Middlewick Ranges: the case for Site of Special Scientific Interest designation

A report by Buglife, Butterfly Conservation, Colchester Natural History Society, Essex Field Club, Essex Wildlife Trust, Friends of Middlewick and RSPB

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Introducing the case for SSSI designation

The Middlewick Ranges and Birch Brook Woodland form part of a network of connected semi-natural habitats, Local Wildlife Sites (LoWS) and Sites of Special Scientific Interest (SSSI) south of Colchester, which together provide a nationally important habitat resource.

The nationally important 76ha Middlewick Ranges is one of Essex's largest LoWS, supporting approximately 10% of its special acid grassland habitats and is a much-loved green space for the local community. The adjacent 30.5ha Birch Brook LoWS supports structurally diverse streamside woodlands on acidic soils, including a species-rich ground flora, ancient oak standards and veteran Alder coppice. Together they support an outstanding assemblage of invertebrates, bats including Vulnerable Barbastelle (*Barbastella barbastellus*) with a maternity roost confirmed locally, and breeding birds, including a thriving population of Red Listed Nightingale (*Luscinia megarhynchos*). New evidence gathered in late 2024 has also confirmed that the grassland supports a previously unknown nationally important assemblage of waxcap fungi.

This updated report, which also references a detailed new botanical survey and report, brings together the current knowledge of the biodiversity value of the Middlewick Ranges site complex and outlines a rationale for its designation as a Site of Special Scientific Interest (SSSI) assessing it against the Joint Nature Conservation Committee (JNCC) '*Guidelines for the Selection of Biological SSSIs*' documents[1].

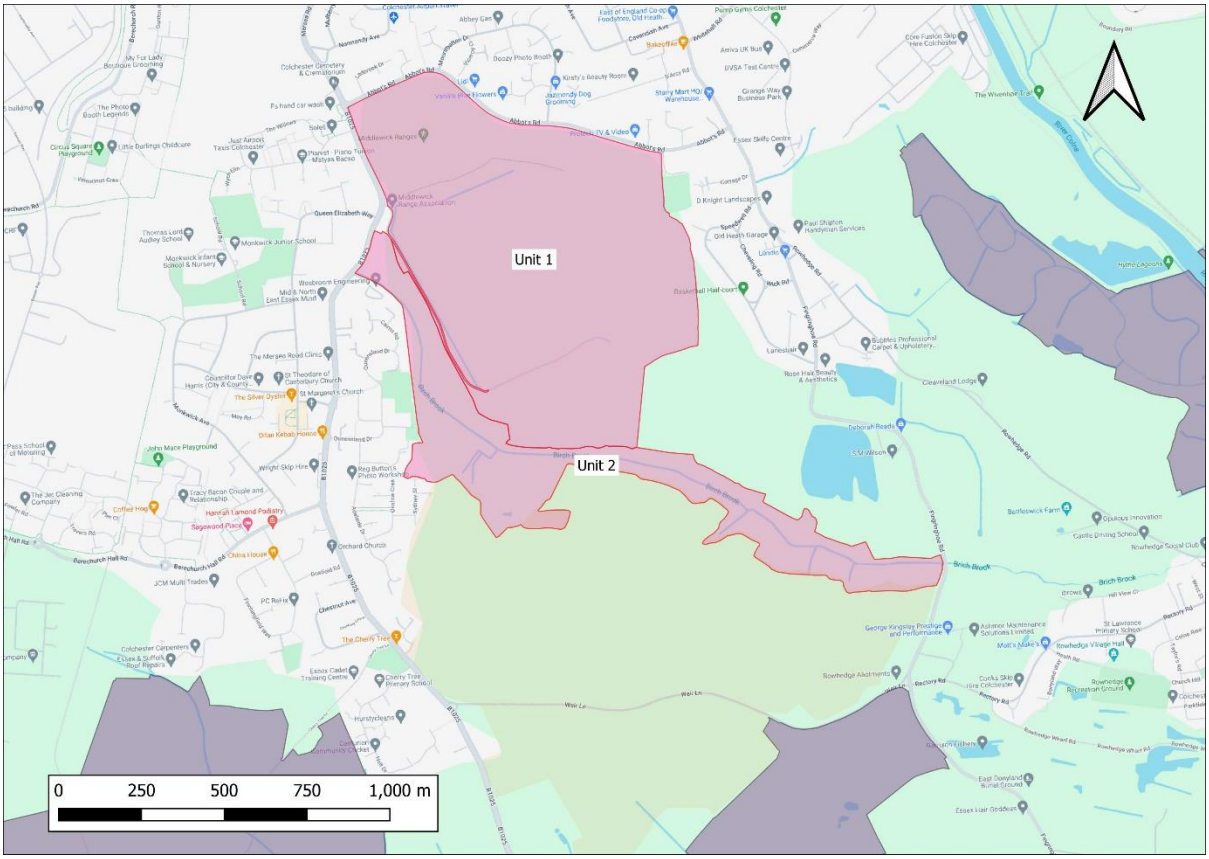
SSSI designation has multiple potential selection criteria, including the importance of a site within the Area of Search, defined here as the North Thames Basin National Character Area (NCA), as a national example of a habitat type or for supporting nationally important proportions of a species or assemblage.

