Phase 1 Habitat Mapping

Plan for Today

Start : 09hrs00

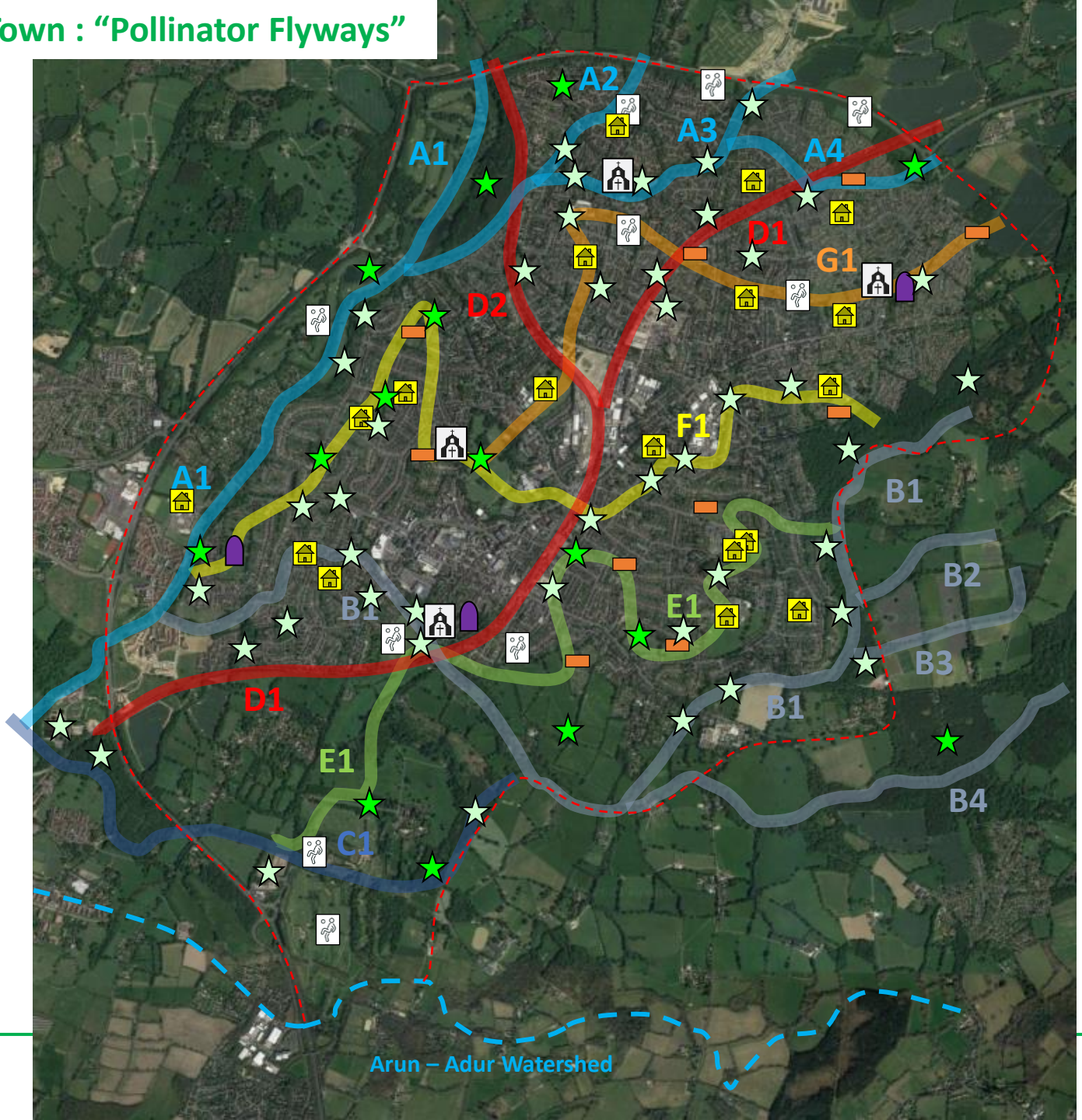
- **Why are we doing this ?**
- **Different Habitat Mapping Systems**
- **Equipment**
- **Preparing the Base Map**
- **The Habitats for Phase 1 Mapping**

Break : 10hrs00

- **Fieldwork**

Finish : 12hrs30

Horsham Town : “Pollinator Flyways”

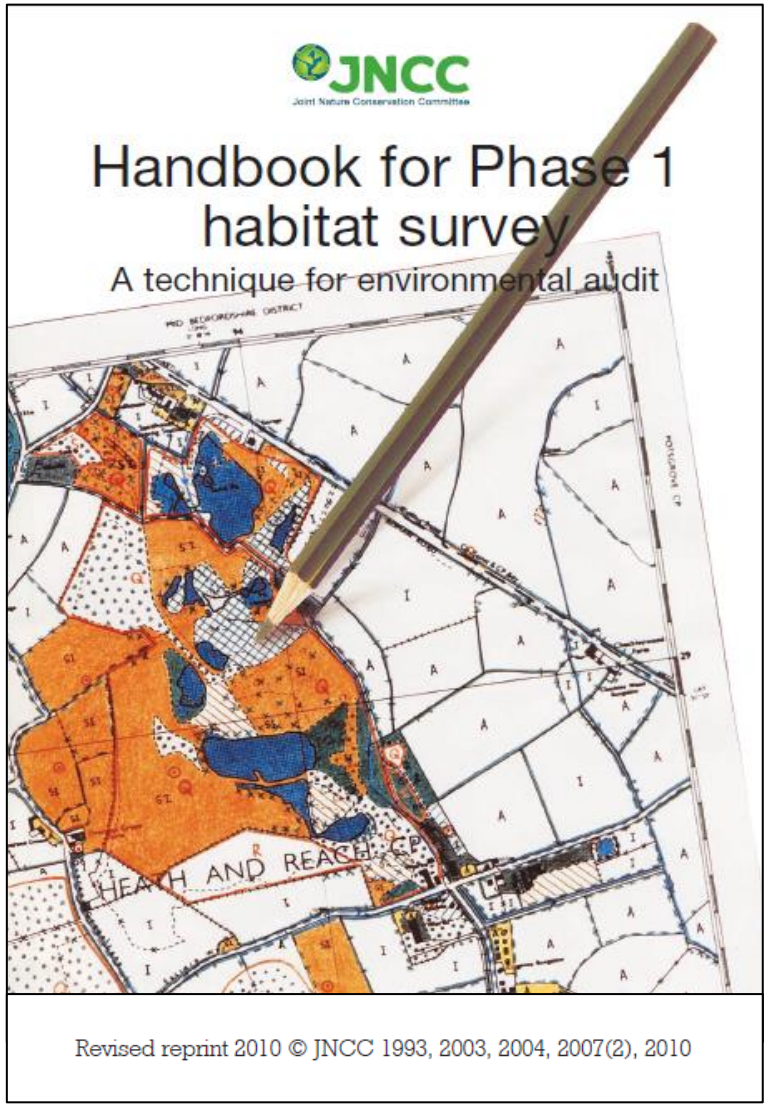


Horsham Green Spaces

- Allotments (10)
- Cemeteries (3)
- Churches (4)
- Schools (18)
- Sports Clubs (10)
- HGS (15)
- Other G.S. (44)

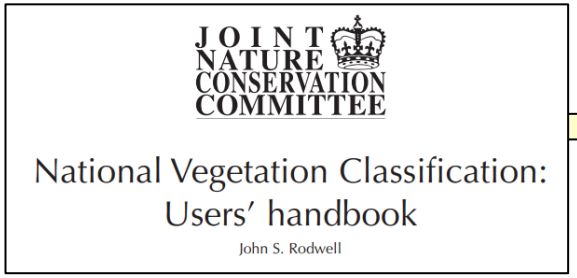
What Habitat Mapping System should I use ?

