Whole Feature Assessment South Dartmoor SSSI January 2025

Wet Heath

The interest feature wet heath fails the whole feature assessment as for upland SSSIs all attributes must pass the stated target at the sample points, if one attribute fails then the feature fails at that sample point. To be favourable 90% of stops (sample points) must pass, for this survey 100% of sample stops failed the assessment as at least one monitoring attribute was failed at the sample point. The whole feature assessment finds wet heath to be in **unfavourable declining** condition.

An analysis of the SSSIs individual monitoring attributes found the following attributes passed the whole feature assessment when only the mean value of all thirty-two wet heath stops are considered:-

- Less than 50% of the last complete growing season's shoots of dwarf-shrub species collectively, should show signs of browsing. Passes this monitoring attribute as a mean of 39% dwarf shrub shoots displayed signs of grazing. However, 41% of stops failed to meet the target, suggesting that grazing should be monitored to ascertain in which units and areas overgrazing is occurring.
- In pioneer stage regrowth, less than 66% of the last complete growing season's shoots of the dwarf-shrubs (collectively) should show signs of browsing. Passes this monitoring attribute as a mean of 17% pioneer cover displayed signs of grazing, with only one stop (9%) failing to meet the monitoring target. However, only eleven (34%) of the thirty-two stops in wet heath had pioneer heath present. The assessment of this monitoring target is based on these eleven stops.
- Less than 10% of the vegetation cover should consist of soft rush *Juncus effusus*. Passes this monitoring attribute as a mean of less than 1% soft rush cover was found at a quadrat scale with all stops passing and a mean of 2% at a visible scale with only one stop 3% failing the monitoring target.
- Less than 10% of vegetation cover should be made up of bracken. Passes this monitoring attribute as a mean of 1% bracken cover was found at a quadrat scale. Visible scale coverage is also required as part of the monitoring specification but the contracted survey has not provided this data.
- Less than 10% of vegetation cover should be made up of scattered native trees and scrub. Passes this monitoring attribute as a mean of 2% scrub and tree cover was found at a quadrat scale and only one stop (3% of stops) failed this monitoring target. Visible scale coverage is also required as part of the monitoring specification but the contracted survey has not provided this data.
- Less than 1% of vegetation cover should be made up of non-native species, should be assessed at both visible and quadrat scale and both scales need to be passed to be favourable. Passes this monitoring attribute as a mean of 0% was found at a visible scale and no stops recorded non-native vegetation as present. Quadrat scale coverage is also required as part of the monitoring specification but the contracted survey has not provided this data. However, due to no non-native vegetation being recorded across the feature it is appropriate to pass this monitoring attribute.
- Less than 10% of the Sphagnum cover should be crushed, broken, and/or pulled-up. Passes this monitoring attribute as a mean of 3% disturbed sphagnum cover was found at a visible scale with only one stop (3% stops) failing the monitoring target.
- Less than 10% of the ground should be disturbed bare ground. Passes this monitoring attribute as a mean of 1% bare ground was found at a quadrat scale and a mean of 2% bare earth at a visible scale, with only one stop 3% failing the monitoring target at both visible and quadrat scales.
- The extent of eroding peat and/or mineral soil should be less than the extent of re-deposited peat and/or mineral soil and new growth of wet heath and/or bog vegetation within the feature. The contracted survey did not provide data that could be used to determine the extent of eroding as opposed to building peat/new growth wet heath. Values provided were cover of exposed peat which gave a mean of 1.5% and it is therefore appropriate given this low value and the lack of surveyor comments on this issue to assume that eroding peat is not an issue for wet heath interest feature and therefore this attribute is passed.