The data contained in this report has largely been collected by local naturalists and experts, with the site yet to be systematically surveyed. Full surveys would undoubtedly reveal a great deal more about this site's extraordinary value for wildlife. Yet even without this degree of survey effort, as a coalition of wildlife charities and organisations we consider a clear case has been made to justify an immediate start to the SSSI notification process.

This is becoming ever more urgent due to the threat of development which hangs over the site with the developing Colchester Local Plan and the Ministry of Defence's (MOD) marketing of the site for up to 1,000 homes. This has led to calls for the site's protection from local and national organisations and groups and has prompted the formation of the 3,500+ strong Save the Middlewick Ranges group[2].

[1] https://jncc.gov.uk/our-work/guidelines-for-selection-of-sssis/

[2] https://www.facebook.com/groups/692112914272789



Map 1: Middlewick Ranges (Unit 1) and Birch Brook (Unit 2) Local Wildlife Sites; the proposed designated SSSI area. Contains Ordnance Survey OpenData © Crown copyright.

Acid grassland

Middlewick Ranges supports the largest remaining intact acid grassland habitat in Essex at over 30 hectares, a Priority Habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006[3]. For context, 83% of acid grassland Sites of Special Scientific Interest (SSSI) nationwide cover less than 20ha[4]. The site supports a largely unimproved Thames Terrace Grassland (TTG) community. Acid grassland is one of several habitat types which form a diverse mosaic including sandy slopes, lichen heath, tall grassland including areas with anthills, ancient and non-ancient woodland, scrub including Gorse (*Ulex europaeus*), Broom (*Cytisus scoparius*) and Bramble (*Rubus fruticosus agg*.) thickets, ponds and tall outgrown hedgerows.

As a result of minerals extraction, development pressures and other land management approaches, it is one of the few remaining examples of its type in the Area of Search. Despite this and the inclusion of Acid Grassland as a Section 41 Priority Habitat and a detailed account in the 'UK Biodiversity Action Plan Priority Habitat Descriptions' which acknowledges its inherent variety[5], the habitat remains poorly represented in Essex in the SSSI series. Acid grassland needs to be considered in the wider context of its cultural, historical and land use. These soils form the end point of an ancient pattern of land use on initially suitable geology, and are very difficult to reproduce or restore when significant nutrient enrichment in particular, has taken place. An undamaged acid grassland