HGS Habitat Mapping : Many Different Systems Available



Analogue

Digital (QGIS)



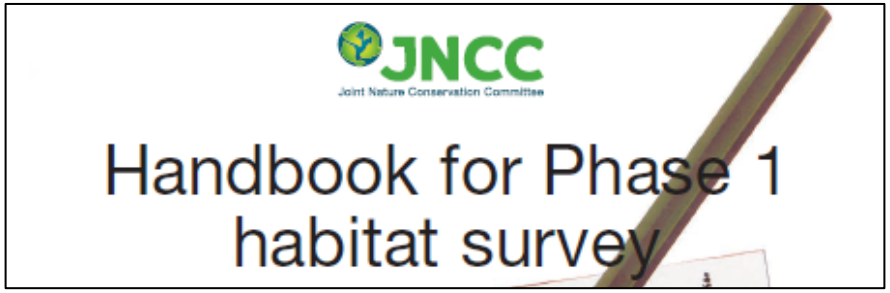
- Comprehensive classification & description of vegetation communities.
- Used by Nature Conservation Agencies for SSSI's etc

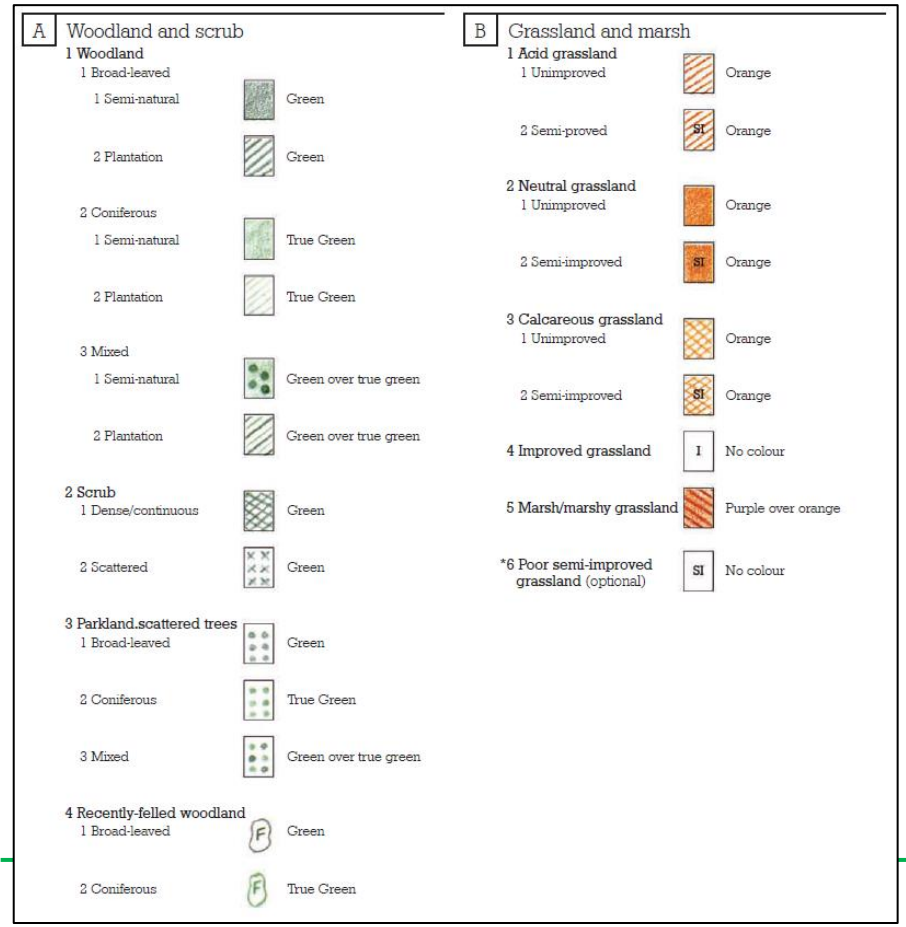
Many other systems focussed on more specific habitats

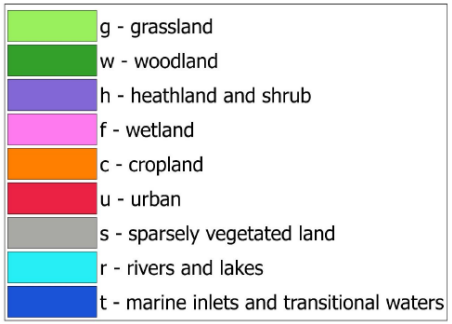
eg : River Habitat Surveying

Hedgerow Surveying….

