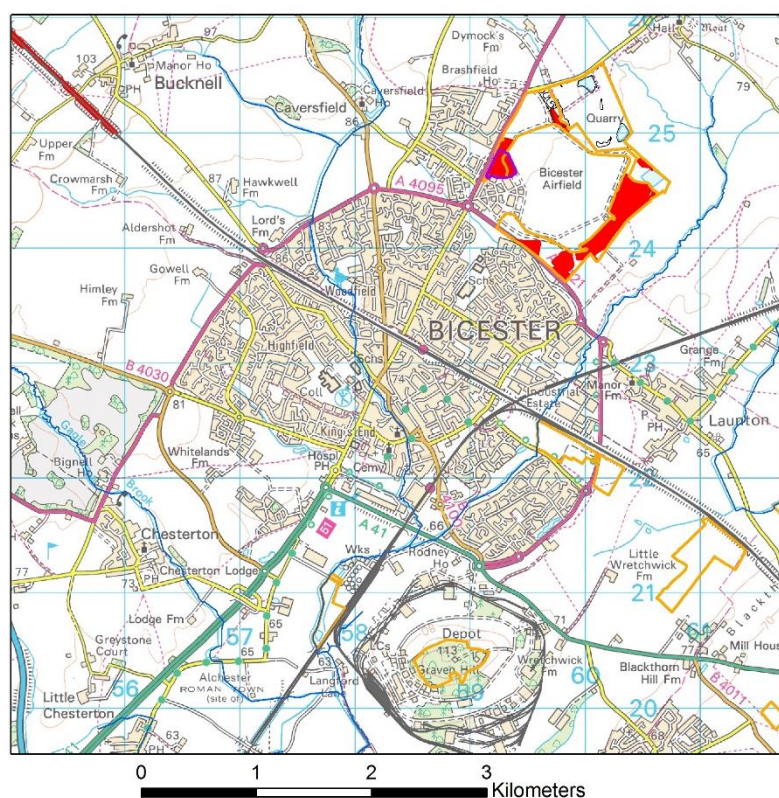


## Planning Application 18/01253/F at Bicester Airfield

The land within this site is within the local wildlife site. It is also unimproved calcareous grassland, which is a Section 41 habitat under the NERC Act, i.e. a Priority Habitat.

Calcareous grassland is a locally distinctive habitat with high cultural and biodiversity value, and is extremely rare across Oxfordshire. The remaining calcareous grassland in Oxfordshire covers only 0.3% of the total area, according to the CEH Land Cover Map 2015. The map below highlights calcareous grassland in red – the only remaining calcareous grassland in Bicester is around the airfield. This forms a high proportion of all the calcareous grassland in Cherwell district – the only other patches of significant size being at Upper Heyford airfield and along the railway embankment between the two areas, with some smaller fragments in the far west.

**Figure 1: The proposed site (outlined in purple) comprises a large proportion of the remaining patches of calcareous grassland around Bicester (red areas), and is within the Local Wildlife Site (orange outlines)**