[3] https://www.legislation.gov.uk/ukpga/2006/16/contents
[4] https://publications.naturalengland.org.uk/file/79014
[5] https://data.jncc.gov.uk/data/902cafcb-578f-43de-8a99-7143f00d79a2/UKBAP-BAPHabitats-26-LowlandDryAcidGrass.pdf

soil is, therefore, of very high irreplaceability value[6]. Paragraph 5.5.1 of JNCC's guidance states that "*the greater the fragility of a feature, the higher its value, and those which cannot be re-created should be regarded as irreplaceable and accorded particular importance in site selection*".
A comprehensive new botanical assessment carried out during 2024[7] has confirmed 30 plant species with a conservation status across Middlewick and Birch Brook Woodland, including 20 Essex Red Data List (ERDL) species, mostly associated with acidic soils. This includes a number of species found in acid grassland and heathland, including Nationally Threatened Heather (*Calluna vulgaris*) and ERDL species such as Velvet Bent (*Agrostis canina*), Brown Bent (*Agrostis vinealis*), Lesser Chickweed (*Stellaria pallida*) and the rediscovered Early Forget-me-not (*Myosotis ramosissima*) which, prior to 2024, was last recorded in 1976.

Amongst an impressive diversity of over 40 grass species across the site, other indicators of acid grassland include Wavy Hair-grass (*Avenella flexuosa*), Heath-grass (*Danthonia decumbens*), Mat-grass (*Nardus stricta*) and three species of Sheep's-fescue including Fine-leaved Sheep's-fescue (*Festuca filiformis*). The sandy soils including the rifle butts also support species often found in dunes or coastal grassland including Near Threatened Small Cudweed (*Logfia minima*), ERDL Little Mouse-ear (*Cerastium semidecandrum*) and Vulnerable Corn Spurrey (*Spergula arvensis* var. *arvensis*).

The 2024 NVC survey confirmed extensive remaining areas (32.4ha) of U1b and U1d acid grassland NVC communities ('Sheep's Fescue – Common Bent grass – Sheep's Sorrel Grassland'). U1d is exceptionally rare at such scale in the East of England. It also confirmed that portions of the grassland – both inside and outside of the fenced area – are deteriorating in the absence of optimal management, slipping into more neutral and enriched MG6b NVC community, a process which is considered reversible with the introduction of suitable management.

Many of these specialist species of acid grassland, heathland and sandy soils have declined or disappeared entirely from other sites, and in some cases Middlewick Ranges is one of only one or two other sites to support that species in North Essex or even the wider county. For example, cross referencing with the Wild Flowers of North East Essex (Tarpey and Heath, 1990)[8] shows that 15 of the noteworthy species present on Middlewick were found in less than 10 monads in NE Essex, with five species found in only one other monad.

The recent Botanical Survey of Middlewick Ranges report states that, "*32.4ha of Survey Area 1 falls within the Priority Habitat of Lowland Dry Acid Grassland. Composed solely of mostly species-rich U1b and U1d, this Priority Habitat is of 'high botanical nature conservation value' and eligible for selection as a Site of Special Scientific Interest (SSSI).*"

Middlewick Ranges is exemplary, as it is the largest area of continuous acid grassland in the county and a unique remnant of old TTG in the county and nationally, as demonstrated by publicly available data. Paragraph 5.4.1 of the JNCC's '*Guidelines for the Selection of Biological SSSIs*' states that it is necessary, "*… to select sites both for their unusual features, and as good examples of typical features which also have special interest*". Middlewick Ranges supports a suite of birds, plants and invertebrates that are typically associated with acid grassland, open mosaic and coastal habitats. Conversely, however, the site could also be considered unique due to the TTG nature of the unimproved Middlewick Ranges substrate.

