

Unit 8 Dean Moor (Dry Heath) Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of unit 8 is based on the condition assessment of dry heath which is the only interest feature assigned to this unit. For an upland interest feature 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 Unit 8 sample stops failed the assessment. Dry heath was found to be in **unfavourable no change** condition due to not having heath in all growth phase and heavy browsing of dwarf shrubs.

The assessment and surveyor comments both indicate that the dry heath is heavily grazed **Land management – Over grazing should be included as a pressure** affecting the condition of the interest feature.

Although not an interest feature, a few stops were made within blanket bog and wet heath habitat which were both found to be in unfavourable condition due to lack of positive indicator species, over grazing of shoots and in the wet heath high grass cover.

Surveyors commented that the northern tip of this unit supported upland dry heath with young heathland shrubs including bilberry *Vaccinium myrtillus* and heather *Calluna vulgaris*. Acid grassland was present in patches along the western boundary of the unit, amongst more widespread areas of wet heath and blanket bog. The acid grassland was heavily grazed to a short sward and dominated by creeping bent *Agrostis stolonifera*. Other positive indicator species were recorded frequently in this habitat including sheep's fescue *Festuca ovina* and heath bedstraw *Galium saxatile*. A low proportion of wildflowers were recorded and bracken encroachment was present. Towards the centre of the unit areas of wet heath upland community dominated by *Molinia caerulea* occur, with a high proportion of grass species. Negative indicators including creeping bent and soft rush, were present although recorded in low numbers. Western gorse *Ulex gallii* was present in the wider landscape. Blanket Bog with a deep underlying peat depth was present in the west extent in the low-down valley areas, which were dominated by dense *Molinia* hummocks. *Pleurocarpus* mosses were present in small amounts. Browsing was recorded as the main pressure throughout the unit and evidenced by stunted heath shrubs and heavily grazed grassland areas.

Subalpine Dwarf Shrub Heath

One sample was taken on the dry heath habitat. Based on this record, surveyor comments and the whole feature assessment results, Unit 8 dry heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as ascertaining change in the trajectory of condition by comparing data with past surveys is not possible with one sample point.

Surveyors observed that the dry heath was heavily grazed and this is reflected in the assessment results with 100% of the pioneer growth showing signs of browsing. **Land management -over grazing should be recorded as a pressure.** Bracken cover was also found to be a factor affecting condition, therefore **Land management – Weeds / inappropriate species should also be included as a pressure.**

Dry heath was found to be in unfavourable no change condition due to not having heath in all growth phase and heavy browsing of dwarf shrubs. An analysis of the whole feature assessment data located within Unit 8 found the following attributes mean failing to meet the monitoring attribute targets:-

- Heather should be present in all growth phases throughout the area. Fails this monitoring attribute as 75% was recorded against pioneer growth phase with no other age class recorded.
- At least 10% of the heather should be in the late mature growth phase. Fails this monitoring attribute as no heather was recorded in late mature growth phase.
- Less than 50% of the last complete growing season's shoots of dwarf-shrub species collectively, should show signs of browsing. Fails this monitoring attribute as 100% of dwarf shrubs were recorded as browsed.

It is recommended that further assessment stops are made to give a more accurate reflection of the dry heath condition so that a comparison with previous surveys can be made and the management issues that are impacting on the condition identified.

Unit 9 Huntingdon Warren Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of unit 9 is based on the condition assessment of dry heath which is the only interest feature assigned to this unit. For an upland interest feature 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 Unit 9 sample stops failed the assessment. Dry heath was found to be in **unfavourable no change** condition due to only having pioneer heath as a live growth phase, with a high proportion (40%) dead heather and having 100% of the pioneer heath browsed. Surveyors commented that the dry heath was heavily grazed and that acid grassland communities were replacing dry heath as a result. **Land management – over grazing should be recorded as a pressure.**

Although not an interest feature, a few stops were made in acid grassland and blanket bog habitat both of which were found to be in unfavourable condition due to a low sward height in the acid grassland and lack of positive indicator species in the blanket bog.

Surveyors commented that a relic field system alongside an old settlement is found on the eastern edge of this unit near the Huntingdon Barrow and Western Wella Brook. The fields appear to be managed, with some newer-built dry stone dykes. Within the field system lies closely cropped acid grassland with high abundances of Common bent *Agrostis capillaris* and sheep's fescue *Festuca ovina* on very shallow peat. Soft rush *Juncus effusus* is associated with ditches formed from old field boundaries. An old boundary follows the profile of the hill round to Broad Falls separating the old warrens from the summit of the hill. The habitat along the south- and east-facing slopes of Huntingdon Warren are a mosaic of undulating grazed acid grassland, frequent patches of pure *Molinia* in wetter areas and heath comprising acid grassland with a developing layer of dwarf shrubs. The dwarf shrubs consist mainly of heavily grazed young heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus*.

On the top of Huntingdon Warren above the pillow mounds, the habitat is blanket bog on moderately deep peat dominated by *Molinia*. Locally frequent older growth of *Calluna vulgaris* and dead flowering stems of Bog asphodel *Narthecium ossifragum* are present here where grazing pressure appears markedly reduced. Grazing pressure increases as you progress along the track towards the cairn and historic tin workings at the summit of the hill and subsequently on to the acid grassland areas surrounding the aforementioned old settlement. The valleys on either side of Huntingdon Warren exhibit a similar pattern of *Molinia* and soft rush.

Subalpine Dwarf Shrub Heath

Two samples were taken within subalpine dwarf shrub heath habitat. Based on these records, surveyor comments and the whole feature assessment results, Unit 9 subalpine dwarf shrub heath interest feature is found to be in **unfavourable no change** condition. For an upland interest feature 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 Unit 9 sample stops failed the assessment. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that the subalpine dwarf shrub heath was in poor condition due to over grazing with the majority of the heath showing signs of browsing. Acid grassland communities were also present and within this habitat the sward was recorded as being less than 5cm high. Surveyors comments also suggest that the grazing levels are favouring acid grassland communities at the expense of the dry heath interest feature. It is recommended that the grazing level is reduced and management is agreed that will encourage dry heath both in extent and age class so that favourable condition is restored. **Land management – over grazing should be recorded as a pressure.**

An analysis of the whole feature assessment data located within Unit 9 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 46% was recorded.

- Heather should be present in all growth phases throughout the area. Fails this monitoring attribute with 60% mean value in pioneer and 40% dead.
- At least 10% of the heather should be in the late mature growth phase. Fails this monitoring attribute as no heath was recorded in late mature stage.
- Less than 50% of the last complete growing season's shoots of dwarf-shrub species collectively, should show signs of browsing. Fails this monitoring attribute as a 100% of shoots had been browsed.
- 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. Fails this monitoring attribute with 100% pioneer heath browsed in both stops.

It is recommended that further assessment stops are made to give a more accurate reflection of the dry heath and the management issues that are impacting on the condition.

Unit 10 Brent Moor (Bog) Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of unit 10 is based on the condition assessment of blanket bog which is the only interest feature assigned to this unit. For an upland interest feature 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 Unit 10 sample stops failed the assessment.

Blanket bog was found to be in **unfavourable no change** condition due to overgrazing of vegetative shoots.

Land management – over and under grazing should be recorded as a pressure, the assessment indicates that over grazing is a cause of failing condition but surveyors also observed, in other habitats such as acid grassland, under grazing where a tall sward and lack of bare earth was recorded.

Although not an interest feature, a few stops were made in acid grassland and wet heath habitat, both of which were found to be in unfavourable condition due to lack of positive indicator species and a high litter content within the acid grassland.

