Annual Knawel *Scleranthus annuus* at Greenham Common, Berkshire

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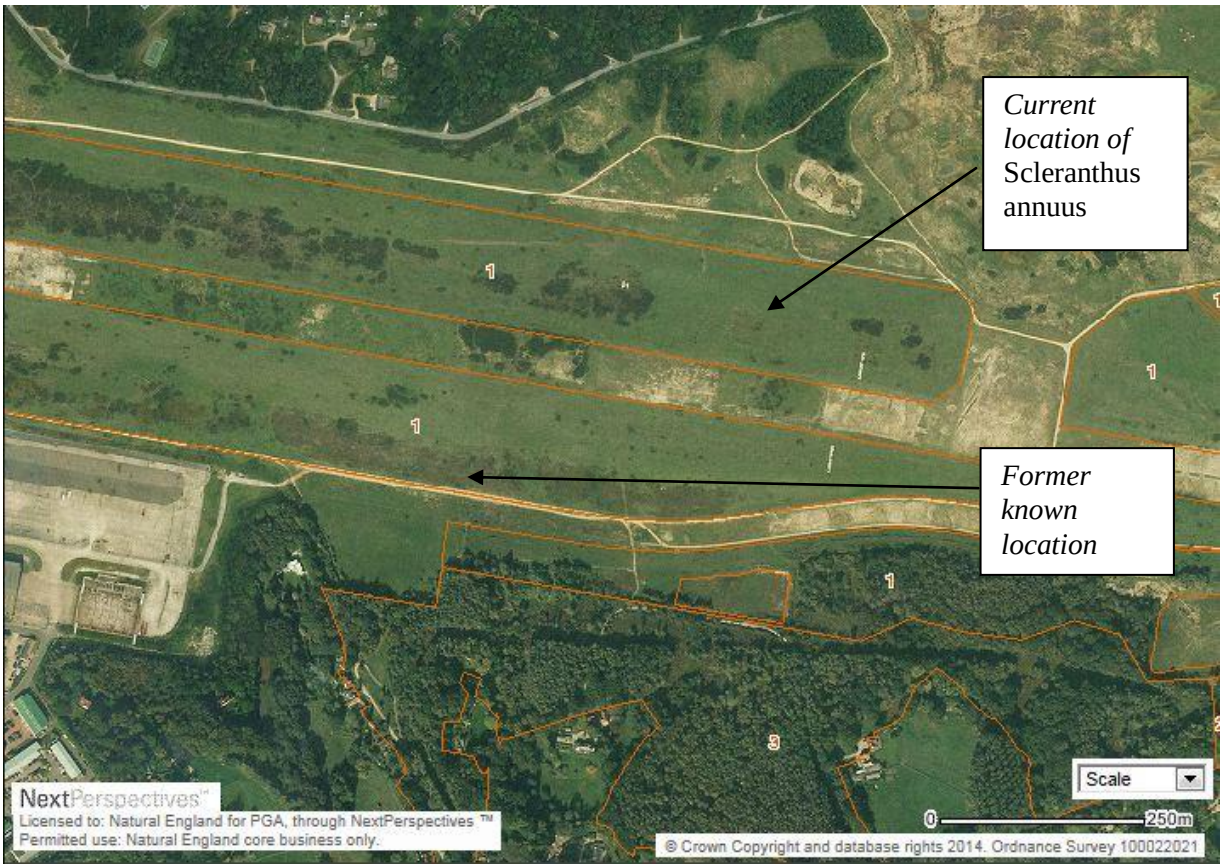
Greenham Common in Berkshire is a very important location for a number of scarce plants of short grassland, disturbed land, bare areas, gravel, and sandy heathland. The vegetation includes large populations of plants which are rare elsewhere in Berkshire. Indeed, the populations of some species are so large the site can be considered a national stronghold for them. Particularly large populations of notable plants present include those of upright chickweed M*oenchia erecta*, fine-leaved sandwort *Minuartia hybrida* (Nationally Scarce, NERC Act S41), small mouse-ear *Cerastium semidecandrum*, flattened meadow-grass *Poa compressa*, small-flowered buttercup *Ranunculus parviflorus,* knotted clover *Trifolium striatum,* small cudweed *Filago minima* and common dodder *Cuscuta epithymum.* The short, open vegetation, bare soil and exposed gravel also support large populations of lichens and bryophytes dependent upon low levels of competition from surrounding vegetation.

Annual knawel *Scleranthus annuus* is a small, undistinguished plant of sandy ground and lowland heaths. It was formerly more widespread and often appeared as an arable weed on light, free-draining soils. Recent assessment of the current distribution of this plant indicates that it has undergone a rapid decline throughout most of its range. The IUCN conservation status of the plant has recently changed to 'endangered' which means that it is considered to be at risk of extinction. It is listed in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 which means that the presence of the species must be taken into account by public bodies when carrying out their functions and the species is regarded as a critical indicator of biodiversity.

Small numbers of this plant were noted in short, open heathy vegetation at Greenham Common shortly before the SSSI was enlarged to include the former airbase and other areas between 1993 and 1997 by Graham Steven and Ron Porley of English Nature. At that time only 2 - 3 plants were found on each occasion. This is thought to be the only currently known location of the plant in Berkshire. A search of online records on the National Biodiversity Network indicates that the plant has not been recorded at the site since then.

Greenham Common was visited on 8 June 2014. The former location of the plant was carefully searched but despite habitat conditions appearing suitable it was not found there. However, a concentration of plants was located roughly 100 metres to the north east. The current location is a relatively small, heathy patch in an otherwise grassy part of the site. An estimated 50-100 plants are present where there are patches of exposed soil amongst sparse vegetation in an area measuring roughly 10x10 metres. The size of plants and number of flowers is variable but all plants are less than 40mm tall. Associated species include silvery hair-grass *Aira caryophyllea*, lesser hawkbit *Leontodon saxatilis (L. taraxacoides)*, small mouse-ear *Cerastium semidecandrum*, changing forget-me-not *Myosotis discolor*, bent *Agrostis* spp., and heather *Calluna vulgaris.* However, the most characteristic feature of the habitat is the high cover of bare ground present. The location is slightly lower than the surrounding land suggesting that it may be damp during the winter months. The whole area is grazed by cattle (and rabbits) but there are no indications of grazing impacts on *Scleranthus*.



View of location towards north east

Scleranthus annuus *occurs in this area*

View of location looking south east

Scleranthus annuus *is in this area*

A typical Sleranthus annuus *plant*

Some specimens have a similar appearance to gorse seedlings

Some larger plants are present and these have a large number of flowers

Suitable habitat conditions for *Scleranthus annuus* are present in many parts of the site. Based on the abundance of the plant at the location described above it would seem likely that the plant may be present in other areas of the common and further survey is recommended. It would also be useful to seek to gain an understanding of the variation in numbers of plants present over a number of years so that future population trends can be detected.

Current management is considered appropriate to maintain suitable habitat conditions. The most important aspects are that the vegetation should be maintained so that sward height is generally short, ie less than 4-5 cm, and that there should be frequent sparsely vegetated patches of bare ground with a peaty, clay or sandy substrate. Such areas must be kept clear of encroaching scrub to maintain open, unshaded conditions. Low nutrient conditions must also be maintained in these areas.