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[6] Penny Anderson Associates Ltd (2015) *Evidence Gathering on Criteria for Identifying Irreplaceable Habitats*. Unpublished report for Natural England.
[7] CBC-null-Botanical-Surveys-of-Middlewick-Ranges-with-Area-2-Species-by-family.-Botanical Surveys of Middlewick Ranges with Area 2 Species by family.pdf
[8] Wild Flowers of North East Essex, Terri Tarpey and Jerry Heath (Colchester Natural History Society, 1990)

Middlewick Ranges could also provide the much-needed ecological coherence identified in Paragraph 5.11 of the JNCC's '*Guidelines for the Selection of Biological SSSIs'*. At the site level it is a large natural grassland that is likely to provide for the needs of some individual species of conservation concern in its own right, including less mobile species and acid grassland specialists. However, it is also likely to play a pivotal role in the region's ecological network, interacting with the adjacent series of LoWS as well as the Roman River SSSI which is just 300m south of the edge of the proposed SSSI area and is designated for its complex mosaic of woodland, scrub, heath, grassland and fen.

Invertebrate assemblages

Since 2019, at least 1,480 species of invertebrate have been recorded across Middlewick Ranges, including 167 species of conservation concern- an impressive 11.28% of the total. However, this is likely an underestimate, with county records identifying 2,165 species from the site historically, almost all of which are likely to still be present. This includes records of 51 Priority Species of invertebrate and 334 species of conservation concern- 15.4% of the total. An additional invertebrate survey on behalf of Colchester City Council during 2024 is anticipated to further expand the total and the list of notable species.

Modern records include records of 465 species of Lepidoptera (over a quarter of Essex's moths and butterflies) and 173 spider species (a quarter of the entire UK species checklist). Species recorded from Middlewick Ranges include: the Vulnerable Six-spotted Mouse-spider (*Phaeocedus braccatus*); Four-banded Weevil-wasp (*Cerceris quadricincta*) which is only found in Essex and Kent; the UK's fastest declining ground beetle, the Endangered Necklace Ground Beetle (*Carabus monilis*); and the cuckoo wasp *Hedychrum rutilans* which was once thought extinct in the UK but can now be found at a handful of sites in Essex and Kent. Its diverse assemblage of threatened and rare species has ensured it is included as a key site in the Essex Coast Important Invertebrate Area (IIA)[9]. IIAs are home to nationally or internationally significant invertebrate populations and their habitats[10].

Analysis of the invertebrate communities using the Pantheon tool[11] developed by Natural England and the Centre for Ecology & Hydrology, indicates that eight invertebrate communities are in favourable condition, those for: bare sand & chalk; rich flower resource; scrub edge; scrub-heath & moorland; open short sward; bark & sapwood decay; heartwood decay; and epiphyte fauna.
Of the 167 species of conservation concern with known records at Middlewick, Pantheon identifies 112 as being associated with 'open habitats', the majority of these being found in 'short sward and bare ground'. This emphasises the importance of the site's bare sandy soils on the rifle butts and along paths within its managed grassland. However, as outlined in the 2015 Local Wildlife Site citation, it is the mosaic of habitats across the site as a whole that is central to its importance for invertebrates: "*The main rifle butts at the south end of the site, along with smaller sandy banks to the north, provide significant nesting habitat for a range of insects, whilst the extensive grasslands surrounding them, including those areas kept closely mown over the active parts of the rifle range, provide the necessary additional foraging grounds."*

When considering the 'typicalness' of a site in the JNCC's '*Guidelines for Selection of Biological SSSIs'*, the National Vegetation Classification (NVC) is referred to as a useful framework for assessing typicalness, but it is a blunt instrument when investigating TTG communities. Comparison of invertebrate data with other acid grassland and TTG sites confirms that the site supports an unusually diverse assemblage of rare and scarce invertebrate species as well as coastal species not found in the Thames Estuary TTG or on Open Mosaic Habitat on Previously Developed Land

[9] https://www.buglife.org.uk/our-work/important-invertebrate-areas/
[10] https://cdn.buglife.org.uk/2024/03/What-are-IIAs-v.FINAL-1.1.pdf
[11] https://pantheon.brc.ac.uk/home

(OMHPDL) sites. For example, it has the only county occurrences of Eastern Sand Wasp (*Podalonia affinis*) away from Colne Point and East Mersea, a population of the usually coastal Sandhill Rustic (*Luperina nickerlii*) and the only Essex location for the Six-spotted Mouse Spider, representing a link between the Suffolk populations at Shingle Street and Orfordness and the North Downs populations in Kent and Surrey. The coastal character of the invertebrate assemblages combined with its size, diversity and proportion of species of conservation concern makes it distinct and exceptional in the Essex context.