Surveyors commented that in the Quickbeam Hill area the south-westward-facing slopes towards Zeal Plains are covered in a near monoculture of dense *Molinia* and occasional bell heather *Erica cinerea* with isolated areas of acid grassland, likely associated with past small-scale improvement efforts or mining activities. At the top of Brent Moor there is a larger expanse of acid grassland associated with old mine workings, covering spoil heaps and bell pits. The northward facing slope is similar to the Broad Rushes area on the SW-facing slope but there are interruptions to the *Molinia*, which is generally less dense, where streams flow northwards delineated by lines of soft rush. There are also areas with a large scale mosaic of these habitats and acid grassland across this slope which appears to be a little under grazed. The old tramway crossing the moor on the high ground is associated with mineral workings and the spoil heaps feature acid grassland. Approaching Petre's Cross the track crosses an area of wet heath with frequent Common cotton grass *Eriophorum angustifolium* and here, in order to avoid the wetter bits, the track has numerous desire-lines associated with it and, in places, the footfall is damaging the peat cover. Grazing appears to be optimal in this location.

Petre's Pit and several associated mining relics are found in the central part of the unit and some of the steeper slopes allow for the development of non-*Molinia* stands, including some grey willow *Salix cinerea* which were supporting passerine bird species. The ground was wet throughout these areas, with flooded pits and areas of cattle or pony paths holding surface water. To the south the headwaters of the Middle Brook and Red Brook formed large bowls dominated by sweeps of *Molinia* dominated hillsides. These were often interrupted only by isolated stands of gorse.

Blanket and Valley Bogs

One sample was taken within blanket bog interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 10 blanket bog interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified. In addition, one sample point could not form the basis of recovering or declining condition conclusion.

An analysis of the whole feature assessment data located within Unit 10 found the following attributes mean failing to meet the monitoring attribute targets:-

- Less than 50% of the last complete growing season's shoots of dwarf-shrub species (collectively), should show signs of browsing. Fails this monitoring attribute as 100% of shoots were browsed.

The monitoring attribute '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' has not been assessed because no pioneer heath was recorded therefore an analysis is not possible.

It is recommended that further assessment stops are made to give a more accurate reflection of the blanket bog and the management issues that are impacting on condition.

Land management – under grazing should be recorded as a pressure, the assessment indicates that over grazing is a cause of failing condition.

Unit 21 High House Waste Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of unit 21 is based on the condition assessment of blanket bog which is the only interest feature assigned to this unit. For an upland interest feature 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 Unit 21 sample stops failed the assessment.

Blanket bog was found to be in **unfavourable declining** condition due to lack of forbs, scrub cover and grazing levels. Surveyors commented that the blanket bog was heavily grazed and that the grazing tracks observed were grazed to lawns. The level of gorse was also identified as a concern. **Land management – over grazing and weeds/ inappropriate species should both be recorded as pressures**, management to reduce the cover of gorse and changes to grazing levels should be agreed and implemented.

Although not an interest feature, a few stops were made within acid grassland habitat which was found to be in unfavourable condition due to low cover of forbs and too much scrub.

Surveyors commented that this small unit sits on a relatively steep south-facing slope between Ford Brook and the wooded slopes of Broadall Lake. It had several features of archaeological interest and had clearly been farmed in the past. There is abundant Gorse, with both Western and European gorse present. Several routes had been cut through the gorse, presumably to try to increase grazing for the ponies. The lower parts of the slope contained a range of spring lines, some of which held interesting flora including Water-crowfoots in shallow channels and abundant bryophytes. Drier ridges between these runnels had evidence of abundant bracken invasion. Above the spring-lines the dominant vegetation type was acid grassland dominated by gorse (visible in aerial images) and subdivided by old trackways and walls.

Blanket and Valley Bogs

One sample was taken within blanket bog interest feature. Based on this record, surveyor comments and the whole feature assessment results, Unit 21 blanket bog interest feature is found to be in **unfavourable declining** condition. Unfavourable declining condition is assigned as the previous condition of this unit was favourable, therefore a downward trajectory of condition is determined.

Surveyors commented that the blanket bog was heavily grazed and that the grazing tracks observed were grazed to lawns. The level of gorse was also identified as a concern. **Land management – over grazing and weeds/ inappropriate species should both be recorded as pressures**, management to reduce the cover of gorse and changes to grazing levels should be agreed and implemented.

An analysis of the whole feature assessment data located within Unit 21 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least four positive indicator species should be present, fails the whole feature assessment as mean of 2 was recorded.
- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. 72% of vegetation consists of positive indicator species, however this is made up from only two species and therefore the monitoring attribute is failed.

The monitoring attribute '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' and the attribute 'Less than 50% of the last complete growing season's shoots of dwarf-shrub species (collectively), should show signs of browsing, have not been assessed because no dwarf shrubs or pioneer heath were recorded therefore an analysis is not possible.

It is recommended that further assessment stops are made to give a more accurate reflection of the blanket bog condition so that a comparison with previous surveys can be made and the management issues that are impacting on the condition identified.

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 57 is found to be **unfavourable declining** condition as blanket and valley bog interest feature was found to be in this condition. Subalpine dwarf shrub heath, wet heath and acid grassland are all found to be in unfavourable no change condition.

For an upland interest feature 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 Unit 57 sample stops in all four habitats failed the assessment.

The heath interest features positive indicators are either failing or close to failure and within the subalpine dwarf shrub heath heather lacks age diversity. Surveyors comment that the wet heath is very 'grassy' and acid grassland could be replacing the degrading wet heath. Similar comments were also made for blanket bog with *Molinia* dominating much of this interest feature. The baseline NVC needs to be assessed to ascertain whether heathland habitats and blanket bog are being replaced by acid grassland as a result of high grazing pressure.

Land management – Over grazing should be added as a pressure and current levels reviewed and stocking changes agreed that would restore favourable condition for heath and blanket bog in this unit.

Although not an interest feature, a few stops were made in short sedge acidic fen habitat which was found to be in unfavourable condition due to lack of positive indicator species, the high cover of soft rush and short sward height.

Wet Heath

One sample of wet heath interest feature was taken in Unit 57. Based on this record, surveyor comments and the whole feature assessment results, Unit 57 wet heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that the wet heath was very 'grassy' and dominated by *Molinia*. Further investigation is recommended to ascertain whether acid grassland is developing from degrading wet heath – **Land management inappropriate species / weeds should be included as a pressure**. Surveyors also observed peat erosion on some tracks within the unit but did not stipulate the cause. **Land management – over grazing and Disturbance & Recreational Impacts – Erosion should be added as pressures**.

An analysis of the whole feature assessment data located within Unit 57 found the following attributes mean failing to meet the monitoring attribute targets:-

- Cross-leaved heath *Erica tetralix* should be present within a 20m radius of the centre of the quadrat. Cross-leaved heath was not recorded.
- At least 50% of vegetation cover should consist of species from *Erica* spp. Heather *Calluna vulgaris*, Bilberry *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 4% was found against the first target and 3% for the second target.
- None of the following should make up more than 75% of vegetation cover: (a) dwarf-shrubs; or (b) graminoids. Passes this monitoring attribute at a quadrat scale with 72% graminoid cover recorded but fails at visible extent scale with 90% recorded. The dwarf shrub cover at a quadrat scale was within the target with a mean of 3% recorded.

It is recommended that further assessment stops are made to give a more accurate reflection of the wet heath habitat and the management issues that are impacting on condition.

Subalpine Dwarf Shrub Heath

Two samples were taken within subalpine dwarf shrub heath interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 57 subalpine dwarf shrub heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that the bilberry and heathers were heavily grazed. **Land management – over grazing should be recorded as a pressure**, new stocking levels should be agreed and implemented to restore favourable condition.

