

Farmer ID:	Surveyor:	Total Score (A+B+C) /100
Plot number:	Survey date:	

Describe river/stream flow: Low Normal Above normal

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

A Ecological integrity	Total Score A (sum of A1 to A3): /65
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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.

Low: 0-2	0	Moderate: 3-5	2	High: 6+	5
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Positive indicators:
(tick those present)

- Moss layer:**
- Branched mosses
 - Non-crustose bushy lichens
 - Sphagnum mosses
 - Liverworts

- Shrub layer:**
- Bell Heather
 - Cross-leaved heath
 - Ling heather
 - Bilberry
 - Bog myrtle
 - Western gorse

Grass/herb layer:

- Bog asphodel
- Bog bean
- Bog cotton
- Lousewort
- Sundews
- White-beaked sedge
- Black bog rush

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

Low: <10% cover across the plot.	0
Moderate: 10-30% cover across the plot.	10
High: >30% cover across the plot.	15

A3 What is the **vegetation structure**?

Overgrazed: Vegetation height is uniformly low. Little or no heather present on wet heaths. Often lacking moss and dwarf shrub layer.	-15
Moderate (over-grazed): Significant areas (>25%) of the plot have low uniform vegetation, although not throughout.	5
Good: Sward in good condition; abundant grass and sedge-like vegetation on blanket bog with hummock, hollow, and pool complexes. On heath, all stages of heather/shrub growth present, mostly >30cm. Mix of bog and/or heath vegetation at various heights throughout. Well-structured vegetation with all three layers (moss, sedge/herb, and shrub) well represented.	25
Moderate (under-grazed): Significant areas (>25%) of the plot have rank vegetation although not throughout.	10
Under-grazed: Rank sward. Purple moor-grass/mat-grass and rank senescent heather dominating. Litter cover high, thatch forming in large continuous patches. Poorly developed ground layer.	-5

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. For upland sites, there must be some presence of thick vegetation/scrub, however trees may be absent.	5
Good: Trees occurring as frequent clumps with large gaps/breaks present. For upland sites, trees are present but there is little recruitment	10
Very good: Trees either (a) semi-continuous along riverside but some gaps/breaks OR (b) continuous along riverside with few gaps/breaks. For upland sites, trees may be less frequent but must still be present in clumps, with recruitment occurring.	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

Total Score B: /35

B1 Surface hydrology and artificial drainage features present within the plot? Assess disturbance, artificial drains and heavily modified watercourses, ignore unmapped natural streams and flushes, see guidance.

Significantly altered bog/heath hydrology: Frequent widespread free-flowing drains on plot with notable effect on surrounding vegetation of bog/heath. >20% of plot affected.	-30
Moderately altered bog/heath hydrology: Free flowing drains in plot with notable effect on surrounding vegetation of bog/heath. <20% of plot affected.	-15
Slightly altered bog/heath hydrology: Drains present in plot although are somewhat impeded and little effect on surrounding bog/heath.	0
Moderately intact bog/heath hydrology: Bog/heath surface largely intact, although some evidence of historic disturbance (cutting, drainage, erosion channels) across any part of plot. Vegetation and hydrology largely recovered/stabilised.	15
Intact bog/heath hydrology: Intact bog/heath surface, no evidence of past drainage or disturbance across plot.	35

C Threats & pressures

Total Score C (sum of C1 to C11):

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

(excluding 20 m adjacent to any watercourse)

High: Damage occurring across a large area ($\geq 21\%$) or of a serious nature if confined	-30
Moderate: Damage occurring across a moderate area ($\geq 6-20\%$) or of a moderate nature if confined.	-20
Low: Damage 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)

- 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.	-20
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

C3a Are **non-native invasive species** present?

Present:	-10	Absent:	0
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C3b What is the cover of **non-native invasive species** throughout the plot?

(excluding 20 m adjacent to any watercourse)

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 or < 5 self-sown conifers	0

Non-native invasive species:

(tick if present)

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

C4 Is there any evidence of **damage due to turbarry activity**?

High: Active peat cutting and associated works >10% of the field affected. High proportion of bare peat due to peat extraction. Sausage machine cutting taking place in any part of the field (regardless of the extent).	-30
Moderate: Active peat cutting (mechanical cutting from face-bank, hand cutting, milling etc.) and associated works <10% of the field affected.	-10
Low: No evidence of peat cutting during the most recent season.	0

C5 What is the extent of **spreading immature scrub**? (refer to Project team if 'moderate' or 'high')

High: Gorse-dominated scrub occurring throughout the site or concentrated in large areas.	<input type="checkbox"/>
Moderate: Small areas of gorse-dominated scrub occur occasionally throughout the site.	<input type="checkbox"/>
Low: Little or no scrub present.	<input type="checkbox"/>

C6 What is the cover of **bracken**? (refer to Project team if 'moderate' or 'high')

High: Very dense stands of bracken covering over half or more of the plot, forming closed canopy.	<input type="checkbox"/>
Moderate: Bracken forming dense stands covering parts of the plot, mostly forming closed canopy.	<input type="checkbox"/>
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.	<input type="checkbox"/>

C7 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

C8 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

C9 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)

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

C10 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 (≥21%) or of a serious nature if confined.	-30
Moderate: Damage/bare soil occurring across a moderate area (≥6-20%) or of a moderate nature if confined.	-20
Low: Damage/ bare soil 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)

- 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)

C11 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 peatland.
- Control the occurrence and spread of invasive species.
- Control the occurrence and spread of encroaching scrub/bracken.
- Consider using supporting actions of slow or impede the flow of drains.
- Move feeders/troughs regularly, and keep away from drains and rivers.
- Consider raising water table to restore peatland; supporting actions available.
- Use stock to graze field more evenly.
- Improve stock management. e.g. fencing/drinking facilities
- No management advice.
- Other (see comments box).

Management recommendation(s):