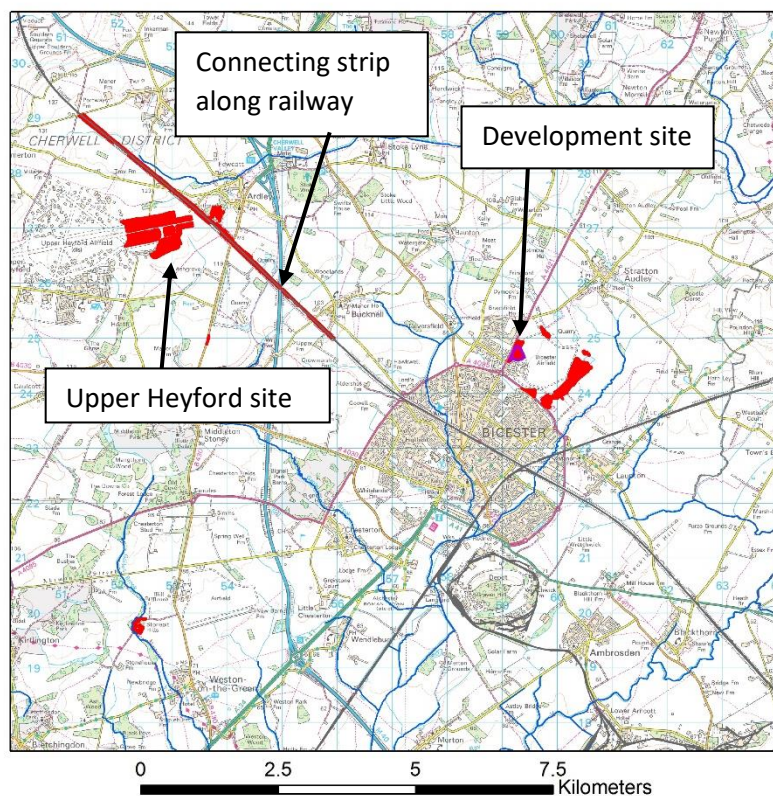


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### Connectivity

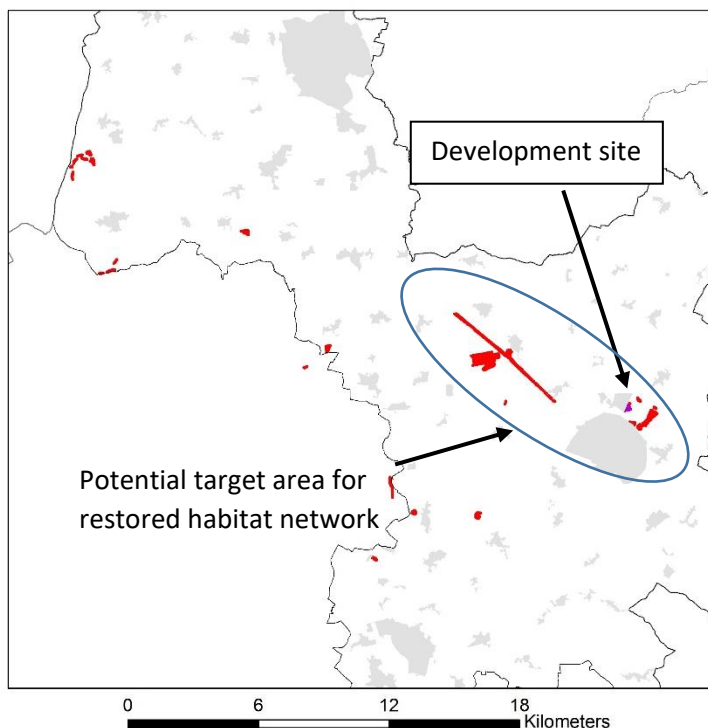
Calcareous grassland is a priority habitat for restoration as part of the two National Character Areas around Bicester: Upper Thames Clay Vale and Cotswolds. The aim of a restoration strategy should be to create connected networks. This block of calcareous grassland on the western side of the airfield forms an important stepping stone between the grassland on the eastern side and the strip along the railway, which connects to the larger block at Upper Heyford. It could be important for allowing movement of species such as butterflies and other invertebrates that depend on calcareous grassland habitats for their survival.

**Figure 2: The proposed development (outlined in purple) would destroy an important link between the remaining eastern and western blocks of calcareous grassland.**



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**Figure 3: Significance as a stepping stone within the wider network in Cherwell District**



