

East Suffolk Council Wildlife Audit 2024

Site name: Brooke Yachts and Jeld Wen Mosaic

Site reference: Waveney 119

Site status: County Wildlife Site

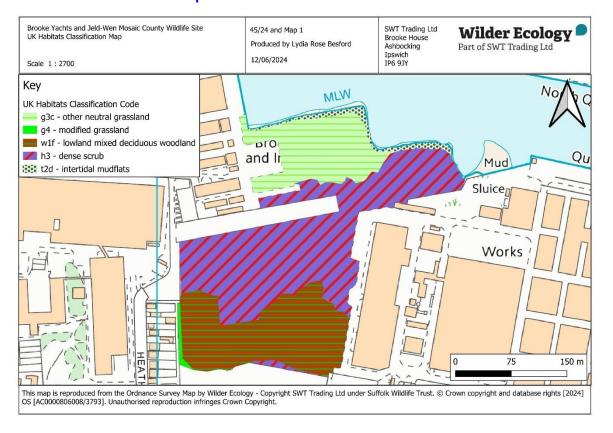
Grid ref: TM 532 926 **Area:** 6.97 ha

Date: 8th and 20th May 2024

Recorder: Lydia Besford, Jo Green and Alison Looser **Weather conditions:** Sunny, ~ 18°C for each visit and a light breeze

Ranking: 2 Biodiversity value: High

UK Habitat Classification Map:



Photos:



Photograph 1: Species rich sward including mosses and stonecrops in a drier area of the northern compartment.



Photograph 2: A species rich mosaic of scrub and rabbit grazed grassland in the northern compartment.



Photograph 3: A common blue butterfly amongst some regenerating gorse scrub in the northern compartment.



Photograph 4: A small area (<20m²) of reeds amongst scrub and wet grassland in the northern compartment.



Photograph 5: Piles of rubbish from the previous development of this site in the northern compartment.



Photograph 6: Species rich sward in the northern compartment that meets lowland meadow criteria.



Photograph 7: An area that remains wet, perhaps part of an old drainage network across the site, reeds and tussocky grassland are present in isolated patches in the northern compartment.



Photograph 8: Encroachment of rubbish arising from the adjacent Brooke business park at the very edge of the northern compartment adjacent to Lake Lothing.



Photograph 9: Looking west from the northern compartment across Lake Lothing featuring the only natural intertidal mudflat present within the immediate harbour region. Providing safe and sheltered resting opportunities for seals to haul onto.



Photograph 10: These oaks are adjacent to the edge of the northern compartment adjoining Lake Lothing proving shelter from the prevailing winds and a more sheltered microclimate behind.



Photograph 11: Another view looking east featuring the intertidal mudflat and natural edge of Lake Lothing.



Photograph 12: Looking west from the northern compartment, this area of grassland is more species poor than other compartments.



Photograph 13: Broomrape species ///risk.cake.vouch in the northern compartment.



Photograph 14: One of the large oaks present in the southern part of the southern compartment. Tall nettles envelope the ground flora in this area.



Photograph 15: The northern area of the southern compartment, where scrub transitions into woodland.



Photograph 16: One of the rides present in the southern compartment providing excellent foraging opportunities for invertebrates and bats.



Photograph 17: Within the southern compartment the woodland has natural glades where trees have fallen and been left as deadwood.



Photograph 18: Looking southeast along the edge of the CWS in a gorse dominated scrub patch.



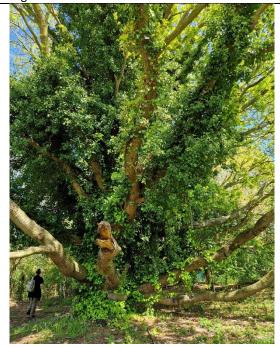
Photograph 19: The edge of the southern compartment including the mature trees at the far end bordering Jeld-Wen.



Photograph 20: The edge of the woodland within the southern compartment displaying the range of species and age classes.



Photograph 21: Primroses are present in isolated areas within this woodland in the southern compartment, separate from nutrient enriched nettle patches with higher human disturbance.



Photograph 22: A veteran oak likely a relic from the Colville House grounds built in the 1850's¹ in the southern compartment.

¹ Oulton Broad - Lowestoft Heritage

Habitat types:

Mixed scrub (h3h), gorse scrub (h3e), other lowland mixed deciduous woodland (w1f7, 204, 205), species rich rabbit grazed other neutral grassland (g3c, 10, 18, 80, 104, 124, 125) modified grassland (g4, 16) and intertidal mudflat (t2d). Some areas of the species rich neutral grassland qualify as lowland meadow (g3a).