JNCC Phase 1 Habitat Survey vs UKHab

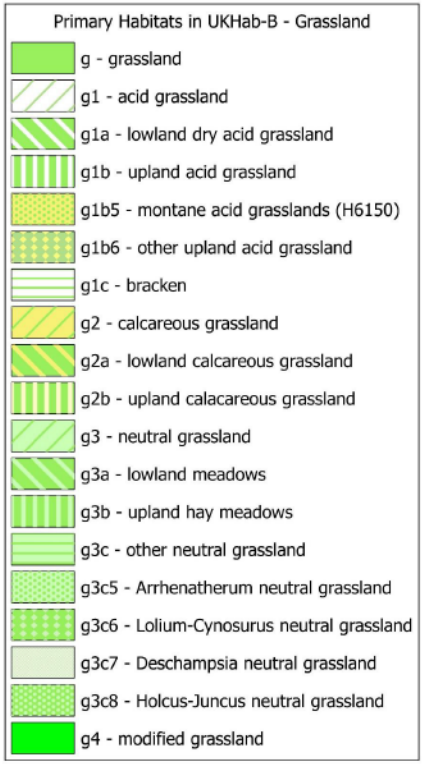




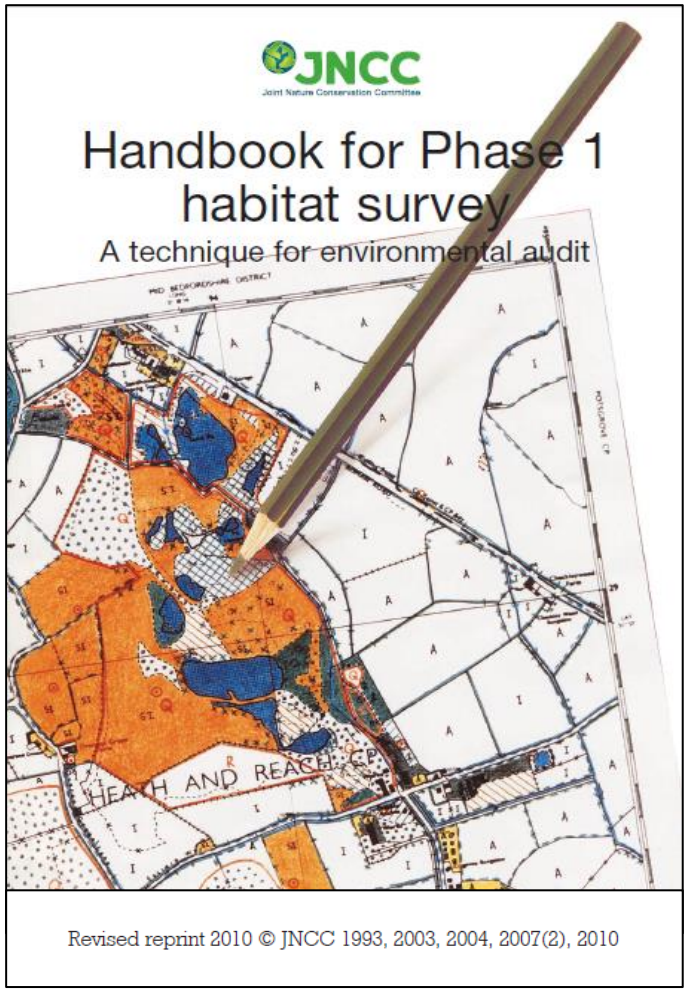


4 Levels of habitat identification :

- Level 1 : eg Grassland
- Level 2 : eg Acid Grassland
- Level 3 : Upland Calc. Grassland
- Level 4 : Holcus-Juncus Neutral Grassland



JNCC Phase 1 Habitat Survey



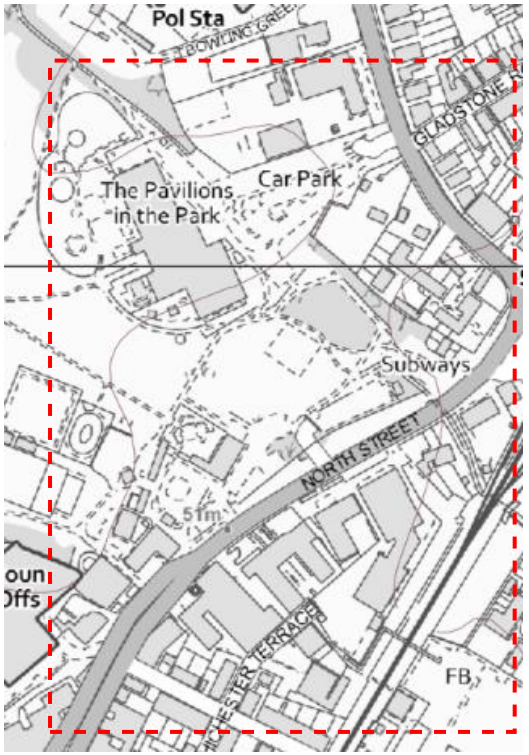
- Time estimate for fieldwork: **80 – 640 ha per day**
- Based on vegetation features
- Habitat maps using standard codes and colours
- **Additional information with target notes**

JNCC Handbook can be downloaded for free :

https://data.jncc.gov.uk/data/9578d07b-e018-4c66-9c1b-47110f14df2a/Handbook-Phase1-HabitatSurvey-Revised-2016.pdf

Or just google : Phase 1 Habitat Mapping

What do you need ?



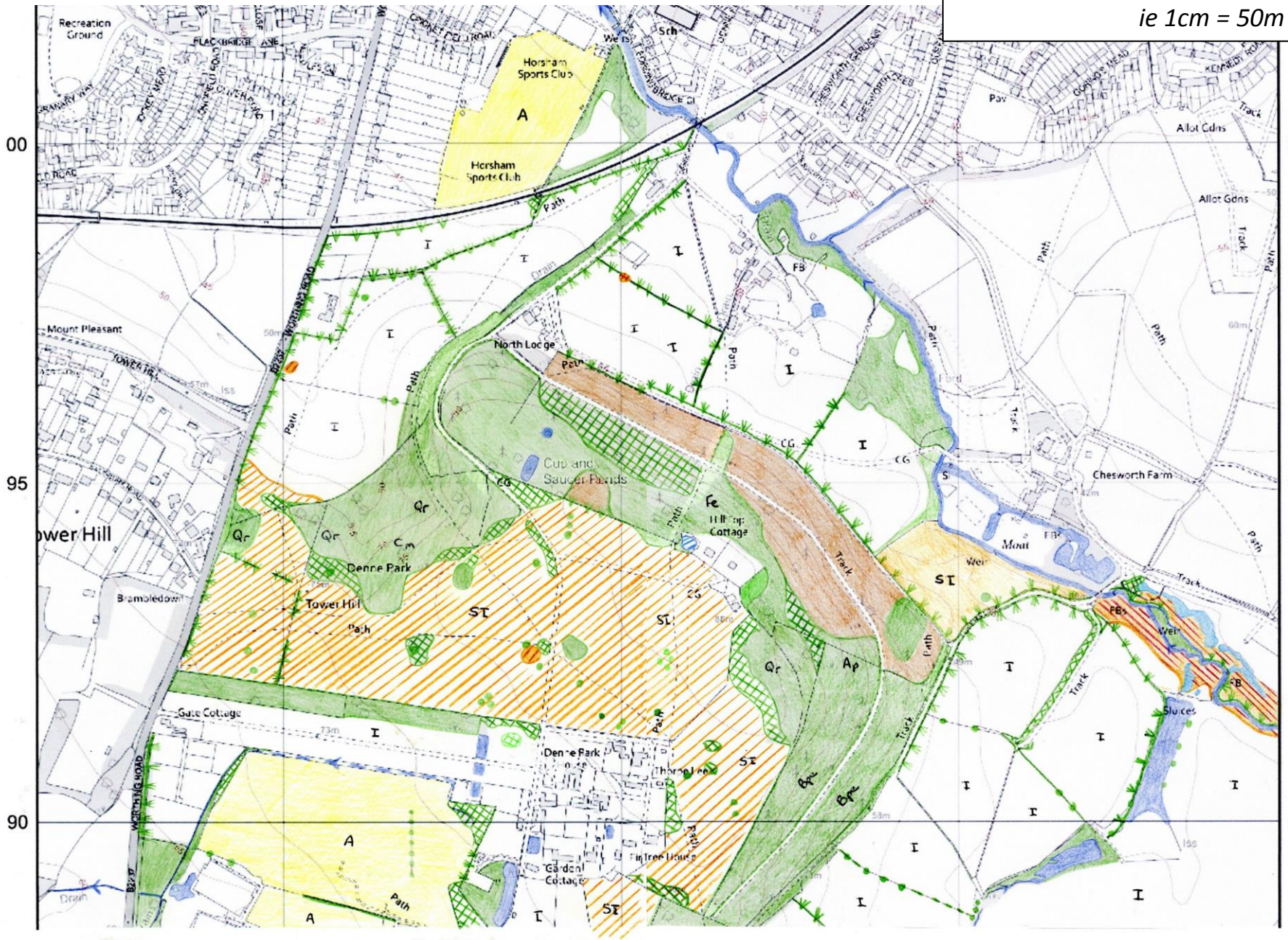
- Plant & tree identification guides : Book or App
- Permission from Landowner if working on Private Land