For an upland interest feature 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 subalpine dwarf shrub heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 57 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 at a quadrat scale as a mean of 5% was recorded, but fails at a visible extent scale with a mean of 30% cover recorded.
- Less than 20% of the vegetation cover should be made up of scattered native trees and scrub. Fails this monitoring attribute as a mean of 43% was recorded.
- Heather should be present in all growth phases throughout the area. Fails this monitoring attribute with not all growth phases represented and both stops failing to meet this target. Mean values of 48% in pioneer, 2% in building/late mature, 0.5% degenerate and 0% dead.
- At least 10% of the heather should be in the late mature growth phase. Fails this monitoring attribute with a mean value of 2% cover of heather in late/mature stage and both stops failing the target.

In addition, the monitoring attribute '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 with a mean of 49% pioneer shoots browsed. However, this analysis is based on two plots and one of the plots was found to have 98% of pioneer shoots browsed, suggesting overgrazing is an issue in some areas of the unit.

It is recommended that further assessment stops are made to give a more accurate reflection of the subalpine dwarf shrub heath habitat and the management issues that are impacting on condition.

Acid Grassland

Six samples were taken in acid grassland habitat. Based on these records and surveyor comments, Unit 57 acid grassland interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that *Molinia* dominates the acid grassland, but observed some areas with 'heath elements' which might indicate that acid grassland has developed from degraded heath. Grazing was observed to be intensive in some areas and therefore **Land management – over grazing should be included as a pressure**. Surveyors also commented that bracken was invasive in some locations, this should be further investigated to ascertain whether this is a pressure causing declining condition – **Land management – Inappropriate species / weeds should be included as a pressure**.

For an upland interest feature 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 acid grassland sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 57 found the following attributes mean failing to meet the monitoring attribute targets:-

- More than 10% of the vegetation cover should consist of forbs. Fails this monitoring attribute with a mean of 3% and all the stops failing to meet the monitoring target.
- Less than 10% of vegetation cover should consist of *Juncus effusus* soft rush. Fails this monitoring attribute at visible extent scale with a mean of 18% and 33% of stops failing. However, passes at a quadrat scale with a mean of 2%.
- 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 *Anthoxanthum odoratum*, Sheep's fescue *Festuca ovina*, Common bent *Agrostis capillaris*, Red-stemmed feathermoss *Pluerozium schreberi*, Bristle bent *Agrostis curtisii*, Mat grass *Nardus stricta*. Fails this monitoring attribute with a mean of 3 and 67% of stops failing to meet the monitoring target.

Blanket and Valley Bogs

Seven samples were taken in blanket and valley bog habitat. Based on these records and surveyor comments, Unit 57 blanket and valley bog interest feature is found to be in **unfavourable declining** condition.

Unfavourable declining condition has been given as a downward trajectory in condition can be identified by comparing the 2024 survey data to the last survey. There is a decrease in the cover of positive indicator species mean value from the 41% and 58% found in the 2013 surveys to 38% positive indicator cover found in 2024. The number of positive indicator species has fallen from a mean value of 8 in 2013 to 3 in the 2024 survey. The browsing levels of both dwarf shrub and pioneer heath increased from 18% and 1% dwarf shrub browsed in 2013 to 58% browsed in 2024; from 18% and 3% in 2013 to 35% of pioneer heath browsed in 2024.

Surveyors observed that much of the blanket bog habitat was *Molinia* dominated and that acid grassland is replacing blanket bog to some extent. The unit was grazed with sheep and ponies and surveyors commented that sheep are causing localised ground disturbance which could potentially damage sphagnum areas. **Land management – over grazing and Livestock caused erosion / Damage should be included as a pressure.**

For an upland interest feature 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 blanket bog stops failed the assessment. An analysis of the whole feature assessment data located within Unit 57 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least four positive indicator species should be present. Fails the monitoring attribute as mean of 3 was recorded and 57% of stops failing to meet the monitoring attribute target.
- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. The mean of 38% fails to meet the monitoring attribute target with 86% of stops failing the target.

Unit 58 South 2B Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of unit 58 is based on the condition assessment of blanket bog which is the only interest feature assigned to this unit. For an upland interest feature 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 Unit 58 sample stops failed the assessment.

Blanket bog was found to be in **unfavourable no change** condition due to lack of positive indicator species as a result of *Molinia* dominance.

Although not an interest feature, a couple of samples were taken in short sedge acidic fen, which was found to be in unfavourable condition due to lack of positive indicator species, high cover of soft rush in the visible extent and the sward being too short.

Surveyors noted peat erosion occurring at numerous points within the unit. **Disturbance and recreational impacts – Erosion should be noted as a pressure on this unit.**

Surveyors commented that the unit occupies a largely flat expanse of *Molinia* moorland centred around Green Hill, with Naker's Hill on the northern boundary and the Red Lake Clayworks in the south, to east and west lie the headwaters of the River Avon and Blacklane Brook, a tributary of the River Erme. The edges of the moorland plateau are punctuated by mires including Blacklane Mire in the west and the extensive Fishlake Mire in the east. The mires form extensive water-logged areas with some interesting flora struggling to outcompete the *Molinia*. The summit of Green Hill shows some evidence of historical drainage efforts with channels visible in aerial imagery.

The northern boundary of this unit is almost entirely dominated by a dense Purple Moor-grass *Molinia caerulea* sward. The underlaying substrate is deep peat, with occasional wetter patches causing surface water pooling which supports multiple *Sphagna*. This same habitat appears to stretch southwards across a large area of the unit. The large expanse of Purple Moor-grass support large numbers of Skylark and Meadow Pipit.

In the north-east of the unit, the extensive Avon Head Mires found on the boundary between Unit 58 and 59 provides a stunning example of an upland mire at the head of the Avon. The mire was not accessible at the time of the survey. Further south, flushes in excellent condition with a full carpet of *Sphagnum* spp. associated with the Avon headwaters drain off Naker's Hill into the River Avon valley. Drier acid grassland areas are found sporadically throughout the dense *Molinia* sward where sheep grazing is concentrated.

Much of the south-western extent of this unit was blanket bog and valley bog, dominated by *Molinia caerulea*. High numbers of *Sphagnum* sp., were recorded beneath the *Molinia* hummocks. A range of positive indicator species recorded including Heather *Calluna vulgaris*, Common cotton grass *Eriophorum angustifolium*, Fescue spp., Deer grass *Trichophorum cespitosum*, and Pleurocarpous mosses. A small amount of bracken was recorded in this area.

The Red Lake Clay works sits on the southern boundary and although the majority of this lies within unit 57, some drainage works and two of the large open waterbodies do sit within this unit.

Blanket and Valley Bogs

Fifteen samples were taken within the blanket bog interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 58 blanket bog interest feature is found to be in **unfavourable no change** condition. For an upland interest feature 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 blanket bog sample stops failed the assessment. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that the blanket bog interest feature was dominated by *Molinia* with a limited number of positive indicator species often hidden underneath the *Molinia* sward. *Molinia* was recorded as covering 76% of the blanket bog interest feature. The area was largely under grazed and this is likely to account for the poor

display of positive indicators which cannot compete against the more aggressive purple moor grass. **Land management – Under grazing and Inappropriate species / weeds should be included as pressures.**

An analysis of the whole feature assessment data located within Unit 57 found the following attributes meanfailing to meet the monitoring attribute targets :-

- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. Although a mean value of four indicator species were found (by rounding up the mean value 3.7), the vegetation cover is less than the target at 42%, therefore, this attribute is failed.

The following monitoring attribute was also close to failing:-

- At least four positive indicator species should be present. The mean value for the fifteen stops made was 3.7, rounding this number up to 4 species is reasonable, however, it should be noted that this monitoring attribute is very close to failing the target score. It also should be noted that 60% of stops failed to meet this monitoring attribute.

Unit 59 Down Ridge Ter Hill Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 59 is found to be **unfavourable no change** as both acid grassland and blanket & valley bog interest features were both found to be in this condition due to lack of forbs and high thatch cover in acid grassland and lack of positive indicator species in the blanket bog. For an upland interest feature 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 acid grassland sample stops and 92% of blanket bog failed the assessment.