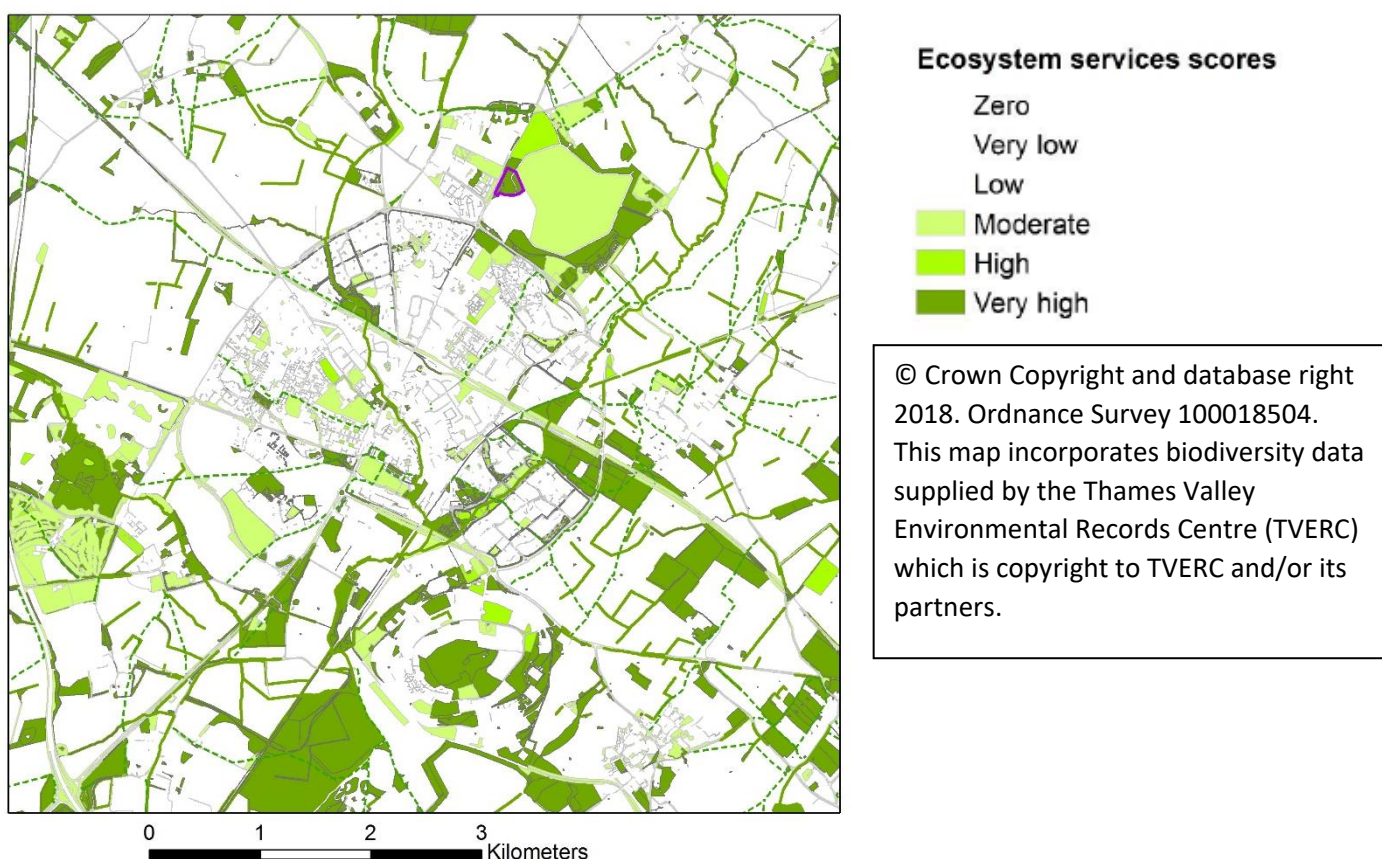
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## Ecosystem service value

As a locally distinctive habitat, this helps to provide a range of cultural ecosystem services for local people including aesthetic value, connection to nature, and a sense of place – supporting locally distinctive and charismatic species such as the Adonis Blue butterfly. It could also provide opportunities for recreation and education, depending on access arrangements. Local residents in North Bicester lack access to natural green spaces (see figure 5), and this local wildlife site could be an important resource. The site also provides a range of regulating services including flood protection (through infiltration into the ground), carbon storage (in soil) and habitat for pollinators (especially bees). There is a general lack of land in the Bicester area that has a high value for delivering cultural and regulating ecosystem services (see figure 4).

**Figure 4: The development site has high value for delivering a range of cultural and regulating ecosystem services.**



Analysis using a land-cover scoring method (Land cover scoring method for Bicester, Smith and Dunford 2017).