Preparing the Base Map

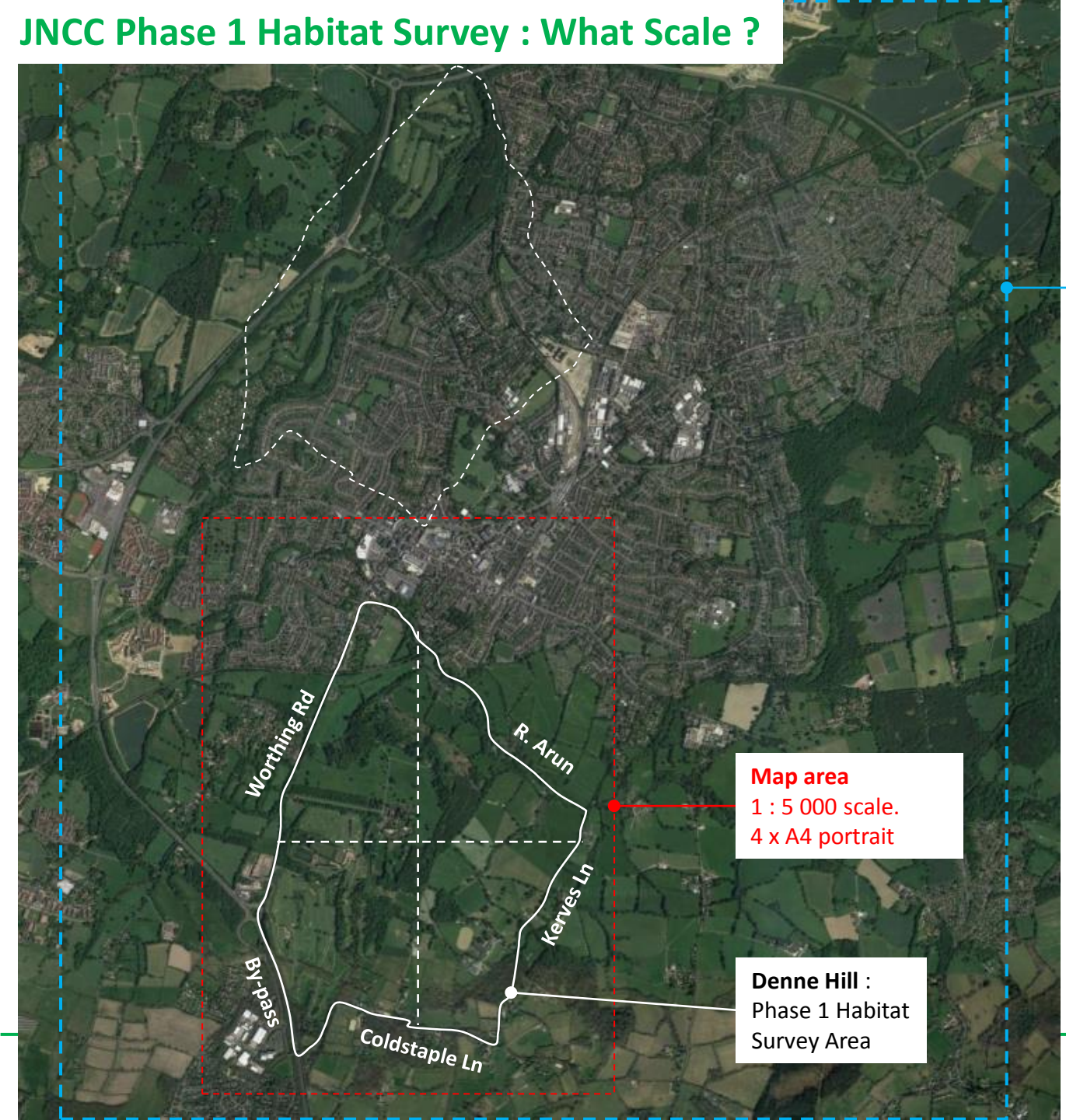
What Scale should I map at ?

JNCC Phase 1 Habitat Survey : Denne Hill - North

Mapped at : 1 : 5,000
ie 1cm = 50m



JNCC Phase 1 Habitat Survey : What Scale ?

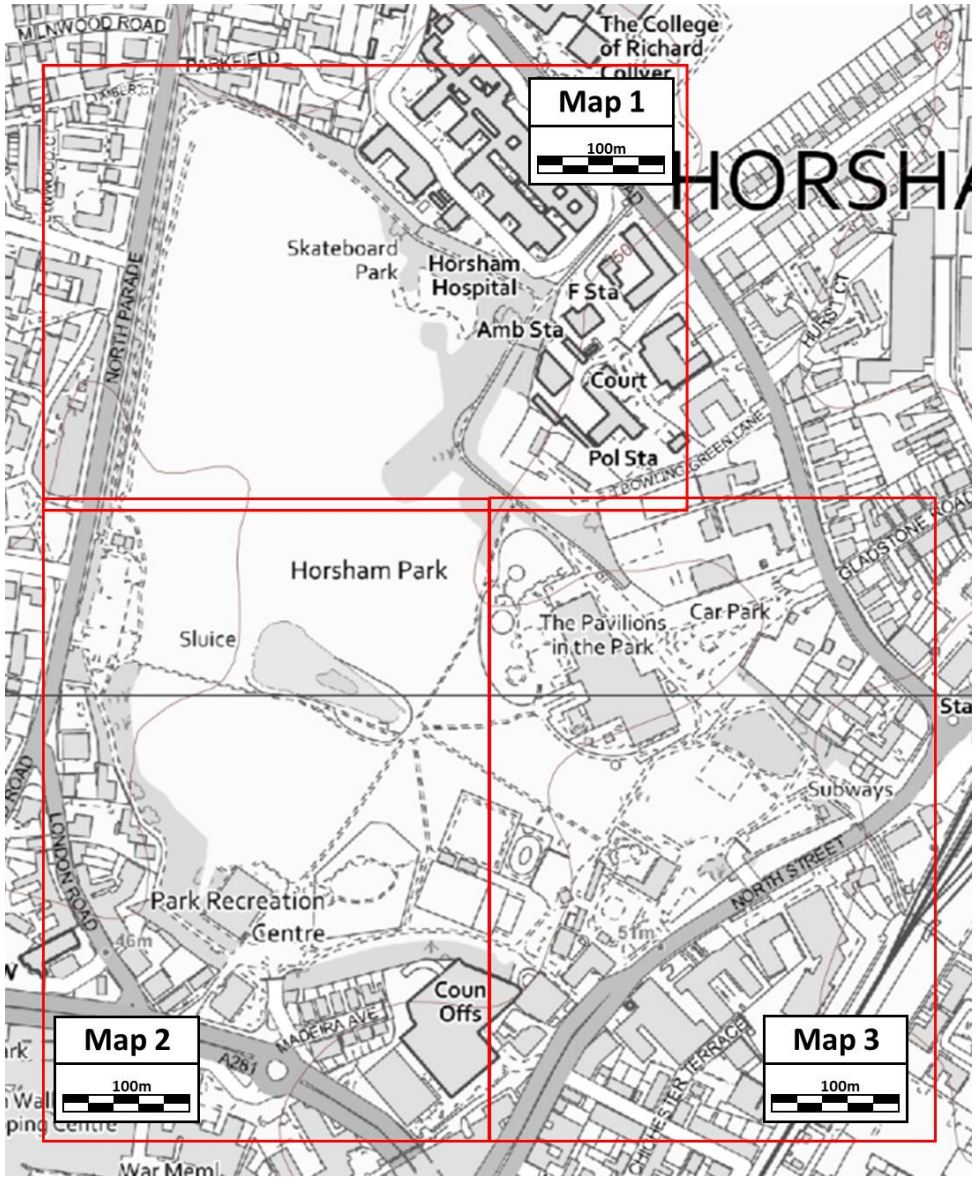


Horsham Town Map
1 : 10 000 scale.
JPEG A1 portrait

Map area
1 : 5 000 scale.
4 x A4 portrait

Denne Hill :
Phase 1 Habitat Survey Area

JNCC Phase 1 Habitat Survey : What Scale ?