An analysis of the SSSIs individual monitoring attributes found the following attributes failed the whole feature assessment when only the mean value of all thirty-two wet heath stops are considered:-

- Cross leaved heath *Erica tetralix* should be present within a 20m radius of the centre of the quadrat. Fails this monitoring attribute as 38% of stops failed to meet the target.
- At least 50% of vegetation cover should consist of species from *Erica* spp. Heather *Calluna vulgaris, Vaccinium* spp, *Sphagnum* spp. and at least 20% of the vegetation cover should consist of *Erica* spp and Heather *Calluna vulgaris*. Fails this monitoring attribute as a mean of 19% was found against the first target and a mean of 9% for the second target, with only one stop (3% of stops) passing both of the attributes.
- None of the following should make up more than 75% of vegetation cover: (a) dwarf-shrubs; or (b) graminoids. Fails this monitoring attribute as a mean of 84% graminoid cover was found at quadrat scale and 80% at a visible scale. However, the dwarf shrub cover at a quadrat scale was within the target with a mean of 15% recorded.

Summary of Surveyor Comments and Recommendations

Many of the comments from the surveyors indicated that the wet heath was species poor and dominated by Molinia which is suppressing growth of positive indicators and this is reflected in the data analysis. However, there were some areas of wet heath which were noted as rich in sphagnum species.

The surveyor comments recommend that a wider assessment and monitoring of grazing levels is carried out. Surveyors found grazing levels too high in some areas and too low within other areas of wet heath. It is recommended that further analysis to identify grazing levels within individual units is carried out, adjustments to stock levels should then be agreed to return the wet heath to favourable condition. **Land management – Over and Under Grazing should be recorded as a pressure for this interest feature.**

Acid Grassland

The interest feature acid grassland fails the whole feature assessment as for upland SSSIs all monitoring attributes must pass the stated target at the sample points, if one attribute fails to pass the target then the feature fails at that sample point. To be favourable 90% of stops (sample points) must pass, for this survey 100% of sample stops failed the assessment, as at least one monitoring attribute was failed at the sample point. The whole feature assessment of acid grassland finds this feature to be **unfavourable declining**.

An analysis of the SSSIs individual monitoring attributes found the following attributes passed the whole feature assessment when only the mean value of all fifty-four acid grassland stops are considered:-

- At least 4 positive indicator species from the following list should be present: Heath bedstraw *Galium saxatile*, Tormentil *Potentilla erecta*, Sheep sorrel *Rumex acetosella*, Sweet vernal grass *Anthoxatum odoratum*, Sheep's fescue *Festuca ovina*, Creeping bent *Agrostis capillaris*, Red-stemmed Feather-moss *Pluerozium schreberi*, Bristle bent *Agrostis curtisii*, Mat grass *Nardus stricta*. Passes this monitoring attribute if the mean of 3.7 is rounded up to 4. However, 48% of stops failed to meet the monitoring target, therefore the positive indicator monitoring attribute is close to failure suggesting species diversity within acid grassland is poor in some units of the SSSI.
- Less than 1% of vegetation cover should be made up of non-native species. Passes this monitoring attribute with a mean of 0.1% and 98% of stops passing the monitoring target.
- Less than 10% of vegetation cover should consist of *Juncus effusus* soft rush. Passes this attribute with a mean of 1% at quadrat scale and 96% of stops passing the monitoring attribute and at a visible scale with a mean of 5% and 87% of stops passing.
- The percentage of vegetation cover made up of Heath rush *Juncus squarrosus* and/or Woolly-fringe moss *Rhytidiadelphus squarrosus* should be less than 33%. Passes this monitoring attribute as the mean value is 5% with 96% of stops passing the monitoring target.
- Less than 10% of the ground cover should be disturbed bare ground. Passes this attribute with a mean of less than 1% at a quadrat scale and all stops passing and 1% at a visible scale with only 1% stops failing to meet the attribute target.

An analysis of the SSSIs individual monitoring attributes found the following attributes failed the whole feature assessment when only the mean value of al fifty-four acid grassland stops are considered:-

- More than 10% of the vegetation cover should consist of forbs. Fails this monitoring attribute with a mean of 10% and 70% of the stops failing to meet the monitoring target.
- Less than 10% of vegetation cover should be made up of bracken and/or scattered native trees and scrub. Fails to meet the monitoring attribute as the combined cover of bracken and scrub mean value is 14% with 28% of stops failing to meet the monitoring target.
- At least 25% of the live leaves and/or flowering shoots of vascular plants should be more than 5 cm above the ground surface, and at least 25% should be less than 5 cm above the ground surface. Passes the monitoring attribute as a mean value of 25% of live leaves are more than 5cm and 59% are less than 5cm. However, 83% of stops failed to meet this attribute and live leaves over 5cm height at 25% only just passes this monitoring attribute.
- The percentage of the ground cover for which dead plant litter forms a "thatch" or "felt", in patches more than 2 cm across, should be less than 10%. Fails this monitoring attribute with a mean of 15% and 35% of stops failing to meet the target.

