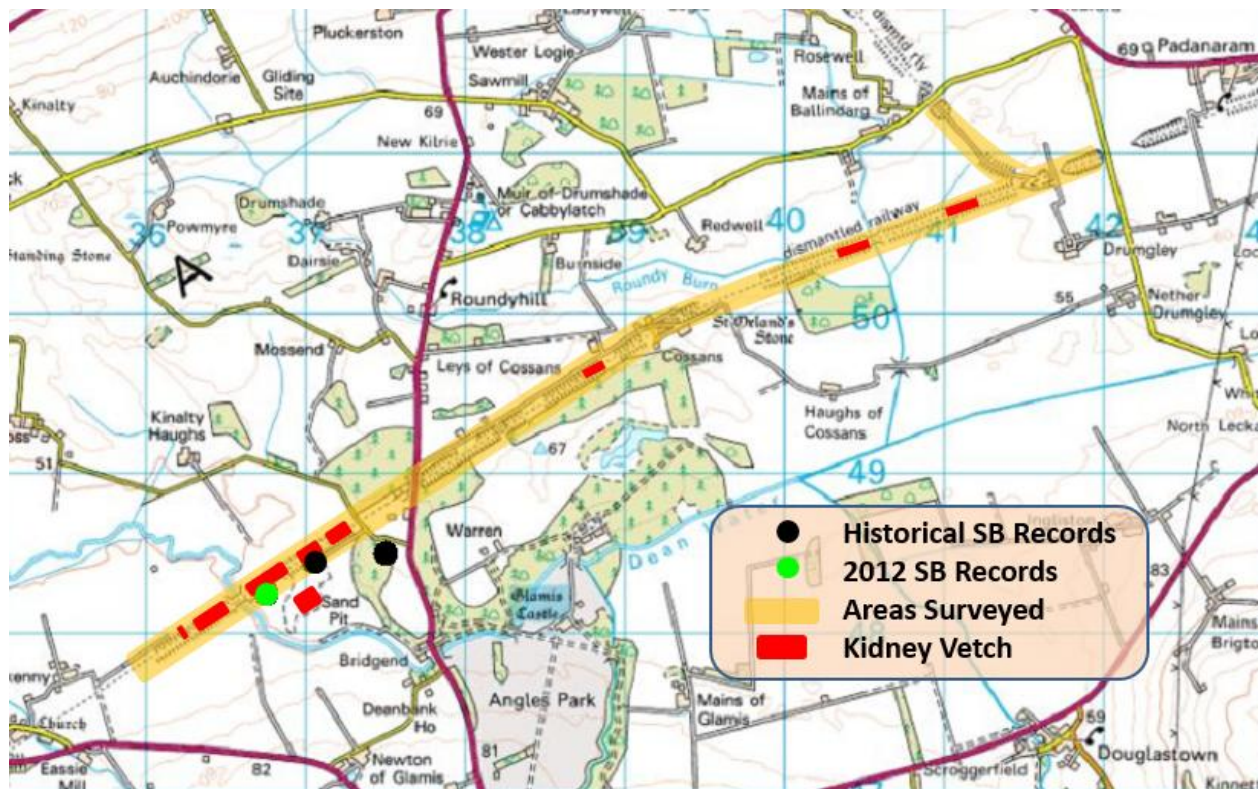
Actions for 2013: None planned... delete from project

Glamis

Although the area is designated “Glamis”, the railway track surveyed extends from Ballindarg on the outskirts of Forfar, through Cossans and on to Dunkenny to the west of Glamis.

From Ballindarg to Cossans, there were areas of coarse grass and vegetation, 30cm and taller. Also areas of rabbit-cropped sward, landfill and rank vegetation. Two patches of dense, flowering Kidney Vetch were found at NO410506 and NO404504, each around 20m x 6m.

The picture between Cossans and Dunkenny is more encouraging, although the first part of the track is heavily overgrown with broom and saplings. There is some KV amongst the undergrowth and is in danger of extinction unless the broom is controlled. The sand-pit at NO370483 has a dense bank of KV, approximately 30 x 16m and the track west of this, NO3648, has more KV in 60 x 8m and 150 x 8m patches. One adult Small Blue was seen there on 19 June. Continuing west, there is further suitable habitat but with little or no KV present.



Actions for 2013:

- Continue survey for KV and Small Blue
- Further survey of railway lines to assess where management of scrub might be beneficial
- Engagement with factor

Conclusion and Acknowledgements

2012 was not a good year for Small Blue surveying: the flight season was marred by periods of heavy rain and cold easterly winds. However, nearly all the target areas were visited and Kidney Vetch was found to be thriving in many of them.

Barry Buddon and Carnoustie appear to have strong Small Blue colonies, with Barry Buddon at least, supporting a second brood (individuals recorded in August in previous years). Suggested activities are to establish in detail the extent of KV and associated Small Blue colonies and determine if any remedial action might be required to protect the existing populations.

The Seaton Cliffs area also has at least one Small Blue colony. The KV is mostly inaccessible and it is suggested that continued monitoring is probably as much as can be done.

The only other Small Blue found in the 2012 survey was the single specimen near Glamis. There are strong populations of Kidney Vetch there, but also areas under obvious threat and others that could be extended. Further survey is suggested, to establish exactly what areas of the railway track might benefit from a management regime and consider how this might be taken forward.

At East Haven, there are already plans in place to improve the habitat, through management of the cycle-path works. Re-visiting the reported 2011 sites of Small Blue and KV is also recommended.

The suggestion for all other areas is to continue the search for Kidney Vetch and Small Blue, in the hope that that the weather this year will be more suitable for the butterfly than in 2012.

Thanks are due to the following volunteers – some from the original volunteer group and others who joined later in the season to take part in surveys and to give advice:
George Addison, Harry & Eileen Bickerstaff, Anna Cheshier, Jim Cook, Jon Cook, Keith Edwards, Ian Ford, Fiona Guest, Alban Houghton, Deny Kennedy, Carol Littlewood, Rob Noble-Nesbit, Ramsay Reid, Art Sangster and Stevie Smith. Thanks are also due to the Small Blue Interest Group committee comprising members from Butterfly Conservation, the Tayside Biodiversity Partnership and Angus Rangers.