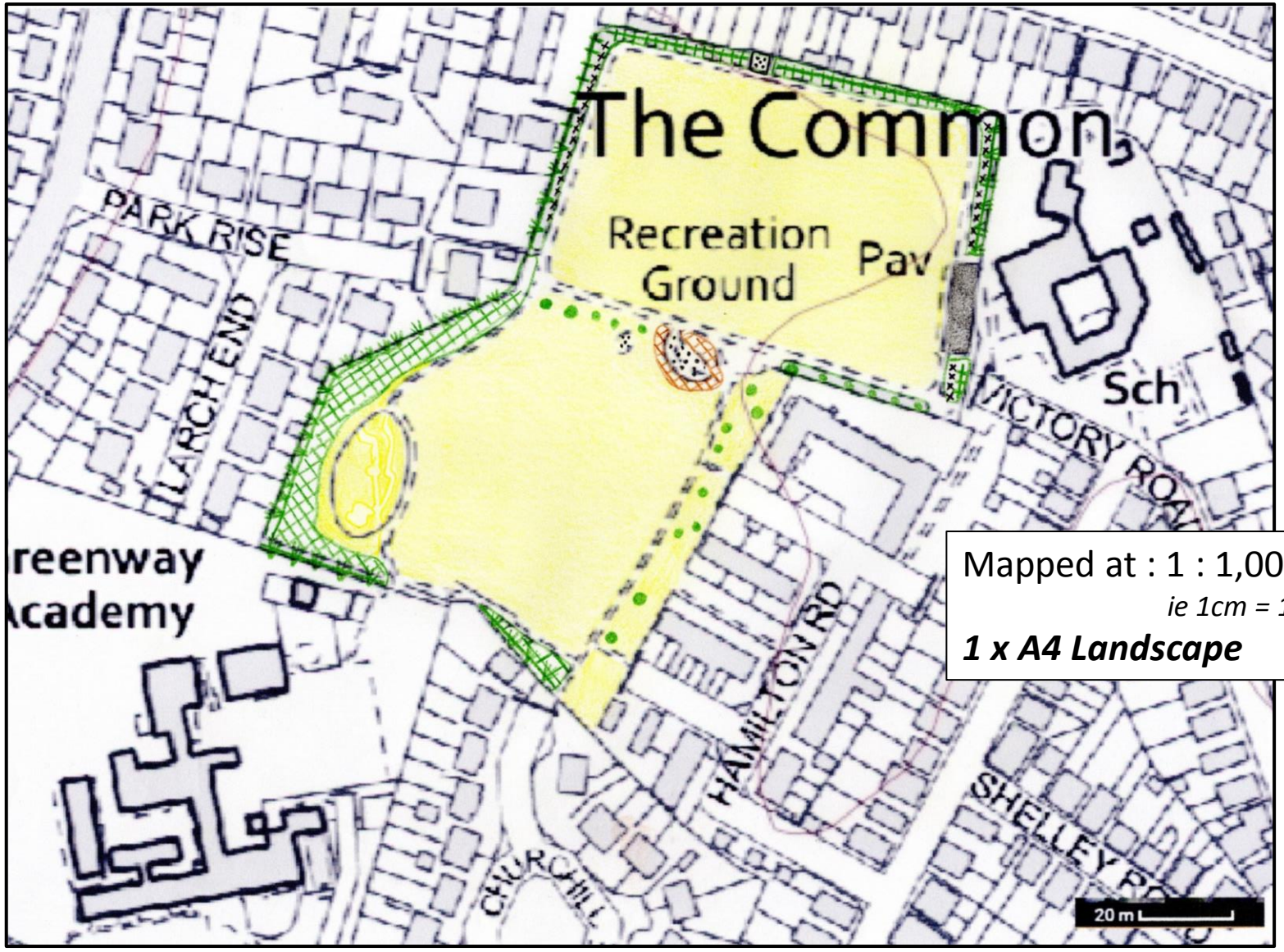


- Denne Hill Survey at 1 : 5,000
  ie 1cm = 50m
- For smaller Green Spaces better to work at a larger scale
  ie 1 : 2,500 (1cm = 25m)
  or 1 : 1,000 (1cm = 10m)
  or 1 : 500 (1cm = 5m)