<u>Summary of Surveyor Comments and Recommendations</u>

Many of the points that were surveyed as acid grassland interest feature were originally allocated to a different habitat type. Surveyors did not find the expected habitat but found acid grassland which suggests that some of the heath habitat interest features are becoming acid grassland and this is likely a result of over grazing and degrading of the heath habitats.

Surveyors frequently commented that much of the acid grassland interest feature was over grazed and described some areas as tightly grazed lawns, which lacked botanical diversity. Molinia was found to dominant the sward at the expense of positive indicator species. Grazing should be monitored and levels adjusted to improve both botanical diversity and structure of the sward in order to achieve favourable condition. **Land management – Over grazing should be recorded as a pressure for this interest feature.**

Surveyors observed that some areas of acid grassland were dominated with bracken or Western gorse. It is recommended that these areas are identified and management agreed to reduce the dominance of gorse or bracken where it is identified as impacting on the condition of the acid grassland interest feature. **Land management (scrub encroachment and inappropriate species) should be recorded as a pressure for this interest feature.**

Blanket and Valley Bogs

The interest feature blanket and valley bogs fails the whole feature assessment as for upland SSSIs all monitoring attributes must pass the stated target at the sample points, if one attribute fails to pass the target then the feature fails at that sample point. To be favourable 90% of stops (sample points) must pass, for this survey 94% of sample stops failed the assessment, as at least one monitoring attribute was failed at the sample point. The whole feature assessment finds blanket and valley bogs interest feature to be in **unfavourable declining** condition.

An analysis of the SSSIs individual monitoring attributes found the following attributes passed the whole feature assessment when only the mean value of all seventy-one blanket and valley bog stops are considered:-

- Less than 1% of vegetation cover should be made up of non-native species. Passes this monitoring attribute as no non-natives were recorded in any stop.
- Less than 10% of vegetation cover should be made up of a scattered native trees and scrub. Passes this monitoring attribute as a mean of less than1% was found with no stops failing this attribute.
- Less than 50% of the last complete growing season's shoots of dwarf-shrub species (collectively), should shows signs of browsing. Passes this monitoring attribute as mean of 30% was recorded. However, 89% of stops failed to meet the monitoring target, which suggest that overgrazing of dwarf shrub is a concern on some units / areas of the SSSI. In addition, 15 (21%) of the 71 stops made in blanket bog contained no dwarf shrubs and were therefore excluded from this assessment of this attribute.
- In pioneer stage regrowth, less than 66% of the shoots of the last complete growing season's shoots of the dwarf-shrubs (collectively) should show signs of browsing. Passes this monitoring attribute as a mean of 23% was found, with 79% of the stops containing pioneer heath passing the monitoring attribute. However, 73% of all stops did not have any pioneer heath present.
- There should be no observable signs of burning into the moss, liverwort or lichen layer or exposure of peat surface due to burning. Passes this monitoring attribute as no signs of burning were observed in any stop.
- There should be no signs of burning or other disturbance in. (a) Slopes greater than 1 in 3, and all the sides of gullies.(b) Ground with abundant and/or an almost continuous carpet of Sphagnum, other mosses, liverworts and/or lichens. (c) Pools, wet hollows, haggs and erosion gullies, and within 5 – 10 metres of the edge of watercourses. Passes this monitoring attribute with only 4% of stops recording burning or disturbance.
- Less than 10% of the Sphagnum cover should be crushed, broken, and/or pulled-up. Passes this monitoring attribute with a mean of less than 1% and no stops failing to meet the target.
- The extent of eroding peat should be less than the extent of stable re-deposited peat and new growth of bog vegetation within the feature. The contracted survey did not provide data that could be used to determine the extent of eroding as opposed to building peat/new growth bog vegetation. Values provided were cover of exposed peat which gave a mean of 0.6% and it is therefore appropriate given this low value, the fact that 76% of stops had no exposed peat eroded and the lack of surveyor comments on this issue, to assume that eroding peat is not an issue for blanket bog interest feature and therefore this attribute is passed.

