

Farmer ID:

Surveyor:

Total Score

Plot number:

Survey date:

(A+B+C)

/100

Do we need to ask these questions as this will be decided in the app?

If yes, describe river/stream flow: Low Normal Above normal

Is the river/stream fenced? Y/N What is the average width of the fencing?

(m)

A Ecological integrity

Total Score A (sum of A1 to A5):

/50

A1 What is the number of **positive indicators** in the plot? Tick all positive indicators below.

Note all positive indicators present as you walk a 'W' through the plot.

* Refers to wetland indicator species (see B1 overleaf)

Low: 0-4 **0** Moderate: 5-8 **3** High: 9+ **5**

Positive indicators:

(tick those present)

- Bedstraws & stitchworts
- Birdsfoot trefoil
- Devil's bit scabious
- Eyebrights
- Forget-me-nots
- Heathers/Ling
- Knapweeds (Common & Greater)
- Lady's mantle

- Lady's smock (Cuckooflower)
- Lesser spearwort
- Louseworts (Common & Greater)
- Marsh cinquefoil
- Marsh marigold
- Marsh pennywort
- Marsh thistle or Meadow thistle
- Meadowsweet

- Mints (all species) or Purple loosestrife
- Orchids (all species)
- Oxeye daisy
- Ragged robin
- Sedges
- Self-heal or Bugle
- Sphagnum & Branched mosses
- Sorrel (Sheep & Common)
- Small rushes (Woodrush, Spike rush, Heath rush)

- Tormentil (Common & English)
- Umbels large (Angelica, Valerian, Hogweed)
- Umbels small (Pignut, Yarrow, Wild carrot)
- Vetches & vetchlings
- Violets (all species), Harebell
- Yellow composites (Cat's ear, Hawkweeds, Hawkbits & Goat's beard) - not Dandelion
- Yellow flag iris
- Yellow rattle (Hay rattle)

A2 What is the combined **cover of all positive indicators** (listed above) throughout the plot? Cover is the proportion of the field taken up by all positive indicators present.

Low: Only a couple of individual plants present or you can take several steps without encountering any positive indicators at all.	0
Moderate: Positive indicators occur every few steps.	5
High: You encounter a positive indicators with every step taken.	10

A3 Vegetation Structure. Note: If grassland is primarily grazed use A3(a); OR, if grassland is cut for hay or silage, use A3(b). Refer to the guidance for sward quality details

A3(a) What is the **vegetation structure in grasslands** that are **PRIMARILY GRAZED**?

Over-grazed: Sward short throughout grazeable area with little variation in height of vegetation. >75% very short. Few flowering plants.	-10
Moderate (over-grazed): Mostly short vegetation. 25-50% of field has short sward with occasional to frequent intermediate patches.	5
Good: >50% of field with sward having variety of taller and/or shorter sward with medium height sward throughout with positive indicators flowering.	15
Moderate (under-grazed): 25-50% of field has tall sward. Litter and dead vegetation occurring. Grazing largely confined to a few easily accessible, palatable areas.	7
Under-grazed: Rank vegetation across much of the site, litter accumulating, scrub encroaching.	-5

OR

A3(b) What is the **vegetation structure in grasslands** that are **PRIMARILY CUT FOR HAY or SILAGE**

Poor structure: No field margins present. Field topped right up to the field boundary line. No aftermath grazing. Little or no variation in sward height.	-5
Moderate structure: Narrow field margins present (~1m). Low number of flowering plants and vegetation structure within the field margin is poor to moderate. Some aftermath grazing providing some structural variation..	7
Good structure: Wide field margins present (2m+) and or good headlands. Aftermath grazing takes place providing variations in height of sward; sward does not look uniform in appearance.	15

A4 Riverside Habitat

Is the gradient of the bank visible and is there trees, shrubs or dry herbs visible with less sedges/reeds present? **Go to A4a**

Is the riverside habitat waterlogged underfoot with no clear bank edge and tall herbs/large sedges/reeds dominating with a very gradual gradient towards the river? **Go to A4b**

A4a – Non-swamp dominant riverside habitat

A4a1 How **continuous** are the riverside trees?

Assess bank face and bank top along water's edge (see guidance).

Non-native invasive species to be excluded from assessment.

Poor: Trees absent or largely absent (occasional isolated tree).	0
Moderate: Trees present but scattered along riverside with large gaps/breaks between either isolated trees or occasional clumps of trees.	5
Good: Trees occurring as frequent clumps with large gaps/breaks present.	10
Very good: Trees either (a) semi-continuous along riverside but some gaps/breaks OR (b) continuous along riverside with few gaps/breaks.	15

A4a2 Is there **overhanging or in-stream woody vegetation** along channel margin?