Working at 1 : 2,000 scale
Ie 1cm = 20m

Horsham Park would require
3 x A4 pieces of paper

JNCC Phase 1 Habitat Survey : The Rec



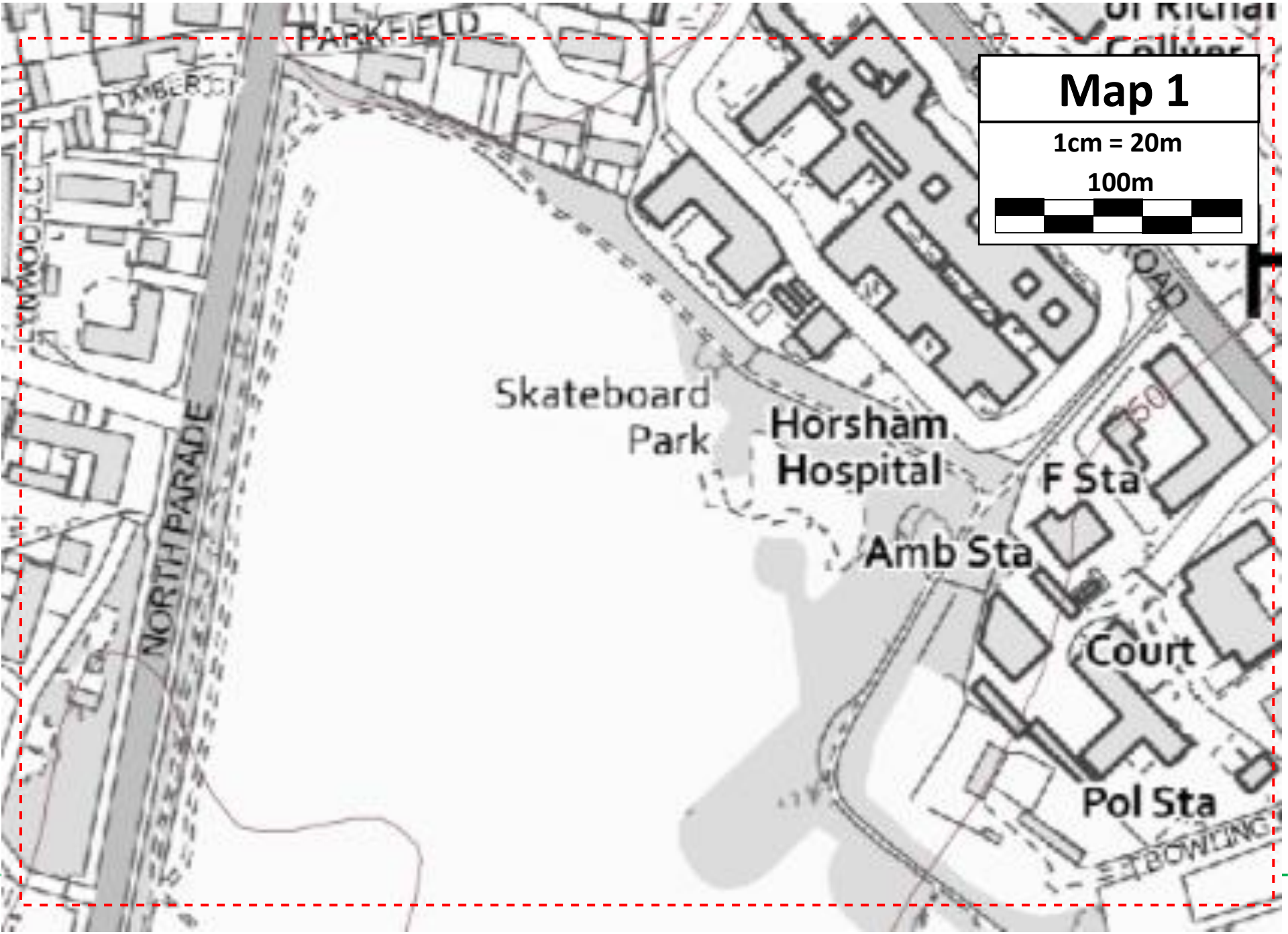
Mapped at : 1 : 1,000

ie 1cm = 10m

1 x A4 Landscape

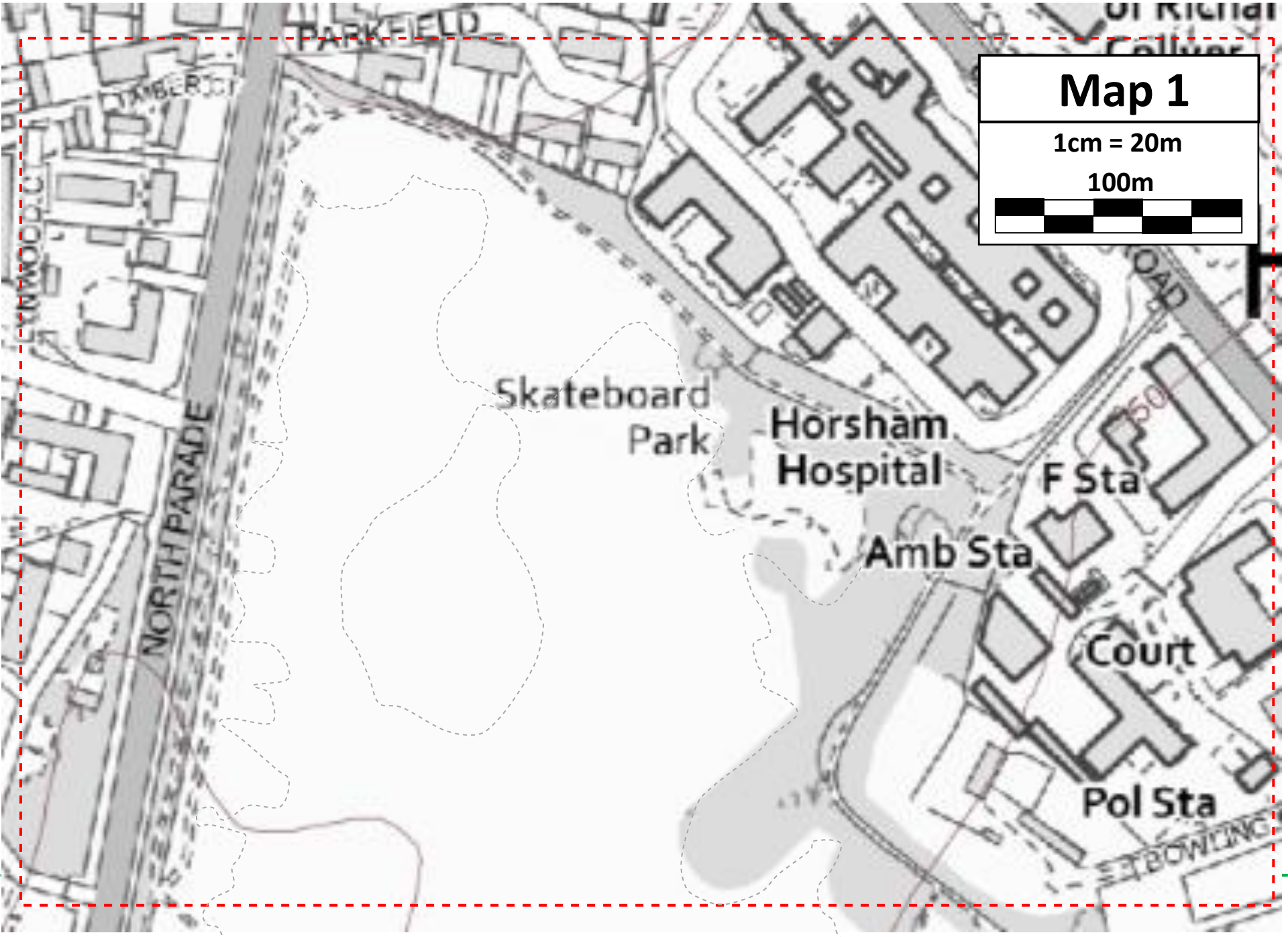
Preparing the Base Maps

Aerial view if possible


Map 1
1cm = 20m
100m
PARKFIELD
NORTH PARADE
Skateboard Park
Horsham Hospital
F Sta
Amb Sta
Court
Pol Sta

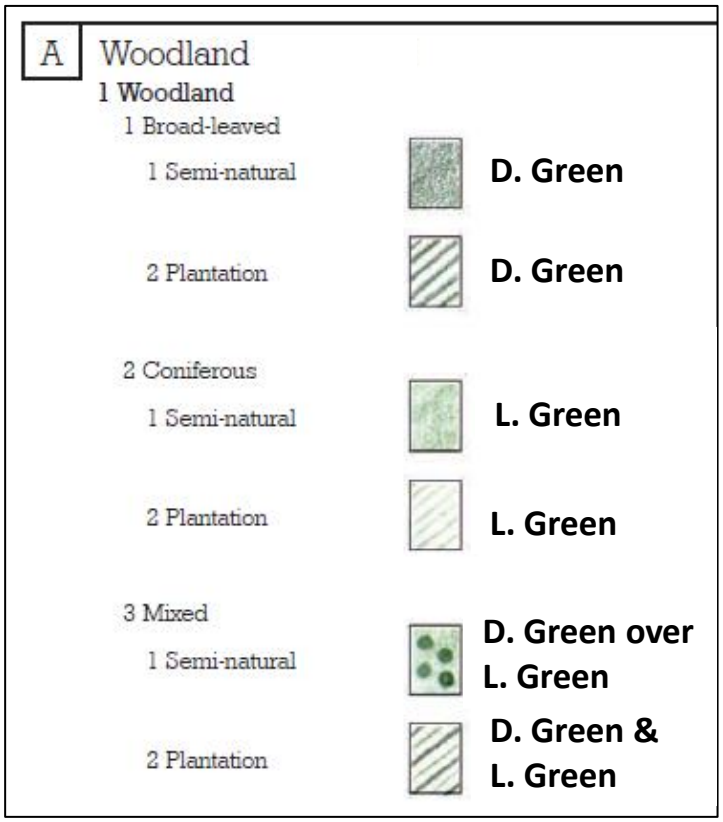

Map 1
1cm = 20m
100m


Map 1
1cm = 20m
100m


Map 1
1cm = 20m
100m
PARKFIELD
NORTH PARADE
Skateboard Park
Horsham Hospital
F Sta
Amb Sta
Court
Pol Sta

What are the Habitats that will be mapped ?