An analysis of the SSSIs individual monitoring attributes found the following attributes failed the whole feature assessment when only the mean value of all seventy-one blanket and valley bog stops are considered:-

- At least four positive indicator species should be present, passes the whole feature assessment if the mean value of 3.7 is rounded up to four, however, as 56% of stops failed to meet the monitoring attribute target it is reasonable to fail this target.
- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. The mean of 50% passes the monitoring attribute target but as 59% of stops individually failed to meet the target it is reasonable to fail this attribute.

<u>Summary of Surveyor Comments and Recommendations</u>

Many of the survey points for blanket bog were initially allocated to wet heath points, but were changed to the blanket bog monitoring attributes because the peat depth dictated that blanket bog attributes should be used.

The quality of the blanket bog appears to be very variable with surveyors recording a good range of sphagnum and other positive indicators at some stops but a lack of botanical diversity in others. Surveyors noted that a large proportion of stops were dominated with Molinia and often when purple moor grass dominated this was at the expense of forb diversity. The wetness of peat also varied with surveyors commenting that some areas of deep peat appeared to be very dry. Grazing levels were also variable with no evidence of grazing recorded at some stops and excessive grazing tracks recorded in others.

It is recommended that a detailed analysis of management to unit level occurs to identify grazing levels and other management operations to identify changes in management that would achieve favourable condition by reducing Molinia dominance, increasing botanical diversity and rewetting peat as appropriate. **Land management, in particular over and under grazing, should be recorded as a pressure for the blanket bog interest feature.**

Short Sedge Acidic Fen

The interest feature short sedge acidic fen fails the whole feature assessment as for upland SSSIs all monitoring attributes must pass the stated target at the sample points, if one attribute fails to pass the target then the feature fails at that sample point. To be favourable 90% of stops (sample points) must pass, for this survey 100% of sample stops failed the assessment as at least one monitoring attribute was failed at the sample point. The whole feature assessment finds short sedge acidic fen interest feature to be in **unfavourable declining** condition as the previous condition was recorded as favourable.

An analysis of the SSSIs individual monitoring attributes found the following attributes passed the whole feature assessment when only the mean value of all eighteen short sedge acidic fen stops are considered:-

- There should be at least one indicator species from the following: small to medium sized *Carex* sedge spp., *Hydrocotyle vulgaris* Marsh pennywort, *Potentilla palustris* Marsh cinquefoil, *sphagnum* spp. Passes this monitoring attribute with a mean of 2 and only one stop (6%) failing to meet the target.
- For M4, M6 there should be at least two indicator species present in the vegetation cover. Passes this monitoring attribute with a mean of 2, however, 17% of stops failed to meet this target.
- Less than 10% of vegetation cover should be made up of scattered native trees and scrub. Passes this monitoring attribute as no trees or scrub were recorded at any stop.
- Less than 1% of vegetation cover should be made up of non-native species. Passes this monitoring attribute as no non-native vegetation was recorded.
- Less than 10% of the ground cover should be disturbed bare ground. Passes this monitoring attribute with a mean of 2% bare earth recorded at both a quadrat and visible scale.

An analysis of the SSSIs individual monitoring attributes found the following attributes failed the whole feature assessment when only the mean value of all eighteen short sedge acidic fen stops are considered:-

- At least 50% of vegetation cover should be made up of positive indicator species, 25% from each of groups i and ii. Fails this monitoring attribute as 60% cover was made up from species from group i and only 11% from group ii, with 83% of stops failing to meet this target.
- Less than 10% of the vegetation cover should consist of *Juncus effusus* soft rush, both visible and quadrat scale should be passed. Fails this monitoring attribute with 16% recorded at a quadrat scale and 28% of stops failing and 20% recorded at a visible scale with 50% of stops failing to meet the target.
- For fens and flushes, at least 50% of live leaves and flowering shoots of vascular plants should be more than 15 cm above the ground surface. Fails this monitoring attribute as a mean of 11% was recorded with all stops failing to meet the target.