Although not an interest feature, samples were also taken in short sedge acidic fen, which was found to be in unfavourable condition due to lack of positive indicator species, high soft rush cover and low sward height

Surveyors observed heavy poaching by livestock and erosion therefore **Land management – over grazing and livestock erosion / damage should be included as pressures for this unit.**

Surveyors commented that the northern central area of unit 59 is associated with O Brook in the valleys either side of Skir Hill. Heavily grazed acid grassland vegetation with *Molinia* dominates the valley sides, even on deeper peat areas on the west side of the Skir Gut valley rising up to Ter Hill. This side of the valley is very heavily poached by cattle in concentrated areas near to the brook. The steep-sided subsidiary valleys away from the brook here are dominated by soft rush *Juncus effusus* at the base with little flow. Occasional patches of Water Crowfoot were identified along the clear waters of the O Brook.

On Skir Hill, *Molinia*-dominated blanket bog occurs alongside new growth of bristle bent *Agrostis curtisii* and dwarf shrub species in areas of slightly shallower peat. At the upper reaches of the O Brook tributary in the eastern valley, a wide flush pertaining towards acid fen over deep peat with localised patches of Marsh pennywort *Hydrocotyle vulgaris* is present in the upper reaches of the O Brook tributary in the eastern valley.

The centre of unit 59 consists of both high and low-lying areas of Purple Moor-grass dominated deep peat, frequently connected by sheep grazed acid grassland slopes. The higher areas tend to wet heath with Heather *Calluna vulgaris* frequent among the *Molinia* sward. Vegetation in lower areas has more bog typical species including Cotton-grasses and Sphagna.

North and northeast facing acid grassland slopes in this area are becoming heavily encroached with Bracken *Pteridium aquilinum*.

The very western edge of this unit is bounded by a small stream, running through acid grassland. Among the acid grasslands here are rocky remnants of old walls and structures, possibly sheep pens, now derelict. Rising up from the path of the stream, the hillsides quickly become dominated by Purple Moor-grass.

The southern area of this unit closest to Unit 9 generally pertains towards blanket bog and is dominated by a dense *Molinia* sward with some tendencies towards species-poor wet heath where ericaceous species and gorse occasionally appear in isolated patches, mostly within Ryder's Mire. Dead stems of Bog asphodel *Narthecium ossifragum* are locally frequent protruding from the dense *Molinia* sward, however some areas consist of pure *Molinia* with little else in the sward. Historic peat cuttings overtaken by *Molinia* are evident on the higher slopes. Sheep tracks are abundant throughout the *Molinia* sward on the slopes and lower down in the valley. Where these are present on lower ground within the valley, the tracks have channelled water run-off from the hill into little streams and encouraged the creation of small bog pools dominated with *Sphagnum* spp. The southern section of the River Avon valley consists of an undulating mosaic of drier acid grassland hummocks between wetter depressions dominated by *Molinia*, soft rush *Juncus effusus*, *Polytrichum* moss and creeping bent *Agrostis stolonifera* with occasional *Sphagnum*.

Blanket and Valley Bogs

Twelve samples were taken in blanket and valley bog habitat. Based on these records, surveyor comments and the whole feature assessment results, Unit 59 blanket bog interest feature is found to be in **unfavourable no change** condition.

For an upland interest feature 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 92% of blanket bog sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 59 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. The mean positive indicator species cover of 48% fails the monitoring attribute target and 58% of stops individually failed to meet the target.
- At least four positive indicator species should be present, passes the assessment if the mean of 3.6 is rounded up to 4. However, 50% of stops failed to meet the monitoring attribute so the positive indicators target should be highlighted as a potentially failing attribute.

Surveyors commented that often the vegetation type found did not conform to blanket bog habitat but to wet heath or acid grassland, but the stop was recorded as blanket bog due to the depth of the peat. Surveyors observed that much of the blanket bog was dominated by *Molinia*.

Acid Grassland

Three samples were taken in acid grassland habitat. Based on these records, surveyor comments and the whole feature assessment results, Unit 59 acid grassland interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that some areas of acid grassland were heavily grazed and that *Molinia* dominated much of the acid grassland with the forb cover being noticeably low. **Land management – over grazing should be included as a pressure.**

For an upland interest feature 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 acid grassland sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 59 found the following attributes mean values failing to meet the monitoring attribute targets:-

- More than 10% of the vegetation cover should consist of forbs. Fails this monitoring attribute with a mean of 7% and two out of three of the stops failing to meet the monitoring target.
- 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 20% and two out of three stops failing to meet the target.

Unit 60 Fox Tor Nun's Cross Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of unit 60 is based on the condition assessment of blanket bog which is the only interest feature assigned to this unit. For an upland interest feature 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 50% of Unit 60 sample stops failed the assessment. Blanket bog was found to be in **unfavourable no change** condition due to lack of positive indicator species as a result of *Molinia* dominance.

Although not an interest feature, samples were taken in short sedge acidic fen, wet heath and acid grassland all of which were found to be in unfavourable condition. Factors causing poor condition were lack of positive indicators and cover of forbs, grass dominance and over grazing. **Land management – over grazing should be recorded as a pressure for this unit.**

Unit 60 is a mixture of upland habitats but with only blanket bog as an interest feature. It would be appropriate to map current habitat and compare to baseline NVC maps to identify change in extent and also whether other upland habitat need to be added as interest features to this unit.

Surveyors made the following description of the unit. Immediately east and south-east of Nun's Cross Farm, much of the habitat is a Purple Moor-grass dominated wet heath. The hillside going eastwards continues as wet heath over approximately 20cm of peat, with occasional deep gullies reaching up to the higher lying land. On the eastern and northern edges of the unit, acid grassland is the predominant habitat on lower lying areas and within steep incised gullies. Stands of Soft-rush *Juncus effusus* are also common within these wet gullies. The north facing slopes to the east of the unit are occasionally interspersed with deeply incised gullies between acid grasslands.

Acid grassland intermixed with *Molinia caerulea* dominated blanket bog were present amongst areas of wet heath in the west of the unit, lower in the valley areas. These areas were heavily grazed and trampled. Negative indicators including soft rush and springy turf moss *Rhytidiadelphus squarrosus* were present in high numbers within the areas of acid grass. Positive indicators include sheeps fescue and heath bedstraw. The blanket bog became drier towards the centre of the unit, with a higher dominance of *Molinia caerulea* and presence of common cotton grass. Wetter areas were present towards the south and higher numbers of *Sphagnum* spp. were recorded here. Wet heath was present on the top of the slopes, where it was slightly drier. Grazing pressures were visible bent *Agrostis* sp. and *Molinia caerulea* dominated these areas, with small heath shrubs including heather *Calluna vulgaris*, cross-leaved heath *Erica tetralix*, bilberry *Vaccinium* spp., as well as *Pleurocarpous* sp. mosses. Short sedge acidic fen was present adjacent to the channel running down the valley, through an old settlement. A carpet of bent *Agrostis* sp. was present, alongside *Sphagnum* sp., *Polytrichum* and sedge *Carex* spp., were present in low numbers. Rabbits were observed within the settlement area which was heavily grazed to a short sward. Wet heath was present along the south of the unit, dominated by *Molinia caerulea*.

Blanket and Valley Bogs

Four samples were taken within the blanket bog interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 60 blanket bog interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as ascertaining change in the trajectory of condition by comparing data with past surveys is not possible with four sample points.

Although the mean for number of positive indicator species was above 4, two of the four samples failed to meet this target. This combined with comments regarding *Molinia* dominance suggest an unfavourable no change condition is appropriate. Future surveys should factor in more stops within unit 60 blanket bog to give a more accurate reflection of condition.

For an upland interest feature 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 50% of blanket bog sample stops failed the assessment.

