

## Annex C: Habitat Suitability Index (HSI) Survey of Ponds

### Pond 1

Location: TA 23076 13328

Description: Oval pond approximately 10 x 20 m with dominant marginal common reed (*Phragmites australis*). Water lily species also present (covering approximately 5% of the open water). Pond is surrounded by semi-improved neutral grassland.

eDNA Sample References: NatureMetrics GCN18-1057 (inconclusive); FERA S18-01520 (negative)



Suitability Index	Habitat Attribute	Field Score	HSI Score
SI1	Location	Optimal	1.00
SI2	Pond area	200 m <sup>2</sup>	0.40
SI3	Pond drying	Rarely	1.00
SI4	Water quality	Moderate	0.67
SI5	Shoreline shade	0%	1.00
SI6	Fowl	Absent	1.00
SI7	Fish	Minor	0.33
SI8	Pound count	5	0.78
SI9	Terrestrial habitat	Moderate	0.67
SI10	Macrophytes	50%	0.80
<b>SCORE</b>	<b>Good</b>		<b>0.72</b>

## Pond 2

Location: TA 23144 13486

Description : Oval pond approximately 35 x 15 m. Common reed dominates the margins with a small emergent stand in the middle (covering approximately 10% of the surface area of the pond). Marginal vegetation comprised occasional cuckoo flower (*Cardamine pratensis*) and rare yellow flag iris (*Iris psuedacorus*), meadowsweet (*Filipendula ulmaria*) and marsh-marigold (*Caltha palustris*). There was abundant submerged water milfoil sp. (approximately 70% cover). A pair of mallard was flushed from the pond on arrival and may nest here.

eDNA Sample Reference: NatureMetrics GCN18-1058 (negative)



Suitability Index	Habitat Attribute	Field Score	HSI Score
SI1	Location	Optimal	1.00
SI2	Pond area	500 m <sup>2</sup>	1.00
SI3	Pond drying	Rarely	1.00
SI4	Water quality	Moderate	0.67
SI5	Shoreline shade	0%	1.00
SI6	Fowl	Minor	0.67
SI7	Fish	Minor	0.33
SI8	Pound count	5	0.78
SI9	Terrestrial habitat	Moderate	0.67
SI10	Macrophytes	50%	0.80
<b>SCORE</b>	<b>Good</b>		<b>0.76</b>



## Annex D: Site Photographs



**Photo 1:** Southern pond (Target Note 1)



**Photo 2:** Southern pond (Target Note 1) with dominant marginal and emergent common reed.



**Photo 3:** Artificial amphibian/reptile hibernaculum immediately adjacent to the southern pond



**Photo 4:** Artificial amphibian/reptile hibernaculum immediately adjacent to the southern pond





**Photo 5:** Northern pond (Target Note 2). There is dominant marginal common reed and abundant submerged water-milfoil.



**Photo 6:** Northern pond (Target Note 2) with an 'island' of emergent common reed



**Photo 7:** The semi-improved neutral grassland to the north of the access track (Target Note 3). This grassland is subject to an annual hay cut. The photo shows that extensive areas of the grassland are grass dominated and with a limited diversity of herb species. A raised bund (background) is more tussocky, with an abundance of cock's-foot (Target Note 4)



**Photo 8:** Localised areas within the semi-improved neutral grassland are more flower rich (for example oxeye daisy and common knapweed) [Target Note 3].





**Photo 9:** Common knapweed, common vetch, meadow vetchling are components of a sward where meadow foxtail is locally abundant (Target Note 3)

**Photo 10:** Localised areas within the sward are more floristically rich (for example bird's-foot trefoil and common vetch). This is likely to reflect spatial variations in the application of the seed mix rather than to variations in substrate/soil type (Target Note 3)



**Photo 11:** The semi-improved grassland to the south of the track is grazed by Shetland sheep (Target Note 3).



**Photo 12:** An area within the semi-improved neutral grassland supports localised planted scrub and is used as an area to store the haycut (Target Note 5). This habitat is suitable for breeding and resting grass snake





**Photo 13:** Planted scrub and stored hay cut (Target Note 5)



**Photo 14:** The drain on Synthomer land outside the SHBPS boundary fence (Target Note 7). This drain provides suitable habitat for water vole.



**Photo 15:** The drain on Synthomer land outside the SHBPS boundary fence (Target Note 8). This drain provides suitable habitat for water vole.



**Photo 16:** The east-west orientated drain forming the south-eastern boundary of the SHBPS with dominant marginal and emergent common reed (Target Note 9). This drain provides suitable habitat for water vole.





**Photo 17:** The north-south orientated drain on the south-western boundary of the SHBPS with dominant marginal common reed (Target Note 10). This drain provides suitable habitat for water vole.



**Photo 18:** The planted species poor hedgerow screening the SHBPS when viewing from South Marsh Road (Target Note 11). The amenity grassland is regularly mown.







**Photo 19:** Ditch and hedgerow in south-western part of site.



**Photo 20:** The hedgerow in the south-western part of the site (Target Note 14). This photo shows the view looking south. There is a linear stand of semi-improved neutral grassland between the hedgerow and the drain which is regularly mown.



	
<p><b>Photo 21:</b> The young planted woodland to the west of the SHBPS has a closed canopy and has an impoverished field flora with patchy common nettle (Target Note 12).</p>	<p><b>Photo 22:</b> There are localised brush piles with locally abundant common nettle (Target Note 12).</p>
	
<p><b>Photo 23:</b> The woodland is subject to regular woodland management, such as coppicing and construction of habitat piles (Target Note 12)</p>	<p><b>Photo 24:</b> An orchard has been planted in the north western part of the SHBPS (Target Note 13)</p>



	
<p><b>Photo 25:</b> The tussocky grassland in the western part of the SHBPS supports common knapweed and wild teasel. The grassland is rank and not subject to regular mowing.</p>	