<u>Summary of Surveyor Comments and Recommendations</u>

The surveyors noted that Molinia was observed in many of the quadrats but did not comment that this was impacting on the condition of short sedge acidic fen. However, it is recommended that Molinia cover is monitored. *Juncus effusus* soft rush was noted as being dominant or expanding into this habitat and therefore **Land management – Weeds / Inappropriate species should be recorded as a pressure** to short sedge acidic fen condition, this is also reflected in the condition assessment results. Grazing levels were recorded as high in some of the stops and this is reflected in the monitoring data. High grazing pressure is likely to be contributing to the low positive indicator count and it is recommended that further analysis to identify grazing levels within individual units is carried out, adjustments to stock levels should then be agreed to

return the interest feature to favourable condition. **Land management -Over grazing should be recorded as a pressure for this interest feature.**

Soakaway and Sump

The whole feature assessment for soakaway and sumps interest feature fails the assessment. For upland SSSIs all attributes must pass the stated target at the sample points, if one attribute fails then the feature fails at that sample point. To be favourable 90% of stops (sample points) must pass. The interest feature soakaway and sump whole feature assessment is based only on two stops which makes an accurate assessment of the condition difficult. However, based on the two stops and surveyor comments soakaway and sumps fails the whole feature assessment as both stops failed 100%. The whole feature assessment finds soakaway and sump interest feature to be in **unfavourable declining** condition as the previous assessment found the feature in favourable condition.

An analysis of the SSSIs individual monitoring attributes found the following attributes passed the whole feature assessment when only the mean value of both soakaway and sump stops are considered:-

- Less than 20% of vegetation cover should be made up of *Molinia caerulea* Purple moor grass. Passes this monitoring attribute as a mean of 13% was recorded.
- Less than 10% of vegetation cover should be made up of scattered native trees and scrub. Passes this monitoring attribute as no trees and scrub were recorded.
- Less than 1% of vegetation cover should be made up of non-native species. Passes this monitoring attribute as no non-native vegetation was recorded.
- Less than 25% of the ground cover, of each soakaway, should be disturbed bare ground. Passes this monitoring attribute as no disturbed bare ground was recorded at either whole feature or quadrat scale.

An analysis of the SSSIs individual monitoring attributes found the following attributes failed the whole feature assessment when only the mean value of both soakaway and sump stops are considered:-

- At least 75% of vegetation cover should be made up of the following indicator species: *Carex* sedge spp., *Hypericum elodes* Marsh St John's wort, *Potamogeton polygonifolius* Bog pondweed, *Sphagnum* spp. Fails the monitoring attribute as none of the positive indicators were found in any stop.
- Either *Hypericum elodes* Marsh St John's wort or *Potamogeton polygonifolius* Bog pondweed should be present in the vegetation cover. Fails the monitoring attribute as neither species was recorded in either stop.
- Less than 10% of vegetation cover should be made up of other graminoids. Fails this monitoring attribute as a mean of 63% was found at both quadrat and visible scale.

<u>Summary of Surveyor Comments and Recommendations</u>

Surveyors provided limited comment for the two stops made in soakaway and sump interest feature. Based on the findings of the two stops the interest feature has a high cover of grasses and a low cover of positive indicators, which could indicate over grazing. It is recommended that further stops are made within the interest feature to provide an accurate representation of the condition and to ascertain the management practices that determine the quality and extent of the soakaway and sump habitat.

Subalpine dwarf shrub heath

The interest feature subalpine dwarf-shrub heath fails the whole feature assessment as for upland SSSIs all attributes must pass the stated monitoring target at the sample points, if one attribute fails then the feature fails at that sample point. To be favourable 90% of stops (sample points) must pass, for this survey 100% of sample stops failed the assessment as at least one monitoring attribute was failed at the sample point. The whole feature assessment finds subalpine dwarf shrub heath interest feature to be in **unfavourable declining** condition.