Nightingale and other breeding birds

2024 surveys support the 2012 national British Trust for Ornithology's (BTO) Nightingale survey results which showed Colchester Barracks (including Middlewick Ranges) to be a nationally significant site for Nightingales[12]. It has been suggested that the site is second in importance only to Chattenden Woods and Lodge Hill SSSI in Kent - a site notified for its mosaic of woodland and neutral grassland and the Nightingales which they support in response to growing development pressure[13]. A conservative 2024 nightly peak count of 128 singing males within this population (including 23 within the Middlewick/Birch Brook proposed SSSI) further reinforces the importance of this population. Using multiple territory analysis the realistic total is considered in excess of 150. A further 18 singing males were recorded the same evening on 3rd May 2024 within a 200m buffer of the proposed SSSI boundary showing the value of peripheral habitats.

Based on the national Nightingale population estimates shared by the BTO of 5,550 males in 2012[14], this would indicate that the proposed SSSI and adjacent areas combined, comfortably meets SSSI selection criteria. Paragraph 3.2 of the JNCC's '*Guidelines for the Biological Selection of SSSIs*' Chapter 17 on birds, clearly states that, "*Localities which regularly support 1% or more of the total British breeding population of any native species and seabird colonies of over 10,000 breeding pairs will qualify for SSSI selection."* It also confirms that "*The threshold of 1% of a population in particular has gained wide acceptance from conservationists and governments because it selects the locations of importance to those species whose specialised requirements cause them to concentrate into relatively few sites*."

Although no breeding bird assemblage index values meet the threshold for SSSI selection for any individual habitat type, current information suggests that 45 bird species have been confirmed as breeding across the site, including over 10 Red and over 10 Amber Listed species, such as Red Listed Skylark, Cuckoo and Linnet.

Fungal assemblage

A survey for grassland fungi carried out in 2024, confirmed a preliminary CHEGD+ (*Clavarioid, Hygrocybe, Entomola, Geoglossum* and *Dermoloma* fungal species groups) score of 43. This included 21 species of Hygrocybe (waxcap) fungi (with one additional species subsequently confirmed) and nine species of Clavaria (club) fungi. This diversity of grassland fungi is exceptional, in particular for the Area of Search and wider eastern region. The total of at least 43 grassland species makes Middlewick Ranges comfortably the best site for grassland fungi in the East of England and of national importance- with further additional species expected.

The list includes three Vulnerable IUCN Red List species: Splendid Waxcap (*Hygrocybe splendidissima*), Crimson Waxcap (*Hygrocybe punicea*) and *Gliophorus europerplexus*. In addition, there are three JNCC High Diversity Indicator species, associated with high quality unimproved grassland- Splendid Waxcap, Crimson Waxcap and Orange Waxcap (*Hygrocybe aurantiosplendens*).

[12] https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.13120
[13] https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/2000764.pdf
[14] https://www.bto.org/understanding-birds/birdfacts/nightingale

The total of 22 Hygrocybe species and nine Clavaria species exceeds the accepted threshold of 19 and seven species respectively for a waxcap and club fungi assemblage to be considered of SSSI quality. Final microscopy and eDNA analysis which are currently in progress, are expected to further expand the list of grassland fungi on Middlewick Ranges.