Unit 61 Willingswalls and Hentor Common Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 61 is found to be **unfavourable declining** condition as wet heath, acid grassland and blanket bog interest features were all found to be in unfavourable condition. For an upland interest feature 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 Unit 61 in all habitat sample stops failed the assessment.

The condition of this unit was found to be unfavourable declining in 2023, given the timescale between surveys, the fact that a higher number of samples were taken at unit level in 2023 and because the 2024 results reflect the earlier survey findings, a condition of unfavourable declining is justified.

All three interest features lacked the required number of positive indicator species and *Molinia* dominated many areas. Some areas within the unit were noted as intensively grazed and this could be driving the dominance of *Molinia*. Areas of eroding peat were frequently mentioned associated with animal disturbance and burning. **Fire – Managed burn, and Disturbance and recreational impacts- Erosion should be recorded as pressures for this unit. Land management – Over grazing should also be added as a pressure.** It is recommended that land management within this unit is reviewed and changes to the stocking levels and moorland management that would restore favourable condition identified and agreed.

Although not an interest feature, a few stops were made in subalpine dwarf shrub heath habitat which was found to be in unfavourable condition due to lack of positive indicator species and heather not being present in all growth phases. Surveyors also commented that extensive burning had occurred here and caused erosion.

Surveyors commented that unit 61 is a large area with varying land forms comprising high moorland, heavily grazed valley sides, mires and rocky tors. On higher lying land to the north of the unit, there are areas of peat erosion currently undergoing targeted management and gully blocking.

The summit of Langcombe Hill is dominated by lightly grazed, species-poor blanket bog consisting of a carpet of *Molinia* and a fairly consistent under layer of *Sphagnum* spp. and pleurocarpous mosses on very deep peat. Rare stems of Bog asphodel *Narthecium ossifragum* were identified here with patchy wet heath areas present on shallower peat with occasional young Heather *Calluna vulgaris*. Localised peat erosion is evident across the wet heath and blanket bog areas around Langcombe Hill where vehicle tracking has encouraged the formation of surface water runoff channels. As you move west down into the Shavercombe Brook valley from Langcombe Hill, the peat depth reduces as the blanket bog transitions into wet heath and mossy acid grassland on more well-draining soil. Between Langcombe Hill and Shell Top, dominant habitats are a mosaic of grazed tussocky acid grassland and heath where young *Calluna* is frequent.

In the south of the unit, burning is evident north-west of Shell Top. The burning has created exposed areas of bare peat whilst allowing for the regeneration of Bristle bent *Agrostis curtisii* over the scorched tops of Heather *Calluna vulgaris* and *Molinia caerulea*. Heavily grazed acid grassland dominates the slopes down from Shell Top towards Dartmoor Way before giving way to dwarf shrub heath where European gorse becomes abundant. The northern extent of this unit supported wet heath habitat in a mosaic with smaller areas of acid grassland. Soft rush was present in surrounds. The area was *Molinia caerulea* dominated with sparse small heath shrubs with signs of browsing and grazing.

The lower slopes show evidence of extensive historical farming and form part of the Ditsworthy Warren complex with Hentor Warren, Willings Walls Warren and Trowlesworthy Warren occupying drier areas along the slope. These are divided by Hentor Brook and Spanish Lake, watercourses which drain the slope to the Plym. Hentor Brook contains a number of mire areas and wet heaths, which are mostly dominated by tussocks of *Molinia*. There are field systems scattered across this slope and features suggesting early farming practices, including several settlement remains.

Both Shavercombe Brook and Hentor Brook are fairly well-defined and channelled until the lower slopes of the Plym valley, but in the south of the unit a stream flows south westwards off Lee Moor into a complex mire in the saddle between Lee Moor and Great Trowlesworthy Tor. The mire drains both north and south, northwards into

Spanish Lake and on to the Plym, and southwards to Blacka Brook. There are several artificial watercourses here which appear to collect water to either avoid or to feed the enormous Lee Moor China Clay quarries. Due to ground conditions, this mire area was not accessible, but is worthy of a repeat visit in better conditions as it appeared to be a good example of this habitat.

Wet Heath

Seven samples were taken in wet heath habitat. Based on these records, surveyor comments and the whole feature assessment results, Unit 61 wet heath interest feature is found to be in **unfavourable declining** condition. Wet heath was recorded as unfavourable recovering in 2013, but a survey of habitats within Unit 61 in 2023 found all features in unfavourable declining condition, it is unlikely that there would be any change in the condition trajectory in one year, so unfavourable declining would be appropriate for the 2024 survey.

Surveyors commented that the wet heath was very 'grassy', dominated by *Molinia* and quite species poor. Further investigation is recommended to ascertain whether acid grassland is developing from degrading wet heath. Surveyors also observed that in some areas grazing tracks ran throughout the habitat. **Land management – over grazing should be added as a pressure.**

For an upland interest feature 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 wet heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 61 found the following attributes mean failing to meet the monitoring attribute targets:-

- Cross-leaved heath *Erica tetralix* should be present within a 20m radius of the centre of the quadrat. Fails this monitoring attribute as 57% of stops failed to meet the target.
- At least 50% of vegetation cover should consist of species from *Erica* spp., Heather *Calluna vulgaris*, Bilberry *Vaccinium* spp, *Sphagnum* spp. and at least 20% of the vegetation cover should consist of *Erica* spp and *Calluna vulgaris*. Fails this monitoring attribute as a mean of 12% was found against the first target and a mean of 7% for the second target, with all stops failing to meet both 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 95% graminoid cover was found at quadrat scale and 86% at a visible scale. However, the dwarf shrub cover at a quadrat scale was within the target with a mean of 11% recorded.

In addition, the following monitoring attribute was close to failing '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 40% vegetation cover displayed signs of grazing. However, 43% of stops failed to meet the target, suggesting that grazing should be monitored to ascertain in which units and areas overgrazing is occurring.

Acid Grassland

Eight samples were taken in acid grassland habitat. Based on these records, surveyor comments and whole feature assessment results, Unit 61 acid grassland interest feature is found to be in **unfavourable declining** condition. Acid grassland was recorded as unfavourable recovering in 2013, but a survey of habitats within Unit 61 in 2023 found all features in unfavourable declining condition, it is unlikely that there would be any change in the condition trajectory in one year, so unfavourable declining would be appropriate for the 2024 survey.

Surveyors noted that the habitat was very grass dominant. The acid grassland was noted as displaying 'lawn' conditions in some areas due to intensive grazing with bilberry noted as very tightly grazed. **Land management – over grazing should be included as a pressure.** Surveyors also commented that bracken was invasive in some locations, this should be further investigated to ascertain whether this is a pressure causing declining condition. **Land management – Weeds / Inappropriate species should be recorded as a pressure.**

For an upland interest feature 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 acid grassland sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 61 found the following attributes mean failing to meet the monitoring attribute targets:-

- More than 10% of the vegetation cover should consist of forbs. Fails this monitoring attribute with a mean of 3% and 88% 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 17% with 50% of stops failing to meet the monitoring target. Bracken cover has a mean of 15% whereas scrub and tree cover is low with a mean of 2%.
- At least 4 positive indicator species from the following list should be present: Heath bedstraw *Galium saxatile*, Tormentil *Potentilla erecta*, Sheep's sorrel *Rumex acetosella*, Sweet vernal grass *Anthoxanthum odoratum*, Sheep's fescue *Festuca ovina*, Common bent *Agrostis capillaris*, Red-stemmed feather moss *Pluerozium schreberi*, Bristle bent *Agrostis curtisii*, Mat grass *Nardus stricta*. Passes number of species if 3.5 is rounded up to 4, however, as 50% of stops failed to meet the monitoring target it is reasonable to fail this monitoring attribute.
- 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. Fails the monitoring attribute as a mean value of 13% of live leaves are more than 5cm and 62% are less than 5cm, all stops failed to meet this attribute.