Assess bank face along water's edge (see guidance).

Poor: Overhanging or in-stream woody vegetation absent or largely absent along channel margin AND/OR evidence of recent cutting/removal	0
Moderate: Scattered overhanging or in-stream woody vegetation along channel margin AND/OR evidence of historic vegetation cutting/removal but now showing evidence of regrowth.	2
Good: Frequent overhanging or in-stream woody vegetation along channel margin.	5

A4b – Swamp dominant riverside habitat

Poor: A small section (3m or less depth) of species poor reed/tall sedge habitat, or herb community that is single species dominated. Open in sections. Little to no shading provided.	0
Moderate: Tall wet flora community with reeds and may have some wet tree species such as Alder, Willow and Pedunculate Oak. Not highly variable in species composition but still mostly continuous and provides some shelter and shading along riverside.	10
Good: Tall and diverse reed/sedge habitat that is deep (5m+) and without gaps, provides refuge for birds and fish, provides shading and is continuous along the riverside. OR the area is dominated by species-rich stands of tall and robust herbaceous vegetation with an understory of smaller wetland plants. Wet tree species such as Alder, Willow and Pedunculate Oak may be present.	20

B Hydrological integrity (carbon capture)

Total Score B (sum of B1 to B4): / 50

B1 What **surface artificial drainage features** are present within the plot? Assess the **WORST 30 m of drain in the plot**

Only assess artificial drains and heavily modified watercourses, ignore unmapped natural streams, see guidance.

Functional: Drains predominantly free flowing (though may be dry at the time of survey), largely unvegetated and unblocked.	-20
Part functional: Drains present but flow is partially impeded (by vegetation etc.).	10
Non-functional: Drains absent or present but non-functioning. No flow, highly vegetated and/or dammed.	25

B2 To what extent are there any **subsurface drainage** features within the plot?

Present and functional	-30
Absent or present but non-functioning	0

B3 What is the **water table level** in the drain?

Only assess artificial drains and heavily modified watercourses, ignore unmapped natural streams, see guidance.

The assessment of effect of drain on field gets more weighting. Unaltered, natural streams should not be assessed.

Low: Water level typically > 1m below drain surface. Drains having significant effect on water-table of field.	-15
Moderate: Water level typically <1m but ≥40cm below drain surface. Drains having a moderate effect on water-table of field.	0
High: Water level typically <40cm below surface of drain. Assume highest water-table if no drains present. Drains having minor to no effect on water-table of field.	20

B4 Floodplain connectivity?

Assess the 20 m from top of riverbank or water's edge (see guidance).

Low: River is artificially constrained to channel, Riverside soils dry/firm underfoot. No evidence that the soil is saturated for all/part of the year. River restricted to single flow direction through embankments and/or bankside protection.	0
Medium: The river has been allowed to move outside its channel, with some bank topping, natural deposition and erosion (not severe). Water-logged (surface moist/fluid underfoot) riverside soils occasionally observed. There may be some bankside protection but no significant hard measures such as riprap and/or concrete. If embankments are away from the river edge (+10m) and allow the river to top its natural bank.	3
High: Water-logged (surface moist/fluid underfoot) riverside soils frequently observed. The river has never been artificially disconnected from floodplain, or has had its connectivity fully restored. The only bankside protection permitted is soft revetments such as willow and/or tree planting which have been installed as part of a river restoration project.	5

C Threats & pressures **Total Score C** (sum of C1 to C9*):

C1 Is there any **evidence of damaging activities** to habitat or vegetation throughout the plot?

High: Damage occurring across a large area (≥21%) or of a serious nature if confined	-30
Moderate: Damage occurring across a moderate area (≥6-20%) or of a moderate nature if confined.	-20
Low: Damage occurring across a small area (≤5%) or of a minor nature if confined.	-10
None: No damaging activities.	0

Damaging activities:

(tick relevant and describe in comments)

- Damage from supplementary feeding
- Inappropriate herbicide use
- Quarrying
- Burning

- Dumping/rubbish
- Removal of mature scrub/trees
- Other (please specify)

C2 What is the extent of **bare soil & erosion** throughout the plot?

High: Excessive areas of bare soil within the body of the field. Bare soil may also be extending out significantly from the main feed sites and/or water troughs and/or livestock access points, where poaching evident. Significant rutting and soil disturbance caused by vehicle/tractor access.	-30
Moderate: Bare soil mainly along regularly used stock routes or congregation areas, with minor soil loss occurring at a few points. Bare soil may extend a short distance beyond the main feed site and/or water points and/or livestock access points. Minor rutting and soil disturbance caused by occasional vehicle/tractor access may be present.	-10
Low: Bare soil more or less restricted to regular stock paths, 'pinch' points & small congregation areas. No soil loss.	0

C3 What is the cover of **non-native invasive species** throughout the plot?