Fungal survey data also provides further confirmation of the acidic and unimproved status of the northern grasslands at Middlewick Ranges, with characteristically acidic species such as Cedar Waxcap (*Cuphophyllus russocoriacea*) and Viscid Black Earthtongue (*Glutinoglossum glutinosum*). Such grasslands should be considered irreplaceable as they can take many decades if not centuries to develop such diverse fungal assemblages. The JNCC states in its 'Guidelines for the Selection of Biological SSSIs: Chapter 14 Non-lichenised fungi' that relative to global declines, "*Britain retains a high number of species-rich waxcap grasslands…for which we clearly have an international responsibility*"[15].

Barbastelle Bats and other bats

The Globally Near Threatened, European Vulnerable and GB Vulnerable Barbastelle Bat has been confirmed within the site by both static and hand-held detector surveys as well as trapping studies and confirmation of a day roost on site. Static detector surveys during summer 2024 have confirmed over 250 Barbastelle passes across over 30 separate locations throughout Middlewick Ranges and Birch Brook Woodland. The site provides highly favourable habitat for foraging and commuting Barbastelles along grassland/hedgerow margins whilst also supporting numerous veteran trees with suitable bat roost features such as flaking bark alongside a structurally diverse shrub layer.

A maternity roost is now suspected within Birch Brook Woodland with 76 passes recorded within one hour of sunset and a maximum of 13 in one evening. This is considered strongly indicative of a maternity roost based on a study by Sussex University, which investigated survey methods to detect breeding sites for Barbastelle bats[16]. A maternity roost had been considered likely at Birch Brook since the discovery of a maternity roost in the nearby Donyland Wood in 2019, part of the Roman River SSSI 300m to the south of the site.

A further nine bat species have also been confirmed including Nathusius' Pipistrelle (*Pipistrellus nathusii*), Brown Long-eared (*Plecotus auratus*), Noctule (*Nyctalus noctule*) and Daubenton's bat (*Myotis daubentonii*) which has been confirmed as breeding in Birch Brook Woodland. Middlewick Ranges and Birch Brook Woodland combined is anticipated to form a vital part of the Core Sustenance Zones of a number of these bat species[17].

Birch Brook Woodland

This streamside woodland established on the banks of Birch Brook exhibits exceptional diversity in woodland habitats and structure, with an associated diverse ground flora, understorey and canopy layer including 45 species of tree and shrub. Its varied structure and ground flora is facilitated by low intervention management, and a lack of pheasant or partridge rearing and large deer grazing which is prevalent in the majority of other Essex ancient woodlands.

Although the main body of woodland is not ancient and not included in the Ancient Woodland Inventory, it clearly includes ancient aspects, likely focused along the linear Birch Brook as well as ancient banks and old green lanes. It supports a diverse ground flora of ferns, sedges and herbs,

[15] https://data.jncc.gov.uk/data/d1fcb171-8086-4f5b-ade5-a34c5edc78c5/SSSI-Guidelines-14-Non-lichenisedfungi-2018a.pdf
[16] An acoustic-based method for locating maternity colonies of rare woodland bats - PMC
[17] Core Sustenance Zones - Landscapes for Bats - Bat Conservation Trust

ancient oak pollards alongside numerous veteran oak maidens, coppice stools and pollards, and birch, Alder and Hawthorn coppice of some age. Over 100 veteran trees have been identified during recent survey work, potentially satisfying SSSI criteria on this and other woodland criteria[18].

Of particular note is a highly diverse fern assemblage which includes seven ERDL ferns: Lady-fern (*Athyrium filix-femina*), Scaly Male-fern (*Dryopteris affinis*), Borrer's Male-fern (*Dryopteris affinis* ssp. *borreri*), Hard-fern (*Blechnum spicant*), Soft Shield-fern (*Polystichum setiferum*), Common Polypody (*Polypodium vulgare*) and Narrow Buckler-fern (*Dryopteris carthusiana*). These ferns are indicative of the alternating wet and dry acidic woodland soils which typify this woodland. Birch Brook Woodland is thought to be the most fern-diverse woodland in Essex, rivalled only by Epping Forest SSSI[19].