Blanket and Valley Bogs

Four samples were taken in blanket and valley bog habitat. Based on these records, surveyor comments and whole feature assessment, Unit 61 blanket and valley bog interest feature is found to be in **unfavourable declining** condition. Blanket bog was recorded as unfavourable recovering in 2013, but a survey of habitats within Unit 61 in 2023 found all features in unfavourable declining condition, it is unlikely that there would be any change in the condition trajectory in one year, so unfavourable declining would be appropriate for the 2024 survey.

Surveyors commented that for some of the stops the vegetative cover was more typical of wet heath, but recorded under blanket bog because of peat depth. Surveyors noted that in some areas of blanket bog grazed tracks occurred throughout. **Land management – over grazing should be included as a pressure.**

For an upland interest feature 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 blanket bog sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 61 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least four positive indicator species should be present. Passes the target number if mean value of 3.5 is rounded up to 4, however, 75% of stops failed to meet this target so it is reasonable to fail this monitoring attribute.
- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. The mean of 49% fails the monitoring attribute target with 50% of stops failing the target.
- 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, hags and erosion gullies, and within 5 – 10 metres of the edge of watercourses. Fails this monitoring attribute with 75% of stops recording burning or disturbance.

- 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. Fails this monitoring attribute as a 100% of the pioneer heath was grazed. However, this assessment is based on one sample stop as the other three stops had no pioneer heath present so could not be assessed against this attribute.

It is recommended that further assessment stops are made to give a more accurate reflection of the blanket bog and the management issues that are impacting on the condition.

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 62 is found to be **unfavourable no change** condition as wet heath, blanket bog and acid grassland were both found to be in unfavourable condition. For an upland interest feature 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 both acid grassland and wet heath sample stops and 90% of blanket bog failed the assessment.

The wet heath interest features failed the assessment due to high level of browsing, high graminoid cover, lack of positive indicator species and damage to sphagnum. The acid grassland failed the condition assessment due to lack of positive indicators, but also high thatch and bracken cover. Blanket bog was found to have a good cover of positive indicator species but the level of browsing of dwarf shrub was high and failed the monitoring attribute.

Although not an interest feature, stops were also made in short sedge acidic fen, subalpine dwarf shrub heath and soakaway and sump habitat, all were found to be in unfavourable condition.

The assessment and surveyor comments identified **Land management – Over and Under grazing as pressures** affecting the condition of the interest features. In addition, the high cover of *Molinia* and erosion of peat is also preventing favourable condition, therefore **Land management – Weeds / Inappropriate species and Disturbance and recreational impacts- Erosion should be included as pressures**.

Surveyors commented that unit 62 is a very large unit extending from the Upper Erme in the east to Shell Top and the watershed with the River Plym in the west. It includes the head of the river Yealm, Penn Moor, Stall Moor and Stalldown Barrow.

The northern section of this unit was generally dominated by large continuous stretches of Purple Moor-grass, forming a generally species-poor wet heath. There are several gullies with small streams flowing north and east into the River Erme, some deeply incised, and within these there is more habitat diversity with patches of acid grassland, subalpine dwarf-shrub heath, and stands of Soft-rush. These gullies frequently support lichens, ferns and bryophytes not commonly seen within the Purple Moor-grass heath.

Adders *Vipera berus* were seen basking on rocky outcrops and tall Purple Moor-grass tussocks near the River Erme, with the surrounding habitats providing many suitable hibernacula, refugia and basking spots for all reptiles.

The eastern slopes, towards the River Erme are quite varied; in the north they are composed of *Molinia*-dominated wet heath with large areas of acid grassland in amongst them. In addition there are wide open, worked, valleys with extensive *Molinia* and Soft Rush mire systems, many with floating mats of vegetation, often given away by the young shoots of Bottle sedge *Carex rostrata* poking through the dead *Molinia* litter layer. Many if not all of these areas have been worked by hushing with an invisible undulating topology under the dense vegetation cover, making these areas quite treacherous. The westward facing slopes of Stall Moor, around Ranny Brook and the headwaters of the River Yealm are similar although the steep slopes on the left bank of the Yealm North of Dendles Wood are composed of acid grassland. These areas generally do not appear to be overgrazed and are potentially undergrazed, with the exception of the acid grassland patches. The southeastern slopes above the River Erme are very steep and are heavily overgrazed by ponies in particular, which are overwintered. Here, in amongst the copious sarsen stones on the slopes, bilberry *Vaccinium myrtillus* is dominant in a broad mosaic with acid grassland and patchy bracken. It is usually in either carpet form or topiary form given the high level of grazing.

West and south of here, the area is exclusively acid grassland with small streams running across it as well as numerous preferential flow paths across the surface following heavy rainfall. Many of these disappear underground in small sumps and then reappear downstream again as springs. The area is grazed by sheep and is in good condition.

Some of the slopes around Yealm Head showed evidence of erosion where streams were actively nicking the surface peat, creating narrow channels which were then widening across a large area. Some of these measured up to 40m across. A considerable sweep of the eastern slopes of Shell Top, extending up from

Broadall Lake showed evidence of burning. An investigation of aerial images suggests a large fire in 2022, extending over the summit and into unit 61. These areas could have provided a break from the Molinia monoculture, however, these areas remain heavily grazed and Heather *Calluna vulgaris*, bilberry and *Erica* species are cropped to 10-15mm and the Molinia is starting to dominate in these areas already. As with Unit 61, there are areas of peat erosion currently undergoing targeted management and gully blocking on higher laying land.

Wet Heath

Eight samples were taken in the wet heath interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 62 wet heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified. Surveyors commented that the wet heath was in some areas heavily grazed and in other locations under grazed. Therefore, **Land management – Over and Under grazing should be recorded as pressures.**

For an upland interest feature 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 wet heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 62 found the following attributes mean failing to meet the monitoring attribute targets:-

- Less than 50% of the last complete growing season's shoots of dwarf-shrub species collectively, should show signs of browsing. Fails this monitoring attribute as a mean of 61% vegetation cover displayed signs of grazing, with 63% of stops failing to meet the monitoring target.
- At least 50% of vegetation cover should consist of species from *Erica* spp., Heather *Calluna vulgaris*, Bilberry *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 31% was found against the first target and a mean of 21% for the second target, with only one stop passing both 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 76% graminoid cover was found at a visible scale, at quadrat scale the target was passed at 70% graminoid cover. The dwarf shrub cover at a quadrat scale was within the target with a mean of 26% recorded.
- Less than 10% of the Sphagnum cover should be crushed, broken, and/or pulled-up. Fails this monitoring attribute as a mean of 13% disturbed sphagnum cover was found, however, this is due to 100% damage in one sample.

Acid Grassland

Fifteen samples were taken in acid grassland habitat. Based on these records, surveyor comments and the whole feature assessment, Unit 62 acid grassland interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

Surveyors commented that the acid grassland was heavily grazed, but noted that heather was occurring where protected from grazing. Erosion associated with vehicles was also recorded within the unit. Surveyors also commented that bracken and western gorse was invasive in some locations, this should be further investigated to ascertain whether this is a pressure causing declining condition.

Land management – over grazing and weeds / inappropriate species and Disturbance and recreational impacts- Erosion should be included as pressures.

For an upland interest feature 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 acid grassland sample stops failed the assessment. An analysis of the whole

feature assessment data located within Unit 67 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 16% with 33% of stops failing to meet the monitoring target. Bracken mean cover was found to be 11% and scrub / tree cover 6%.
- At least 4 positive indicator species from the following list should be present: Heath bedstraw *Galium saxatile*, Tormentil *Potentilla erecta*, Sheep's sorrel *Rumex acetosella*, Sweet vernal grass *Anthoxanthum odoratum*, Sheep's fescue *Festuca ovina*, Common bent *Agrostis capillaris*, Red-stemmed feather moss *Pluerozium schreberi*, Bristle bent *Agrostis curtisii*, Mat grass *Nardus stricta*. Fails this monitoring attribute with a mean of 3 and 67% of stops failing to meet the monitoring target.
- 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 25% cover and 33% of stops failing to meet the target.