UK Habitat Classification Codes:

Primary code/description		Secon	Secondary code/description	
g3c	Other neutral grassland	10	Scattered scrub	
		18	Species-rich grassland	
		80	Open mosaic on previously developed land	
		104	Other grazed	
		124	Anthills	
		125	Flower forage abundant	
		127	Sward type mosaic	
g3a	Lowland meadows	125	Flower forage abundant	
g4	Modified grassland	16	Tall forbs	
t2d	Intertidal mudflat			
w1f	Other lowland mixed deciduous	204	Veteran tree	
	woodland	205	Ancient tree	
h3h	Mixed scrub			
h3e	Gorse scrub			

Subsidiary habitats:

Within the northern section of the site there are piles of rubble and discarded rubbish such as tyres, these provide ample basking opportunities for reptiles. Also, within this section of the CWS there are limited areas of reeds and ranker vegetation bordering the scrub. Along a short stretch of the CWS there are short and dense oaks along the exposed edge of Lake Lothing providing a more sheltered and humid environment behind these. The scrub cover throughout the site is varied, within the northern section it is scattered scrub with some dense stands, within the southern section it is generally denser cover with rides present.

Within the southern section of the site there are some veteran oak trees which are likely ancient and mostly ivy clad. There is also both standing and fallen deadwood.

Site description:

Brooke Yachts and Jeld Wen Mosaic is located in south Lowestoft, it borders Lake Lothing to the north. The northwestern edge and eastern edges border industrial areas. The industrial area is currently largely derelict. To the south of the site is an unmanaged grassland that was previously a playing field. There is no public access to any of this CWS.

The site contains a mosaic of habitats, the northern compartment has short sward neutral grassland with mixed scrub and gorse stands present. There are also gradual ecotones present between scattered scrub, tall tussocky grasses and forbs through to short species-rich swards. There is a great diversity of flora species present, some of which indicate wet and dry conditions in close proximity to one another, this likely indicates that there is impeded drainage on site. In summer conditions the site is likely to become very dry and in winter it may flood. There are a few individual semi mature oak and mature fruit trees on the northern edge of the site, bordering Lake Lothing. There is also a small area of intertidal mudflat within the site boundary bordering Lake Lothing.

The southern compartment transitions to a more closed canopy of mixed scrub along the border of storage facility, heading east towards Jeld-Wen it opens out into mixed scrub with a ride present. Along the eastern edge to the factory there is short grazed dry grassland assemblage. Further south this gradually becomes scattered mixed scrub with some stands of gorse and then transitions into mixed deciduous woodland. Within this woodland there are veteran oaks present that could be ancient, they are a likely relic from the 1800's Colville Manor House that was demolished in 1964.

Protected species seen or known:

Common lizard (seen on site) Kingfisher (seen on site)

Records in the surrounding area include:

Common porpoise

Harbour seal

Otter

Water vole

Bat sp.,

Common pipistrelle

Soprano pipistrelle

Noctule

Great crested newt

Grass snake

Protected species potential:

Other bat species Badgers

Slow worm

Priority habitats present:

Intertidal mudflat Lowland mixed deciduous woodland Lowland meadows

Priority species seen or known:

Song thrush (seen on site)

Herring gull (seen on site)

Dunnock (seen on site)

Swift (seen on site)

House sparrow (seen on site)

Kestrel (seen on site)

Meadow Pipit (seen on site)

Records in the surrounding area include:

BoCC⁵ Red and Amber listed including: brent goose, yellowhammer and linnet Hedgehog

Wall, small heath and white-letter hairstreak butterflies, and Norfolk hawker dragonfly Numerous moth species including cinnabar and lunar yellow underwing moths Five-banded weevil-wasp

Priority species potential:

Common toad Harvest mouse

Connectivity:

This site has good connectivity with Lake Lothing bordering the northern edge of the site. This provides connectivity through to the North Sea and inland to Oulton Broad and the River Waveney via the Broadland Ramsar and SPA, the Broads SAC and Sprat's Water and Marshes SSSI's. Leathe's Ham CWS is 250m north across Lake Lothing and connects along the Lowestoft to Oulton Broad railway line and is in close proximity to the Great Eastern Linear Park CWS which provides further connectivity through urban Lowestoft. The Brooke Yachts and Jeld Wen Mosaic CWS is also part of a larger area of previously developed land which is mostly fenced, private and succeeding into grassland and scrub mosaics. There are 12 CWS within 2km of the site.

Structural Diversity:

This site has excellent structural diversity. The site transitions from deciduous woodland, to tall scrub, dense scrub, scattered scrub, tall tussocky grassland and short rabbit grazed grassland. There are also scattered areas of reeds where historic drains may be present. The southern part of the south compartment is ~3m higher than the north compartment².