An analysis of the SSSIs individual monitoring attributes found the following attributes passed the whole feature assessment when only the mean value of all twenty-seven subalpine dwarf shrub heath stops are considered:-

- At least 25% of dwarf-shrub cover should be made up of: *Calluna vulgaris* Heather, *Erica* spp. *Racomitrium lanuginosum* Woolly-fringe moss, *Vaccinium* spp. Passes this monitoring attribute as a mean of 46% was recorded. However, 44% of stops failed to meet this target.
- Less than 50% of dwarf shrub cover should be made up of *Ulex gallii* Western gorse. Passes this monitoring attribute as 2% cover of Western gorse was recorded with all stops passing the attribute.
- At least two indicator species should be present from *Calluna vulgaris* Heather, *Erica* spp., *Racomitrium lanuginosum* Woolly-fringe moss, *Vaccinium* spp., *Agrostis curtisii* Bristle bent. Passes this monitoring attribute with a mean of 2 and only 7% of stops failing to meet the target.
- Less than 10% of the vegetation cover should consist of *Juncus effusus* soft rush, must be passed at both visible and quadrat scale. Passes this monitoring attribute as a mean of less than 1% was recorded at a quadrat scale (4% of stops failed to meet the target) and 4% at a visible scale (7% of stops failed to meet the target).
- Less than 10% of the vegetation cover should be made up of bracken. Passes this monitoring attribute as a mean of 2% was recorded, however, 11% of stops failed to meet the target.
- Less than 20% of the vegetation cover should be made up of scattered native trees and scrub. Passes this monitoring attribute as a mean of 8% was recorded, however, 11% of stops failed to meet the target.
- Less than 1% of vegetation cover should be made up of non-native species. Passes this monitoring attribute as no non-natives were recorded.
- Heather should be present in all growth phases throughout the area. Passes this monitoring attribute with all growth phases represented. Mean values of 36% in pioneer, 20% in building/late mature, 1% degenerate and 3% dead. However, 100% of stops failed to meet the target and a mean value of 1 growth phase was found.
- At least 10% of the heather should be in the late mature growth phase. Passes this monitoring attribute with a mean value of 20% cover of heather in late/mature stage. However, 70% of stops failed to meet this monitoring target.
- Less than 10% of the ground cover should be made up of disturbed bare ground. Passes this monitoring attribute as mean of 3% of disturbed bare ground was recorded at both a quadrat and visible scale. However, 11% of stops failed to meet the monitoring target.
- In pioneer stage regrowth, less than 66% of the last complete growing season's shoots of the dwarf shrubs (collectively) should show signs of browsing. Passes this monitoring attribute with a mean of 44% recorded. However, only 33% of all stops in subalpine dwarf shrub heath had any pioneer heath present, the assessment for this monitoring target is based only on these 9 stops. 74% of stops which had pioneer heath failed to meet the monitoring target, which suggests that frequently where pioneer heath occurs it is heavily browsed.

An analysis of the SSSIs individual monitoring attributes found the following attributes failed the whole feature assessment when only the mean value of all twenty-seven subalpine dwarf shrub heath stops are considered:-

- At least 50% of vegetation cover should be made up of *Calluna vulgaris* Heather, *Erica* spp. *Vaccinium* spp. *Ulex gallii* Western gorse, *Agrostis curtisii* Bristle bent. Fails this monitoring attribute as a mean of 45% was recorded, with 59% of stops failing to meet the target.
- Less than 50% of the last complete growing season's shoots of dwarf-shrub species collectively, should shows signs of browsing. Fails this monitoring attribute as mean of 73% of dwarf shoots were recorded as browsed with 74% of stops failing to meet the monitoring target.

Summary of Surveyor Comments and Recommendations

Surveyors frequently commented that the level of grazing of the heath was very intensive with heathers reduced to tight carpets and this is reflected in the whole feature assessment results. It was noted that heathers were recovering in many areas but recovery is being pushed back by the high level of grazing. Surveyors also observed areas of burnt heath and also recorded soil erosion as a result of fires. The intensive grazing is a likely cause of the dominance of Molinia, which was also noted by the surveyors. **Land management – over grazing and Fire – Managed burning will be recorded as pressures to achieving favourable condition for subalpine dwarf shrub heath interest feature.**