Blanket and Valley Bogs

Ten samples were taken in blanket and valley bog habitat. Based on these records, surveyor comments and the whole feature assessment, Unit 62 blanket and valley bog interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified. The blanket bog had a good diversity and coverage of positive indicator species and no negative indicators were recorded.

For an upland interest feature 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 90% of blanket bog sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 67 found the following attribute failing to meet the monitoring attribute targets:-

- Less than 50% of the last complete growing season's shoots of dwarf-shrub species (collectively), should show signs of browsing. Fails this monitoring attribute as a mean of 66% was recorded, with 57% of the stops that had dwarf shrubs in the quadrat failing to meet the attribute target.

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 63 is found to be **unfavourable declining** condition as wet heath is found to be in this condition. Blanket bog interest feature was found to be in unfavourable no change condition. For an upland interest feature 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 in both habitats failed the assessment.

Both blanket bog and wet heath failed the assessment due to lack of positive indicator species. In addition, wet heath cover of graminoids (*Molinia*) was found to be too high and cross-leaved heath was absent in 60% of stops. For blanket bog interest feature the browsing levels were too high and therefore **Land Management – Over grazing should be included as a pressure.**

Although not an interest feature, a few stops were made in acid grassland and subalpine dwarf shrub heath habitat, both of which were found to be in unfavourable condition. The acid grassland lacked forbs and had a high thatch cover and the dwarf heath was found to be very heavily grazed.

The assessment and surveyor comments identified **Land management – Over and Under grazing as pressures** affecting the condition of the interest features. In addition, the high cover of *Molinia* and erosion of peat is also preventing favourable condition, therefore **Land management – Weeds / Inappropriate species and Disturbance and recreational impacts- Erosion should be included as pressures.**

Surveyors commented that the northern section of this unit around Brown Heath is dominated by wet heath, typically with a mixture of *Molinia caerulea* and Common cottongrass *Eriophorum angustifolium* and scattered Bell heather *Erica cinerea*. The *Molinia* typically becomes more dominant as you ascend the slope. There are areas of acid grassland, associated with mineral working along the valley of the River Erme on top of the (likely artificial) river terrace with ancient enclosures; there is also a patch of bracken here at Erme Pound.

As you move from Brown Heath to Ugborough Moor the *Molinia* becomes much more dense and species-poor. However, in the Ugborough Moor area, scarification of the *Molinia* near monoculture is taking place using a quad-bike mounted chain harrow. This is removing the dead vegetation and releasing species underneath (Bilberry was much in evidence) and creating the conditions suitable for Heather seeds to germinate. The scarifying is continuing to the south onto the slopes above the River Erme.

Between Stony Bottom and Quickbeam hill there are extensive areas of mineral working, and associated acid grassland, within the general coverage of *Molinia caerulea*; indeed Stony Bottom itself is a large and very deeply incised mineral working remanent where a rich vein of ore was clearly followed uphill creating a new drainage path as it was excavated. The grasslands are typically U4 in character and widespread on the west-facing slope, decreasing as the top of the hill is approached and reverting to dense *Molinia*. The area is likely optimally grazed overall, however, the acid grasslands will support large numbers of sheep whereas the *Molinia*-covered areas will support 1 ewe per 4 hectares or less, obviously resulting in overgrazed and undergrazed areas within the unit. This can only be rectified by the introduction of shepherding or the success of the ongoing scarification programme.

The steep Erme valleyside and the hillside of Three Barrows are heavily grazed by sheep resulting in some areas of bent grass *Agrostis* lawn interspersed with dense stands of rush running along drainage lines. The upper slopes were interspersed with exposed boulders and had a reasonable dry heath vegetation assemblage, albeit cropped to a bonsai state. Where slopes became less steep, these areas reverted to extensive *Molinia* meadows, despite waterlogging and underlying peat depth.

Wet Heath

Five samples were taken of wet heath interest feature in Unit 63. Based on this record, surveyor comments and the whole feature assessment results, Unit 63 wet heath interest feature is found to be in **unfavourable declining** condition. Unfavourable declining condition has been given as there is an increase in the mean value

of graminoid cover from the 81% grass cover found in 2013 to 101% grass cover found in 2024. In addition, the mean value cover of positive indicator species has decreased from 22% in 2013 to 9% in 2024.

Surveyors commented that the wet heath was species poor and dominated with *Molinia*. Further investigation is recommended to ascertain whether acid grassland is developing from degrading wet heath and identify management that is driving this change. **Land management – weeds / inappropriate species should be recorded as a pressure.**

For an upland interest feature 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 wet heath sample stops failed the assessment.

An analysis of the whole feature assessment data located within Unit 63 found the following attributes mean failing to meet the monitoring attribute targets:-

- Cross-leaved heath *Erica tetralix* should be present within a 20m radius of the centre of the quadrat. Fails this monitoring attribute as 60% of stops failed to meet the target.
- At least 50% of vegetation cover should consist of species from *Erica* spp. Heather *Calluna vulgaris*, Bilberry *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 9% was found against the first target and a mean of 4% for the second target, with all stops failing 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 101% graminoid cover was found at quadrat scale and 76% at a visible scale. However, the dwarf shrub cover at a quadrat scale was within the target with a mean of 8% recorded.

It is recommended that further assessment stops are made to give a more accurate reflection of the wet heath habitat and the management issues that are impacting on condition.

Blanket and Valley Bogs

Three samples were taken in blanket and valley bog habitat. Based on these records, surveyor comments, and whole feature assessment results Unit 63 blanket and valley bog interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as ascertaining change in the trajectory of condition by comparing data with past surveys is not possible with three sample points.

For an upland interest feature 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 blanket bog sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 63 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. The mean of 48% fails the monitoring attribute target in addition two of the three stops individually did not meet the target.
- Less than 50% of the last complete growing season's shoots of dwarf-shrub species (collectively), should show signs of browsing. Just fails this monitoring attribute as mean of 50% was recorded and two out of three stops did not meet the target.

The monitoring attribute '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' has not been assessed because no pioneer heath was recorded therefore an analysis is not possible.

It is recommended that further assessment stops are made to give a more accurate reflection of the blanket bog condition so that a comparison with previous surveys can be made and the management issues that are impacting on the condition identified.

Surveyors note that the vegetation cover found on the three stops was not typical of blanket bog communities, stops were therefore determined as blanket bog due to peat depth rather than vegetation communities present.

Unit 65 Buckfastleigh Common Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 65 is found to be **unfavourable no change** condition as subalpine dwarf shrub heath and wet heath were both found to be in unfavourable condition. For an upland interest feature 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 Unit 65 sample stops in both habitats failed the assessment.

Both interest features lacked positive indicator species. Within subalpine dwarf shrub heath there is a lack of age structure and high levels of browsing of the dwarf shrubs.

The assessment and surveyor comments identified **Land management – Over grazing as pressures** affecting the condition of the interest features. In addition, the high bracken cover and erosion of peat is also preventing favourable condition, therefore **Land management – Weeds / Inappropriate species and Disturbance and recreational impacts- Erosion should be included as pressures.**

Although not an interest feature, a few stops were made in blanket bog and acid grassland habitat, both of which were found in unfavourable condition. The acid grassland habitat had a good coverage of positive indicator species, but the cover of bracken, short sward height and cover of *Molinia* thatch, indicate poor condition. The blanket bog was found to be over grazed and some peat erosion was also recorded.

