

Upton Towans, St Ives Bay

Site summary

Upton Towans is a 97-hectare site located midway on an ancient coastal dune eco-system that extends for about 4 miles from Hayle to Godrevy Head. The grassland supports a richly diverse, lime-loving flora with one of the largest established populations in the UK of the **Silver-studded Blue** *Plebejus argus*.

Protected status

The Silver-studded Blue is a threatened species with partial statutory protection. It is one of five butterfly species on Upton that are subject to the UK Biodiversity Action Plan; the others being the Small Pearl-bordered Fritillary, Wall, Grayling and Small Heath.

Upton is a Site of Special Scientific Interest and a Local Nature Reserve managed by Cornwall Wildlife Trust.

Essential information

Owner: Cornwall Council **Permission:** Not required **Best time:** June - August
Access: Mainly on foot along winding paths with uneven ground on dunes.
Reasonably level track suitable for wheel-chair users for short distance only.
OS map: Explorer 102 **Entrance NGR:** SW 579 396 **SatNav:** TR27 5BJ

What to look out for

At least 26 species of butterfly have been recently recorded at Upton. As well as the BAP species described above, notable records include Dark Green Fritillary and Brown Argus, which are not widely distributed in Cornwall. Also recorded here is the yellow form of the Six-spot Burnet Moth. After dark during the summer, the eerie green light of glow-worms – actually the female of the bioluminescent beetle, *Lampyrus noctiluca* - can occasionally be seen. In early summer, there are impressive flushes of Pyramidal Orchid and Cowslip.

Ecological setting

The dune systems found along many parts of the north coast of Cornwall are formed of wind-blown sand, which here overlies grey Devonian slates. The sand particles mainly comprise a fine debris of sea-shells, creating a lime-rich soil that supports a fifth of all the plants found in Cornwall. Botanically, the dunes have three distinct parts. The seaward *foredunes* are unstable, continuously re-shaped by wind and tide, characterised by Marram Grass. The landward *dune slacks* are relatively stable, with Buck's-horn Plantain and Carlina Thistle in the drier areas and Southern Marsh-orchid and Field Horsetail in the wetter parts. Between the foredunes and dune slacks is the undulating, close-cropped turf of the herb-rich calcareous grassland, supporting larval food-plants: Common Bird's-foot-trefoil for Silver-studded Blue and Common Dog-violet for Dark Green Fritillary caterpillars. Another reason that the Silver-studded Blue flourishes on the dunes is the presence of a black ant that tends the young caterpillars and emerging adults, to the benefit of both species.

History of "Dynamite Towans"

Although nature has been the primary architect of the dunes over 5,000 years, more recently people have left their mark. The dunes are pitted with old mineshafts from Wheal Boil, which extracted copper, lead and zinc from the underlying rocks until it closed in 1865. However it is the National Explosives Company, whose buildings covered 300 acres of the dunes, that has left an indelible imprint. Established in 1888 to manufacture dynamite for Cornish mines, it employed 1,800 people at its peak in the First World War, when it supplied



Silver-studded Blue, Upton Towans
Photo: Tristram Besterman July 2015

explosives for the armaments industry, until it closed in 1919. The tall chimney was part of the works that made nitric acid for the manufacture of nitroglycerine. Some of the buildings, made of timber and buried in the sand to contain any accidental blast, were used until the 1960s to store explosives (the risks were real enough: an explosion in 1904, heard across the Duchy, killed five men and injured many others).

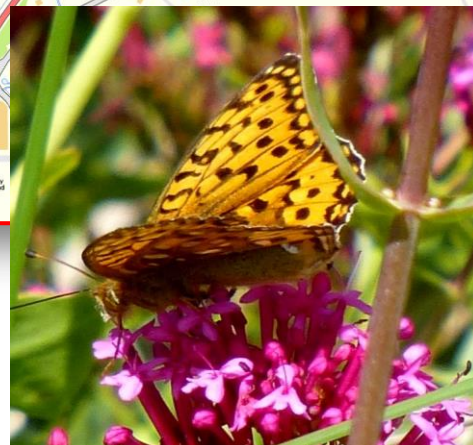
Getting there

The entrance to Upton Towans Nature Reserve is two miles northeast of Hayle, grid ref. SW 579 398. Take the B3301 north from Hayle towards Gwithian, go past the right hand turn signposted to Connor Downs then just after take the track on the left. At the top of the track there is some parking at the gate entrance, but it is limited so visitors can also park at the Gwithian Towans car park further on up the B3301 (grid ref SW 581 407) and walk over the dunes to the left to the nature reserve.



Useful links:

- http://www.sssi.naturalengland.org.uk/citation/citation_photo/1004171.pdf
- <http://www.cornwallwildlifetrust.org.uk/reserves/upton-towans>
- <http://www.cornwall-butterfly-conservation.org.uk/>
- http://www.qsl.net/zeowaw/upton_towans.htm
- <https://www.cornwall.gov.uk/leisure-and-culture/beaches-in-cornwall/cornwalls-sand-dunes/>



Dark Green Fritillary, Upton Towans
Photo: Tristram Besterman July 2015

Cornwall Butterfly Conservation

If you enjoy wildlife and would like to help it to thrive, why not introduce a friend and suggest they join Butterfly Conservation, giving automatic membership of the Cornwall branch? Just a click away on <http://butterfly-conservation.org/90/join.html>