Over 40 plant species associated with woodlands have so far been recorded, including ERDL species often associated with ancient woodland: Wood Anemone (*Anemone nemorosa*), Yellow Pimpernel (*Lysimachia nemorum*), Wood-sorrel (*Oxalis acetosella*), Blackcurrant (*Ribes nigrum*) and Butcher's-Broom *(Ruscus aculeatus*). ERDL Wood Horsetail (*Equisetum sylvaticum*), very rare in North East Essex, has also been identified recent surveys.

Three sedges of damp, acidic woodlands are of special note- Oval Sedge (*Carex leporina*), Common Yellow-sedge (*Carex demissa*) and Smooth-stalked Sedge (*Carex laevigata*), with the latter two being ERDL species and extremely rare in Essex. Skullcap (*Scutellaria galericulata*) and Bugle (*Ajuga reptans*) are also found within these springs and wet flushes which support a wet woodland flora. Drier slopes support species such as Pignut (*Conopodium majus*), Heath Speedwell (*Veronica officinalis*), Wood Speedwell (*Veronica montana*) and Wood Spurge (*Euphorbia amygdaloides*).

The recent botanical surveys have confirmed a number of NVC communities present including oak and wet Alder and willow communities reflecting the complex and diverse woodland structure and hydrology, with in total 14 woodland NVC communities recorded within the site. These include: W1 Grey Willow-Marsh Bedstraw Woodland; W6 Alder-Stinging Nettle Woodland; W7 Alder-Ash-Yellow Pimpernel Woodland; W10 Pedunculate Oak-Bracken-Bramble Woodland; alongside W21-25 scrub communities including around Hawthorn, Blackthorn, Gorse, Bramble and Bracken.

Birch Brook Woodland meets a number of the Primary Criteria for evaluation of Woodland SSSIs:

- Characteristic example of more than one woodland type from wet to dry woodland.
- Over 100 veteran trees within the woodland and connected hedgerows.
- A large area of wet woodland, which is uncommon in Essex and under-represented in the Area of Search.
- Supports a number of different woodland types, showing a high natural variety within the Area of Search.
- Supports a rich and diverse community of vascular plants associated with wet and dry acidic woodland.
- Diverse structure and mix of habitat niches present within the wood as a result of natural processes.
- Long-established woodland likely to be in places ancient.
- Priority Habitat, which supports Priority Species such as Dormouse and Barbastelle bat.
- Low level of negative influences such as pests, disease, invasive species, non-native species and pollution.

[18] https://data.jncc.gov.uk/data/8a93f17c-15ca-4de6-bbb4-760be06d9298/SSSI-Guidelines-2a-Woodlands-2018.pdf

[19] https://www.essexfieldclub.org.uk/portal.php/p/Archive/s/110/o/0001

The fungi, bryophytes and lichens of Birch Brook Woodland remain poorly recorded, however, recent efforts have confirmed the first Essex record of the Bi-coloured Bracket (*Gloeoporus dichrous*), alongside IUCN Red Listed Glistening Waxcap (*Gloioxanthomyces vitellinus*), an Elf Cup species (*Sarcoscypha* sp.), and oak dead wood fungi including Oak Mazegill (*Daedalea quercina*), Oak Curtain Crust (*Hymenochaete rubiginosa*) and Clustered Bonnet (*Mycena inclinata*).

The opportunity for SSSI designation

One of the original purposes of SSSI designation was to protect nationally significant sites from development. The JNCC's '*Guidelines for the Selection of Biological SSSIs. Part 1: Rationale, Operational Approach and Criteria for Site Selections*' states while discussing the origins of the SSSI network from the National Parks and Access to the Countryside Act 1949 that: "*The areas of special interest were specifically differentiated from nature reserves as 'not being land for the time being managed as a nature reserve', but which were of sufficient natural heritage interest to warrant formal protection from development and other change*."