Flora:

There is an excellent diversity of flora present due to the mosaic of habitats present. some variety likely arises from impeded drainage on site because there is wet and dry indicator species within the same segment of grassland. Grass species present include meadow brome, meadow foxtail and sweet vernal grass, which indicate undisturbed grassland. Perforate St John's wort, birds foot tref oil, common centuary, biting stonecrop, male fern, bulbous buttercup and wild carrot indicate dry neutral soils. Self heal, meadow buttercup and common fleabane indicate damper neutral soils. There are also some dry acidic species on site including sheep's sorrel and heath bedstraw. Interestingly a broomrape species was found on site, a parasitic plant often found in dry, nutrient-poor soil.

Within the northern compartment there are small (<150m²) areas (w3w – spices.survey.pumps, expert.moth.jars) of higher forb diversity that qualify as lowland meadows (g3a) amongst the scattered scrub. There is greater than 50% cover of broadleaved herbs and less than 10% cover of rye grasses and white clover. There are seven indicator species of lowland meadow present. Five of these species are at least 'occasional' on the DAFOR scale; oxeye daisy, common knapweed, cowslip, Lady's bedstraw and rough and autumn hawkbit., whilst birds foot trefoil is abundant and goat's beard is rare within this grassland.

The grassland on site has a known history of disturbance, with early successional vegetation communities including annuals, bryophyte, ruderals, inundation species, open grassland, flower-rich grassland and heathland all present. The site has spatial variation forming a mosaic of these early successional communities. Annual communities include common centaury, changing forget-me-not and early forget-me-not. Bryophyte communities are present within the short sward alongside stonecrops. Ruderal communities include wild carrot, oxeye daisy and black medick. Inundation communities include toad rush and common fleabane. The flower-rich grassland community on site includes common knapweed, common bird's foot trefoil, meadow buttercup,

² United Kingdom Flood Map: Elevation Map, Sea Level Rise Map

red clover, mouse ear hawkweed, self heal, common and bush vetch.

There is a variety of mixed scrub patches throughout the site, these include gorse, blackthorn, hawthorn, wild privet, and wild rose sp.. The southern section of the site has a few rides present within the scrub. Within the woodland compartments there are large mature oaks and sycamore, there is also tall scrubby species present such as hawthorn and blackthorn within the woodland. Honeysuckle and ivy are climbing up a number of the mature trees. There are some areas with woodland ground flora including primrose, although there are also large stands of common nettle in places.

Avifauna:

The habitats on site provide excellent foraging roosting and nesting opportunities for a wide range bird species. 18 species of bird were seen and/or heard, including summer migrant species such as lesser whitethroat and blackcap. Other resident species include greenfinch and dunnock. There is a linnet record just 400m north west in 2023 in a similar habitat across from the CWS so they are highly likely to be present. Black redstart are known to breed in coastal urban locations within Lowestoft and as a scarce breeding and amber listed bird these could be present on this derelict industrial site. House sparrows were present in the scrub within the southern compartment towards Waveney Drive. Song thrush were also heard, a species noted on this sites designation.

Wader species noted along Lake Lothing include oystercatcher and redshank. Adjacent to the site on Lake Lothing are records for brent geese, a priority species. There are also diver and wader species records including turnstone, cormorant, shag, kingfisher and great northern and redthroated diver. The latter two benefit from the Outer Thames Estuary SPA 1.7km E which is classified for the protection of the largest aggregation of wintering red-throated diver in the UK.

Gulls were present throughout and herring and lesser black backed gulls are breeding on the adjacent abandoned factory roofs. These host a significant population of gulls.

Invertebrates:

There is a five-banded weevil-wasp record 500m east in isolated gorse scrub patches surrounded by an industrial estate, it is likely that they are also present at Brooke Yachts and Jeld Wen Mosaic CWS. A small heath butterfly was recorded in 2009 approximately 200m SE of the site. Wall butterflies have also been recorded nearby and the habitat on site is suitable for both species.

White-letter hairstreak butterflies have been recorded 750m N of the site. The presence of elm means this species is likely to support these species. 350m N is the closest record for Norfolk hawker dragonflies.

A green hairstreak butterfly was seen on the northern compartment of the site, along with common blue, speckled wood and large white butterflies and silver y moths. Due to the variety of flora present on site it provides ample food plant species for a wide range of invertebrates. Common carder bee, buff-tailed bumblebee, red tailed bumblebee and common blue damselfly were also observed on site. There are numerous records of moth species in the vicinity of the site and the habitat is suitable for many of these.

There are rabbits on site that create bare patches of sandy earth throughout the grassland providing habitat for solitary bees and wasps. Ant hills are also present throughout the grassland, these often have a hemi parasitic effect on competitive grasses much like plants such as yellow rattle, which lead to a greater forb diversity in these areas. Ant hills are also indicative of old grasslands.

