## **Learn more**

The resources below have further information on both species and getting involved.

Tayside Biodiversity Partnership - Small Blue page http://www.taysidebiodiversity.co.uk/get-involved/projects/projects-butterflies/

Butterfly Conservation Small Blue page http://butterfly-conservation.org/50-779/small-blue.html

Dempsey, K (University of Edinburgh) 2014: Back from the brink: Using a local, collaborative approach to aid in the rescue of a vulnerable, fragmented *Cupido minimus* population in North East Scotland.

Contact @marinelifeangus or info@marinelifeangus.co.uk

The Angus Small Blue Interest Group meets regularly; anyone with an interest in the butterfly or helping us survey Small Blues and/or Kidney Vetch is very welcome to join us. Contact glynedwards19@yahoo.com or taysidebiodiversity@pkc.gov.uk

http://butterfly-conservation.org/842/scotland.html and www.taysidebiodiversity.co.uk









Image credits ©BarryPrater @Kelly Ann Dempsey @Harry Bickerstaff @MontroseImages

For more information on a wide range of coastal projects included in the new Tayside Biodiversity Action Plan 2016-26 visit www.taysidebiodiversity.co.uk and @taysidebiodiversity or contact the Marine & Coastal Working Group Leader: DempseyK@angus.gov.uk

## Back From The Brink: Understanding the Ecology of Small Blue Butterfly Populations in Angus





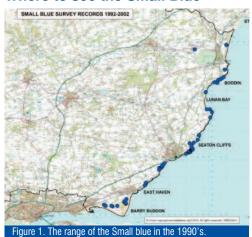




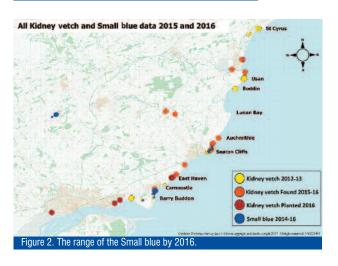
The UK has seen a decline in many butterfly species and our smallest native species the Small Blue (*Cupido minimus*) has seen a great decline over recent years. Areas of Scotland are still strongholds but local populations have become more isolated over recent years.

Angus in North East Scotland, although still a hotspot, has suffered declines and only a few small isolated populations remain. Surveys have been carried out at locations, particularly along the coastline since the late 1970's allowing us to chart this decline. The maps below show how wide the range of the species once was in Angus and how isolated populations have become.

## Where to see the Small Blue

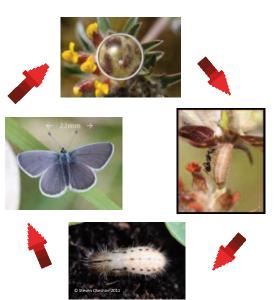


Recent surveying shows just how contracted the butterflies range has become. The most likely place to see the butterfly is on eroding cliff areas, golf courses and path networks particularly on the coast. Land management practices e.g. livestock grazing, may be a cause of decline as habitats are modified. As well as reducing numbers of Kidney vetch, the host plant of the butterfly, grazing may reduce shrub cover which is now being recognised as important for the Small Blue.



## The importance of Kidney Vetch

The Small Blue has a close and perhaps limiting relationship with its host plant Kidney Vetch (*Anthyllis vulneraria*). It can only complete its complex life cycle with its food plant; the larva can only live in the flower head and will only eat the seeds and developing anther of the plant. Kidney Vetch does not flower for long periods of time and can easily be out competed by other species so conditions must be favourable for it to flourish i.e. areas of disturbed ground.





Get involved

Our smallest, rarest butterfly needs your help. You can become involved by taking part in our Small Blue and Kidney Vetch surveys. From June to August you can take part in our simple survey and record both species if you see them. If you regularly visit one particular site and want to be a dedicated surveyor we'd love to hear from you. Please contact taysidebiodiversity@pkc.gov.uk for more information

Text and photographs by Jain Cowe, Barry Prater and Steven Cheshire

The Tayside Biodiversity Partnership is working with Butterfly Conservation Scotland to publicise the Small Blue: look out for details about the Scotlish Small Blue Week in early June and how you can get involved.