SSSI notification remains the best way to secure the long-term future of the nationally important wildlife of Middlewick Ranges. This is emphasised again in the JNCC's '*Guidelines for the Selection of Biological SSSIs*' where it clearly confirms that, "*Site safeguard, that is the protection and management of the most important areas for wild flora and fauna and their habitat, is regarded as the cornerstone of conservation practice and, within this, SSSI notification is now the principal statutory means of achieving this goal*."

The grasslands have developed on an old early Thames terrace and have a long history of being managed as firing ranges dating back to the mid-19th century. The former Middlewick Farm and earlier farming managed the land through grazing as opposed to ploughing, leaving a largely unimproved TTG community. The unimproved TTG community present also has the potential to contribute to the "Thames estuary invertebrates, Kent & Essex" communities highlighted in Natural England's designations SSSI programme[20], contrasting invertebrates on an old Thames terrace with those on the younger terraces of South Essex.

The designation of Middlewick Ranges and Birch Brook Woodland would also provide much needed ecological coherence in the protected area network south of Colchester, which currently includes the acid grassland and woodland mosaics of the Roman River SSSI. This need for ecological coherence is all the more significant given the growing body of evidence that it supports one of the UK's most important Nightingale populations.

The evidence presented of the biodiversity importance of Middlewick Ranges and Birch Brook Woodland together with the continued threat to its habitats clearly establishes that the site meets the SSSI selection criteria.

A future for Middlewick Ranges

The site continues to be listed for sale by the MOD and is included in the most recent Colchester Local Plan for up to 1,000 houses- despite ongoing concerns about the quality of the biological information that underpinned the Local Plan review process.

We believe that there is more than sufficient evidence for Middlewick Ranges and Birch Brook Woodland to qualify as a SSSI, based on the habitats, and invertebrate assemblages that it supports when considered against the JNCC's 'Guidelines for the Selection of Biological SSSIs'. Taken together with adjacent land, this area also more than meets the criteria for notification for breeding

[20] https://www.gov.uk/government/publications/natural-england-designations-programme-for-areas-sites-and-trails/natural-englands-designations-programme

Nightingales. It is clearly an important site for wildlife, both in the Area of Search and the UK as a whole. It is also a crucial wildlife-rich green space that is readily accessible to the residents of Colchester in a city that is becoming increasingly congested. Accessible nature-rich spaces are essential for people's wellbeing, enabling them to connect with and appreciate the wildlife on their doorstep.

SSSI designation would help to ensure the long-term future of the site thanks to the protections afforded by the National Planning Policy Framework (NPPF)[21]. It would also provide a driver to ensure that the habitats currently owned and managed by the MOD continue to remain important for wildlife. Both national and local organisations and groups are ready to work with the MOD to explore other opportunities to forge an alternative future for the site, one that safeguards this special wildlife site for future generations to enjoy.

'*Biodiversity 2020: A strategy for England's wildlife and ecosystem services*'[22] established the principle that "*Natural England and other partners will ensure that management of SSSIs and other habitats takes better account of the requirements of a wider range of species. Natural England will consider the impact of climate change and other long-term processes on the existing SSSI network through its Notification Strategy, which will also identify gaps in the present coverage of priority habitats and species within the SSSI series*". Middlewick Ranges and Birch Brook Woodland remains a notable omission from the SSSI series, that Natural England should rectify to deliver the Government's biodiversity commitments.

As the site has been included in Colchester City Council's most recent Local Plan for development and is currently being marketed by the Ministry of Defence and due to Middlewick Ranges' unparalleled importance for UK biodiversity, the designation must be fast tracked for consideration within Natural England's designations programme. The data supporting this assessment, which has been collected through the dedication and expertise of local naturalists and recorders is available to Natural England to undertake its own rigorous assessment of the site's importance.

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[21] https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf
[22] https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s- wildlife-and-ecosystem-services