Herpetofauna:

Common lizard were seen on both site visits in the northern compartment. The mosaic habitat provides excellent habitat for herpetofauna, the scrub provides cover, the species rich grassland will provide varied and abundant feeding opportunities, the piles of rubbish such as tyres will provide basking opportunities and hibernacula. Whilst there aren't any slow worm records within 2km, the habitat on site is highly suitable. There are grass snake records within 2km. Great crested newts could utilise the terrestrial habitat on site if there is a population in the area. Whilst there aren't any ponds or scrapes present, there is a drainage ditch in poor condition in the northwestern edge that could support amphibians such as common frog, toad and newt.

Mammals:

Lowestoft has limited bat records, there are 6 within 2km, 3 of which are bat sp., the remaining being common pipistrelle, soprano pipistrelle and noctule. The site provides excellent foraging and commuting opportunities in an otherwise built-up part of the town. There are some veteran oaks present within the southern compartment which provide roosting opportunities for some species.

There is anecdotal evidence of seals using the intertidal mudflat areas along the edge of Lake Lothing as a resting spot. The inner harbour and large parts of Lake Lothing also have concrete edging and are public, so this area of undisturbed natural shoreline is rare within the wider vicinity of the CWS and therefore provides a valuable haven.

Badgers could make use of the scrub and woodland interface for sett building, there is a raised bank within the private woodland. The nearest record for badger is 2.75km SW.

There is a hedgehog record on site and frequent ones within 500m, the grassland will provide ample foraging opportunities and the scrub will provide hibernation and nesting opportunities. An isolated population of harvest mice could be supported on site.

There is extensive evidence of rabbits present on site, maintaining the short sward. The piles of rubbish and ample prey availability would support foxes on site, using this secluded site for dens. Stoat and weasel could also be present due to abundant prey and den building opportunities. Due to the variety of sward structure present it is likely to support a diverse assemblage of small mammals such as field and bank vole and wood mouse.

Comments and recommendations:

This site provides valuable habitat resource in a primarily urban area due to its varied mosaic of good condition scrub and grassland. There are areas of high botanical diversity arising from low nutrient enrichment and rabbit grazing management. This area provides an important refuge within a wildlife corridor for bats and migrating bird species both from the North Sea through to Broadland Ramsar and SPA, the Broads SAC and Sprat's Water and Marshes SSSI's. There is also some connectivity with vacant naturally regenerating land to the east and south of this site, most of which is private and unlit.

The lack of consistent human disturbance and lack of management has left dead trees within the woodland providing valuable standing and fallen deadwood.

A reptile survey is recommended to ascertain whether this site still hosts an 'exceptional population

of common lizard' per the county wildlife site designation description. This may also confirm records of slow worm on site.

There is recently dumped rubbish arising from anti-social behaviour and historic rubbish present. Careful consideration should be made if removing this to prevent damage to the current grassland and scrub. Appropriate timing and methods should be considered for presence of breeding birds and reptiles.

The scrub on site has generally currently of a good variety in age structure but in time this could become leggy. In the southern section of the site there are some very old unmanaged gorse present, great care should be taken to manage these and it may be beneficial to leave them as is. It appears that the scrub has been managed at some point in the northern section of the site, a 15-year rotational management plan could be introduced to ensure this mosaic is preserved.

CWS Citation:

This semi-natural site on the southern bank of Lake Lothing has an open mosaic of habitats on previously developed land and a small area of intertidal mudflat (biodiversity priority habitats). It provides food, shelter and nesting sites for a wide range of wildlife including reptiles, small mammals and birds and is of high wildlife value, particularly in an urban setting.

Indeed the site supports an exceptional population of common lizards and the presence of breeding song thrush and linnet (Biodiversity priority species) and overall bird assemblage makes an important contribution to the site's value for biodiversity.

The majority of the shoreline is natural although eroding and the connectivity with the wetland corridor of Lake Lothing is excellent. The structural diversity is also very good with a wide range of habitats from short to rank grassland, thick scrub (which includes dense area of gorse) and woodland. On parts of the site, industrial debris is covered by scrub.

CWS Condition Assessment:

Does the site still retain the	Yes. The mosaic of habitats present are generally in good
features for which it was	condition.
originally designated and still	The site does suffer from antisocial behaviour within the all
meet CWS criteria? How	the compartments; woodland, scrub, scrub-grassland mosaic
would you rate the condition	and modified grassland. Dumped domestic rubbish and
of the overall site and each	evidence of fires being started are present.
compartment?	
How is the site currently being	Currently unmanaged, rabbits are maintaining the mosaic
managed? Is this positive	nature of this site.
conservation management?	
Has a conservation	No
management plan been	
prepared for the site and is	
there evidence it has been	
acted upon?	
Has the site received	Unknown
management advice and is	
there evidence that this	
advice has been acted upon?	
Has or is the site being	No
managed for conservation	
through any funding such as	
agri-environment scheme,	
WGS etc?	
Is the site being managed for	No
any priority habitat or	
species?	