**Maintaining standing stones benefits biodiversity in lowland heathland**

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Supplementary Table 1: Heathland species in the UK which have habitat requirements that are provided by the existence of Neolithic sacred sites that occur within the heathland matrix in Cornwall, UK. This information indicates that the sacred monuments, and their maintenance/use, provide habitat types which are not typically found within mature heathland, and therefore provide benefit to biodiversity within the lowland heathland matrix in Cornwall, UK. (ARKIVE, 2016; Arc Trust, 2016; Butterfly Conservation, 2016; Devon County Council, 2016; Pembrokeshire County Council, 2016; RSPB, 2016; Robinson, 2017).

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| **Species** | **Habitat requirements provided by Neolithic sacred sites** |
| **Birds** |  |
| Nightjar *Caprimulgus europaeus* | Open ground; low, sparse vegetation; patches of bare ground; gravely or sandy soils |
| Red-backed shrike *Lanius collurio* | Open ground |
| Skylark *Alauda arvensis* | Short vegetation; patches of bare ground |
| Stone curlew *Burhinus oedicnemus* | Semi-natural grassland; grass heaths; stony ground; short or patchy vegetation; dry, open places |
| Tree pipit *Anthus trivialis* | Patchy areas, low canopy, grass and bracken  |
| Woodlark *Lullula arborea* | Bare ground; very short vegetation; areas of long grass |
| **Herptiles** |  |
| Adder *Vipera berus* | Sunny glades or slopes; open areas in direct sunlight; warm sites under cover; low vegetation cover; vegetation cover and open areas in close proximity to each other  |
| Common lizard *Zootoca vivipara* | Sunny glades or slopes; open areas in direct sunlight; warm sites under cover; low vegetation cover; vegetation cover and open areas in close proximity to each other |
| Common toad *Bufo bufo* | Rough grasslands |
| Grass snake *Natrix natrix* | Areas with sunshine; shelter; rough grassland |
| Great crested newt *Triturus cristatus* | Ditches with permanent stagnant water; availability of refuges |
| Natterjack toad *Epidalea calamita* | Open and unshaded light sandy soils; heaps of stones; vegetation debris  |
| Pool frog *Pelophylax lessonae* | Ditches; can occur in slightly modified habitats |
| Sand lizard *Lacerta agilis* | A variety of structural and temperature conditions required |
| Slow worm *Anguis fragilis* | Open habitats; stones |
| **Insects** |  |
| Kugelann's ground beetle *Poecilus kugelanni* | Sandy or gravelly soil and wet patches |
| Early Sunshiner *Amara famelica* | Mosaic of vegetation types; bare ground; areas dominated by mosses and lichens; low herbs on disturbed ground; grasses; flower-rich areas |
| Dark guest ant *Anergates atratulus* | Sparse vegetation cover and short, dry, acidic turf |
| Grayling *Hipparchia semele* | Sparse vegetation; bare ground; open areas |
| Dingy mocha *Cyclophora pendularia* | Open heathland; damp grassland |
| Galium carpet *Epirrhoe galiata* | Open areas |
| **Species** | **Habitat requirements provided by Neolithic sacred sites** |
| **Insects (continued)** |  |
| Heath bee-fly *Bombylius minor* | Exposed sandy banks and bluffs along the edges of paths |
| Heath tiger beetle *Cicindela sylvatica* | Dry, open and sandy soils |
| Hornet robberfly *Asilus crabroniformis* | Unimproved grassland and heath |
| Ladybird spider *Eresus sandaliatus* | Sparse heather and lichen |
| Latticed heath *Chiasmia clathrata* | Edges and clearings |
| Lunar yellow *Noctua orbona* underwing | Open grassy sites |
| Moss carder bee *Bombus muscorum* | Large areas of open, flower-rich areas |
| Mottled bee-fly *Thyridanthrax fenestratus* | Open heathland preferably in a matrix of heather of varying age classes; sparse vegetation; bare sand |
| Narrow-headed ant *Formica exsecta* | Open areas within heathland |
| Purbeck mason wasp *Pseudepipona herrichii* | Exposed ground |
| Shrill carder bee *Bombus sylvarum* | Open areas |
| Silver-studded blue *Plebejus argus* | Short vegetation |
| Small heath *Coenonympha pamphilus* | Short grazed turf; sandy soils |
| Speckled footman *Coscinia cribraria* | Various species of grass |
| Tormentil mining bee *Andrena tarsata* | Bare ground |
| Wart-biter bush cricket *Decticus verrucivorus* | Mosaic of bare ground and short turf |
| Wood tiger beetle *Cicindela sylvatica* | Bare ground |
| **Plants** |  |
| Glandular eyebright *Euphrasia anglica* | Grazed habitats |
| Heath lobelia *Lobelia urens* | Grassy heathlands |
| Lesser butterfly orchid *Platanthera bifolia* | Heathy pastures, grassland, open scrub |
| Lesser smoothcap *Atrichum angustatum* | Bare, loamy or sandy soils; heath grassland |
| Marsh clubmoss *Lycopodiella inundata* | Areas of disturbance |
| Red-tipped cudweed *Filago lutescens* | Open, sandy or gravelly soil |