Phase 1 Habitats – A1 : Woodland



- Tree cover **>30% of area**
- Trees **>5m in height**
- Dominant Tree & Understorey species to be coded if possible
  - **Broadleaved** : **10%** or less conifer in canopy
  - **Coniferous** : **10%** or less broadleaved in canopy
  - **Mixed woodland** : **10-90%** of either broadleaved or conifer in the canopy.

    Target Note approx. Proportions.
    - **Semi-natural** : **<30%** of trees are planted
    - **Plantation** : **>30%** of trees are planted

- Tree cover **<30%** = Scattered trees (see below)

Phase 1 Habitats – A2 : Scrub

2 Scrub

1 Dense/continuous  **D. Green**

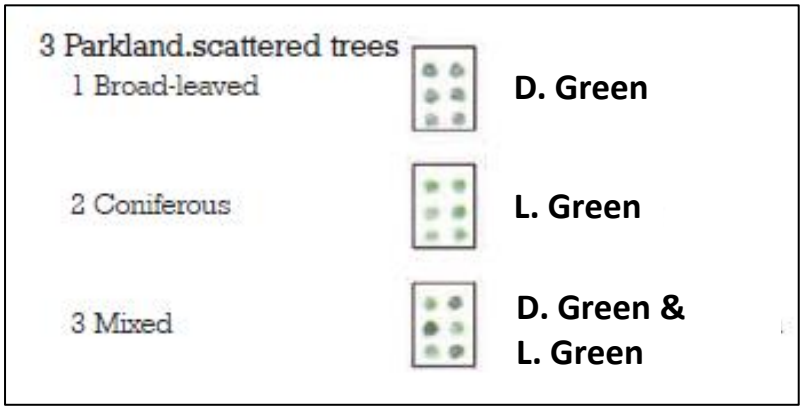
2 Scattered  **D. Green**

- Vegetation dominated by **Native Shrubs**, **< 5 m tall,**
- Occasionally with a few scattered trees.
- Code dominant species if possible.

- Should include : Bramble, Hawthorn, Blackthorn, Willow sp.

- Should not include : Hedges, Introduced Shrubs

Phase 1 Habitats – A3 : Parkland & Scattered Trees



- Tree cover **< 30%**
- Superimpose green dot over appropriate habitat colour eg semi-improved neutral grassland etc
- Green dot colour determined by :
  - **Broadleaved** : **10%** or less conifer
  - **Coniferous** : **10%** or less broadleaved
  - **Mixed woodland** : **10-90%**

Phase 1 Habitats – B : Grassland and Marsh

B	Grassland and marsh		
	1 Acid grassland		
	1 Unimproved		Orange
	2 Semi-proved	SI	Orange
	2 Neutral grassland		
	1 Unimproved		Orange
	2 Semi-improved	SI	Orange
	3 Calcareous grassland		
	1 Unimproved		Orange
	2 Semi-improved	SI	Orange
	4 Improved grassland	I	No Colour
	5 Marsh/marshy grassland		Purple over Orange
	*6 Poor semi-improved grassland (optional)	SI	No Colour

- **Improved** heavily dominated by a few "agricultural" grass species, very few wild flowers and regularly grazed and improved with fertilisers, herbicides etc

  Tends to be an homogenous green colour

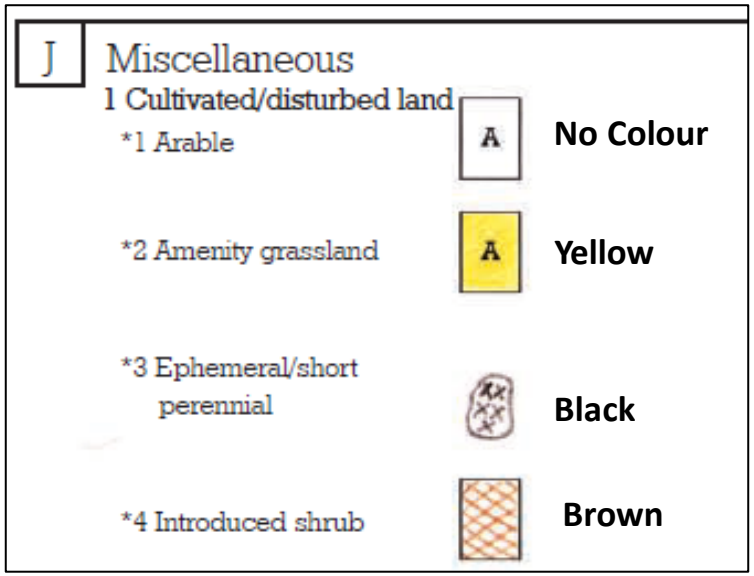
- **Semi-improved** = lots of wild flowers in the grass.

  Patchwork of different greens

- **Unimproved** doesn't exist in UK (apparently).
  - **Acid : pH <5.5**
  - **Neutral : pH 5.5 to 7.0**
  - **Calcareous : pH >7.0**

- **B5 Marsh / Marshy Grassland**
- Water table close to but below substratum most of the year

Phase 1 Habitats – J1 : Cultivated / Disturbed Land

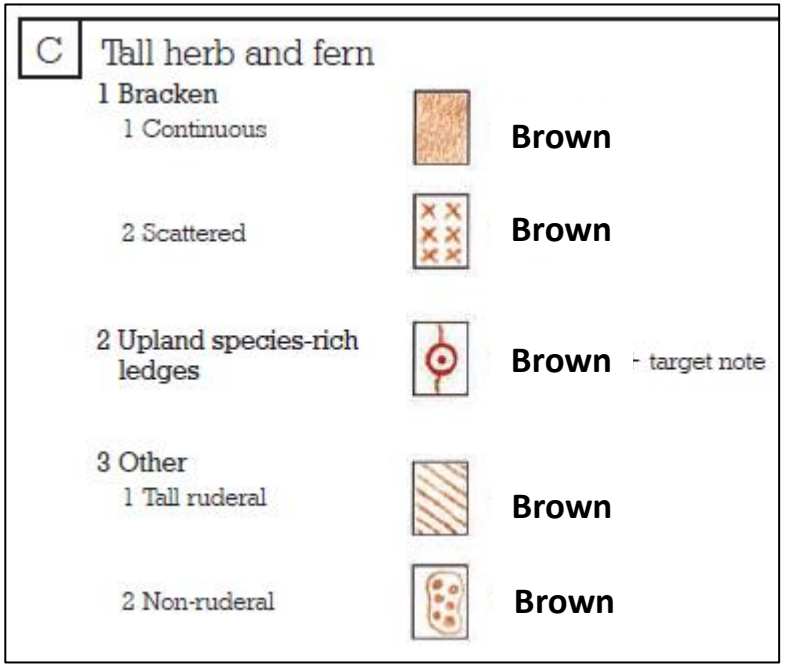


- **Arable :** cropland, nurseries, vegetable plots, flower beds
- **Amenity Grassland : Regularly mown -** Lawns, Playing Fields
- **Ephemeral/short perennial :** derelict urban areas
- **Introduced Shrub :** Non native introduced shrub

  Introduced shrub below woodland should be target noted.