**Adonis Blue**



**Silver spotted skipper**

### Invertebrate species associated with calcareous grassland (from BugLife)

Mining bee *Andrena lathyri*

Cuckoo bees: *Nomada armata*; *Nomada ferruginata*

Brown-banded carder bee (*Bombus humilis*)

Large garden bumblebee (*Bombus ruderals*)

Shrill carder bee (*Bombus sylvarum*)

Hornet robberfly (*Asilus crabroniformis*)

Dotted bee-fly (*Bombylius discolor*)

Phantom hoverfly (*Doros profuges*)

Ground beetles: *Ophonus stictus*, *Ophonus cordatus*, *Ophonus parallelus*, *Harpalus dimidiatus*

Wart-biter bush cricket (*Decticus verrucivorus*)

Field cricket (*Gryllus campestris*)

Lizard weevil (*Cathormiocerus britannicus*)

Hazel pot beetle (*Cryptocephalus coryli*)

Leaf beetles: *Cryptocephalus nitidulus*, *Cryptocephalus primarius*

Silver spotted skipper (*Hesperia comma*)

Adonis blue butterfly (*Lysandra bellargus*)

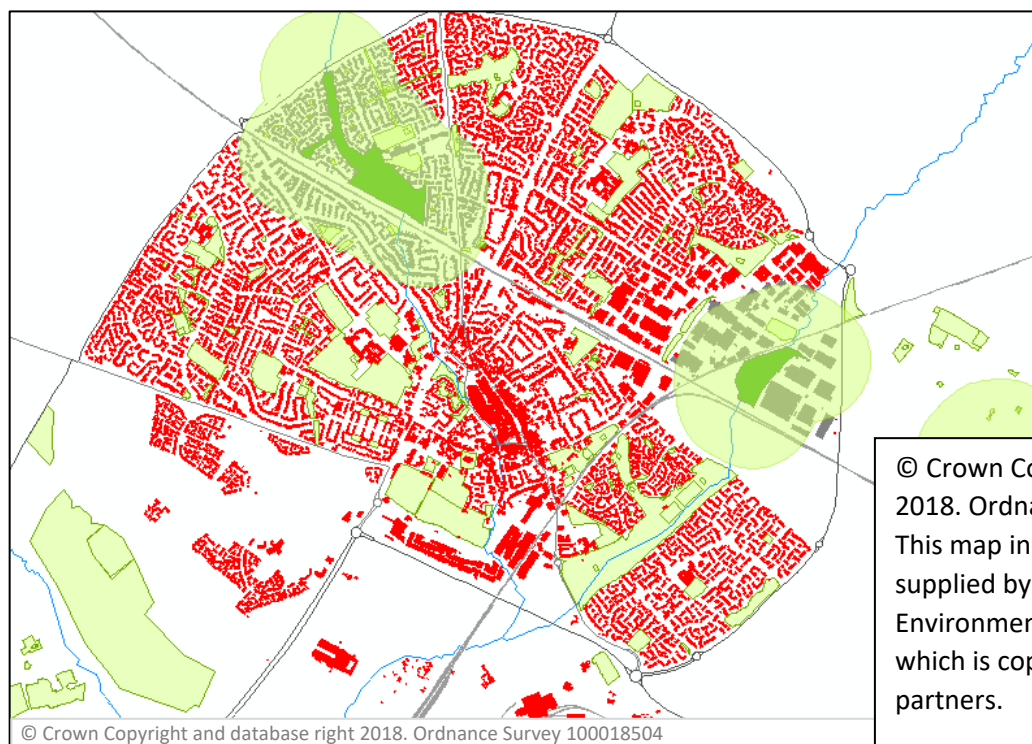
Large blue butterfly (*Maculinea arion*)

Bordered gothic moth (*Heliophobus reticulata*)

Pale shining brown moth (*Polia bombycina*)

Four-spotted moth (*Tyta luctuosa*)

**Figure 5: ANGSt analysis: Only 2530 out of 19594 buildings (13%) are within 300m of an accessible natural green space over 2ha in size (using the CDC Open Space survey 2011 definition of natural green space).**



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Analysis by the University of Oxford (Public value of green space in Bicester, Smith et al 2018).