High: Abundant. Some forming dense clumps, many seedlings.	-20
Moderate: Frequent. Some flowering, many seedlings present.	-10
Low: Scattered. Plants mostly small and not flowering.	-5
None: No non-native invasive species present.	0

Non-native invasive species: (tick if present)

- Giant hogweed
- Giant rhubarb
- Himalayan balsam
- Himalayan honeysuckle
- Himalayan knotweed

- Japanese knotweed
- Montbretia
- Rhododendron
- Self-sown conifers
- Other (please specify):

C4 What is the cover of **bracken** throughout the plot?

High: Very dense stands of bracken covering over half or more of the field, forming closed canopy.	-10
Moderate: Bracken forming dense stands covering parts of the field, mostly forming closed canopy.	-5
Low: Bracken absent or some scattered fronds and none forming closed canopy. Can include some isolated small patches or some larger patches on steep slopes.	0

C5 What is the extent of **livestock access to the watercourse?**

Assess the 20 m from top of riverbank or water's edge (see guidance).

Extensive access: Grazing occurs right up to watercourse and there is constant access to the river for drinking	-15
Limited access: Access is limited to short periods of the year, or the watercourse is mainly inaccessible due to the presence of thick vegetation, however there is still a possibility of livestock accessing the river.	-7
No access: The river or the riverside habitat is fenced and/or there is no possibility for livestock to access the watercourse	0

C6 How **stable** is the riverbank?

Assess bank face (see guidance).

Poor: Bank unstable of loose soil, which is easily disturbed. Significant areas of banks cut away, undercut or showing erosion scars.	-10
Moderate: Bank moderately stable (not easily disturbed). Infrequent small areas of erosion mostly healed over.	-5
Good: Bank largely stable, held firmly by grasses, shrubs and tree roots.	0

C7 What is the cover of **non-native invasive species** along the riverside habitat? (tick if present) Assess the 20 m from top of riverbank or water's edge (see guidance).

High: Abundant. Some forming dense clumps, many seedlings	-30
Moderate: Frequent. Some flowering, many seedlings present	-20
Low: Scattered. Plants mostly small and not flowering	-10
None: No non-native invasive species present	0

Non-native invasive species: (tick if present)

- Giant hogweed
- Giant rhubarb
- Himalayan balsam
- Himalayan honeysuckle
- Himalayan knotweed
- Japanese knotweed
- Montbretia
- Rhododendron
- Self-sown conifers
- Other (please specify):

C8 Is there any evidence of **damaging activities/ bare soil** along the riverside habitat?

Assess the 20 m from top of riverbank or water's edge (see guidance).

High: Damage/bare soil occurring across a large area ($\geq 21\%$) or of a serious nature if confined.	-30
Moderate: Damage/bare soil occurring across a moderate area ($\geq 6-20\%$) or of a moderate nature if confined.	-20
Low: Damage/ bare soil occurring. across a small area ($\leq 5\%$) or of a minor nature if confined.	-10
None: No damaging activities.	0

Damaging activities:

(tick relevant and describe in comments)

- Livestock poaching/dung
- Rutting/soil disturbance due to machinery
- Inappropriate herbicide/pesticide use
- Dumping/rubbish
- Flailing/cutting/removal of riverside vegetation
- Burning
- Other (describe in comments)

C9 What is the extent of **gorse** along the riverside habitat? (refer to Project team if 'high')

Assess the 20 m from top of riverbank or water's edge (see guidance).

High: Gorse dominating throughout the plot ($>75\%$ cover).	<input type="checkbox"/>
Moderate: Gorse occurs frequently throughout the plot (25–50% cover).	<input type="checkbox"/>
Low: Scattered presence or no gorse present ($<25\%$ cover).	<input type="checkbox"/>

Common management recommendations:

- Continue current management of this high-quality grassland.
- Control the occurrence and spread of invasive species, encroaching bracken and/or scrub.
- Consider tree planting
- Control reducing fertiliser inputs.
- Consider using supporting actions of slow or impede the flow of drains.
- Consider raising water table to restore peat soil; supporting actions available.
- Improve stock management. e.g. Fencing/drinking facilities
- Move feeders/troughs regularly and keep away from drains and rivers.
- No management advice
- Other (see comments box)

Management recommendation(s):