  eg. Invasive Rhododendrons

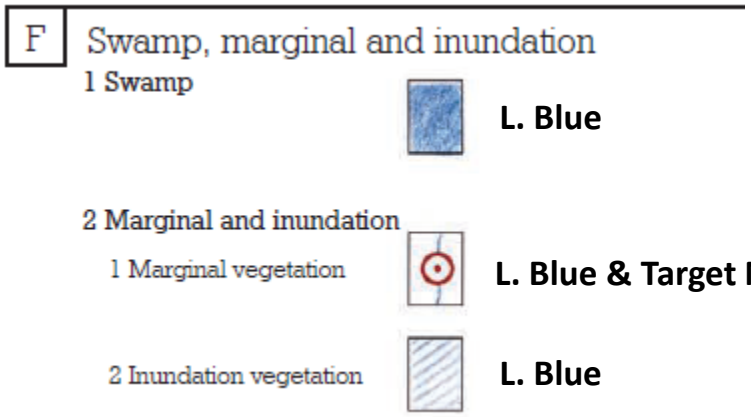
Phase 1 Habitats – C : Tall Herb & Fern



- **Bracken** Continuous or Scattered
- **Tall Ruderal :** tall (>25cm) perennial or biennial flowering plants :

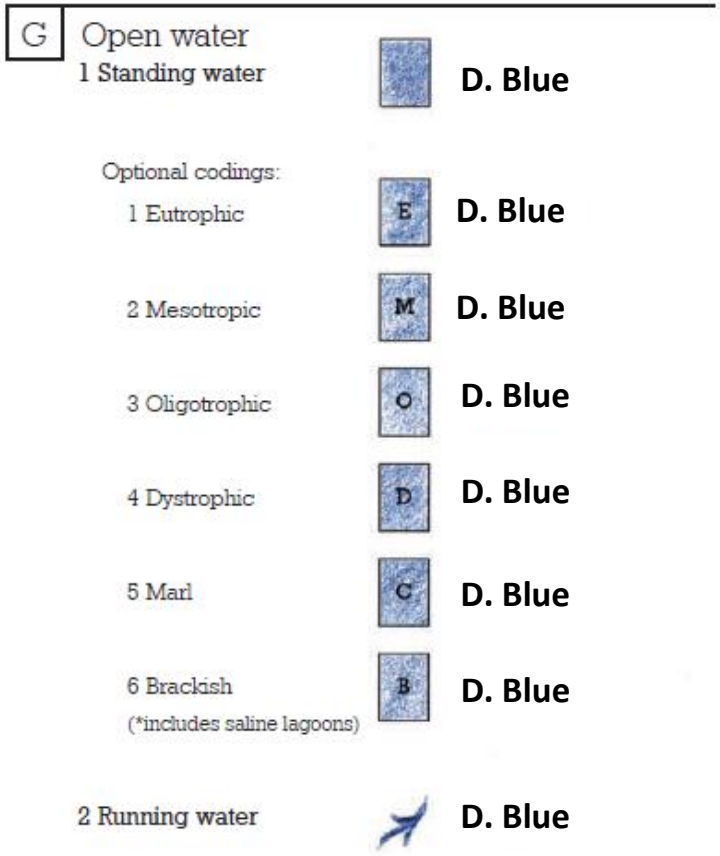
  eg : Nettle, Willowherb etc
- **Non-ruderal :** Ferns

Phase 1 Habitats – F : Swamp, Marginal and Inundation



- **Swamp :** Generally in standing water most of the year.
  - Tall emergent vegetation typical of transition zone between open water and land.
- **Marginal Vegetation** : Margins of lowland water courses. Usually **<5m** in width
- **Inundation Vegetation :** Unstable communities in areas of periodic flooding on pond, lake & river margins

Phase 1 Habitats – G : Open Water

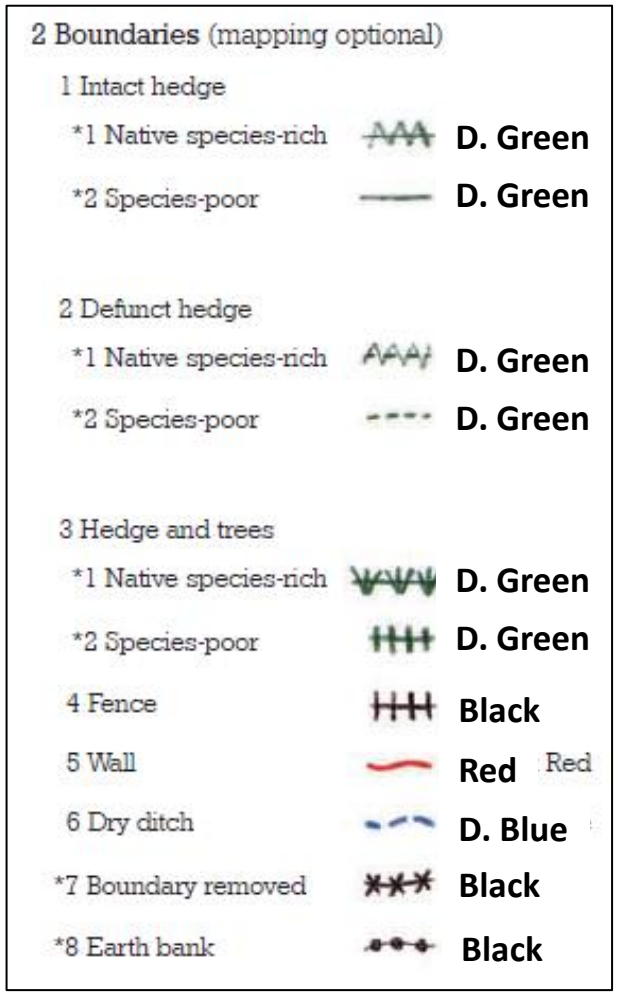


- Water beyond the limits of swamp or emergent vegetation but may have free floating or floating leaved vegetation.

- **Standing Water** - Ponds, Lakes etc
  - **Eutrophic** : pH usually >7, strongly discoloured with algae
  - **Mesotrophic** : pH neutral, some algae discolouration
  - **Oligotrophic** : pH <7, usually clear
  - **Dystrophic** : peat stained, pH v low (3-5 – 5-5)

- **Running Water** – streams, rivers etc

Phase 1 Habitats – J2 : Boundaries



- Only concentrate on boundaries with habitats
- **Intact Hedge** – dense enough to be stock proof
  - **Native Species rich -** diversity of native woody species and a good hedgerow bottom flora.
  - **Species Poor**
- **Defunct Hedge** – A hedge with gaps
- **Hedgerow with Trees** – frequency of cross hatching to reflect density of trees.
- **Dry Ditch** – dry most of the year
- **Earth Bank** -
- **Fence, Wall etc** – Only map those supporting habitats

Phase 1 Habitats – J3 : Built-up Areas

3 Built-up areas		
4 Caravan site		**Black**
*5 Sea wall (artificial material)		**Black**
*6 Buildings		**Black**
4 Bare ground		**Black**
5 Other habitat		**Black & Target Note**

- All pretty Self Explanatory
- **Target Note** – Very Important and is the connection between your map and your notebook.
- Phase 1 system uses **abbreviations from latin names.** Appendix 3 in JNCC handbook.

Phase 1 Habitats – Others

- Heathland
- Coastline
- Mire
- Rock Exposure & Waste

Phase 1 Habitats – End Result

Any Questions ?

Fieldwork