Surveyors commented that the River Mardle forms the northern boundary of this unit. The Mardle is quite deeply incised with a narrow channel. The banks and bed are rocky, and the habitat on the wider right bank is predominantly acid grassland over a shallow soil. In the northern headwaters there is much evidence of mining on both banks but on the right bank within this unit there is a very long incision parallel to the river on the hillside, presumably following an ore body. This ravine has intercepted the groundwater flowing off the north-facing hillside, channelling it westwards, leaving the portion of the hillside below the cut and above the river drier. As a result this area has changed to acid grassland. There is also an extensive area of *Molinia* valley mire that has developed immediately upstream of these workings, in the headwaters of the R. Mardle.

The eastern facing slopes of this unit are predominantly a mosaic of acid-grassland and subalpine dwarf-shrub heath, with both habitats showing evidence of sheep grazing. Within this larger mosaic are occasional patches of wet heath vegetation, typically forming near gullies and hillside streams. These wet areas can show a healthy population of *Sphagna* species.

Along the western boundary of this unit, the upland areas typically overlay deep peat and support a mix of wet heath vegetation and more typical bog species. Purple Moor-grass is dominant throughout. On higher laying land to the northwest of the unit, there are ongoing works to combat gullying and erosion.

Blanket bog and wet heath in western extent is dominated by *Molinia caerulea* and browsing is the main pressure. Shrubs and *Calluna vulgaris* heather are scarce, positive indicators including Woolly-fringe moss *Racomitrium lanuginosum*, sedge spp and bilberry. Acid grassland was present on lower heavily grazed slopes on eastern edge of Dartmoor National Park. Negative indicator species were present including Springy-turf moss *Rhytidiadelphus squarrosus*. This was mixed with upland dry heath which supported young and browsed heath shrubs heather *Calluna vulgaris* and Bilberry *Vaccinium myrtillus*, these areas were heavily grazed. Acid grassland dominated by Sheep's fescue *Festuca ovina*, and Common bent *Agrostis capillaris* were present with Heath rush *Juncus squarrosus* recorded and Mat grass *Nardus stricta* also recorded. Trees and scrub were present in the visible surrounds, including patches of Western gorse on these lower slopes on edge of Dartmoor.

Wet Heath

Three samples were taken in wet heath interest feature in Unit 65. Based on this record, surveyor comments and the whole feature assessment results, Unit 65 wet heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified. Surveyors commented that heather cover

appeared good but were concerned that no mature heath was present, this is also reflected in the survey results. Surveyors observed that *Molinia* was dominant in some areas and that gorse was quite extensive.

For an upland interest feature 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 wet heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 65 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 35% was found against the first target and a mean of 4% for the second target, with all stops failing to meet the target.
- Less than 10% of vegetation cover should be made up of scattered native trees and scrub. Fails this monitoring attribute as a mean of 18% scrub and tree cover was found at a quadrat scale with only one stop (33% of stops) failing this monitoring target.

It is recommended that further assessment stops are made to give a more accurate reflection of the wet heath habitat and the management issues that are impacting on condition.

Subalpine Dwarf Shrub Heath

Four samples were taken within subalpine dwarf shrub heath interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 65 subalpine dwarf shrub heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as ascertaining change in the trajectory of condition by comparing data with past surveys is not possible with four sample points.

Surveyors commented that some areas of subalpine dwarf shrub heath were heavily grazed and this is also reflected in the assessment results. **Land management – over grazing should be recorded as a pressure**, new stocking levels should be agreed and implemented to restore favourable condition.

For an upland interest feature 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 subalpine dwarf shrub heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 65 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 35% was recorded, with 100% of stops failing to meet the target.
- Heather should be present in all growth phases throughout the area. Fails this monitoring attribute as only pioneer heath (mean value of 75%) and mature building (mean value 6%) were recorded, with all stops failing to meet the target.
- At least 10% of the heather should be in the late mature growth phase. Fails this monitoring attribute with a mean value of 6% cover of heather in late/mature stage and 75% of stops failing the target.
- Less than 50% of the last complete growing season's shoots of dwarf-shrub species collectively, should show signs of browsing. Fails this monitoring attribute as 96% of dwarf shrubs were found to be browsed, with all stops failing to meet the monitoring target.

It is recommended that further assessment stops are made to give a more accurate reflection of the subalpine dwarf shrub heath habitat and the management issues that are impacting on condition.

Unit 67 Holne Moor Condition Assessment South Dartmoor SSSI January 2025

Overall Unit Condition

The overall condition of a unit is determined by the 'lowest' interest feature condition found in the monitoring assessment. Therefore, Unit 67 is found to be **unfavourable no change** condition as subalpine dwarf shrub heath, wet heath, acid grassland and blanket bog interest features were all found to be in unfavourable condition. For an upland interest feature 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 Unit 67 sample stops in all four habitats failed the assessment.

Acid grassland was found to be unfavourable due to the short sward and high bracken cover, cover of forbs was also found to be close to failing the target. Blanket bog was found to be in unfavourable condition due to lack of pioneer heath, lack of positive indicator species and peat erosion. Wet heath was found to be in unfavourable condition due to lack of cross-leaved heath and other positive indicator species, high cover of soft rush and bare ground and also eroding peat. Subalpine dwarf shrub heath is found to be in unfavourable condition due to lack of positive indicator species, lack of heath in all growth phases (lack of pioneer) and high bracken cover.

The assessment and surveyor comments identified **Land management – Over and Under grazing as pressures** affecting the condition of the interest features. In addition, the high bracken cover and erosion of peat is also preventing favourable condition, therefore **Land management – Weeds / Inappropriate species and Disturbance and recreational impacts- Erosion should be included as pressures.**

Although not an interest feature, a stop was made in soakaway and sump habitat which was found to be in unfavourable condition due to no positive indicator species being present and the high cover of molinia.

Surveyors commented that the majority of the unit is composed of Molinia wet heath cut by incised streams which have lines of soft rush associated with them as well as small flushes, sometimes with short sedge acidic fen and *Sphagnum denticulatum*. There are also extensive areas of acid grassland especially where there are old mineworkings and here there are small areas of dwarf shrub heath that is very heavily grazed. This is dominated by bilberry *Vaccinium myrtillus* and heather *Calluna vulgaris*, both in carpet form. Towards Holne Ridge and Holne Moor there are large-scale mineral workings and here there are deep ravines of acid grassland. Around here, the Molinia heath gives way to a dwarf shrub heath that is composed of European and Western gorse, with some Molinia. Dwarf shrub heath dominates the eastern portion of the unit as far as the road boundary with some patches of acid grassland within the heath. This unit appears to be generally undergrazed, given the spread of the Ulex, however, as with all such habitat mixes, some preferred habitats are overgrazed.

Near the boundary with Unit 65 there are a number of deep ravines cut into the hillsides and some of these are now occupied by small streams. A number of these have recently had installed wooden dams that are designed to slow the flows; the materials to construct more of these were present in the location at the time of the visit. These discharge into the headwaters of the River Mardle and, along the left bank of the river, there are seepage lines as well as sumps and springs where the groundwater emerges. These have been affected by the mineral workings, leading to a concentration of flushing in certain locations which has led to the build-up of extensive raised, delta-like fans of sediment trapped by *Sphagnum cuspidatum*. Two of these are very extensive forming large, green wet mires that cannot be walked upon. There are also small areas of short sedge acidic fen and Molinia seepage mire along the sides of the valley adjacent to the River Mardle.

The south-east facing slope is an acid grassland with scattered mature Hawthorn trees. The southern slope is also acid grassland but a browsed gorse scrub frequently forms dense impenetrable stands. Bracken is also beginning to become a dominant species on the grassland slopes.

The River Mardle forms the boundary between this unit and Unit 65 along its southern edge. The left bank of the river is often steep and rocky, with acid grassland and occasional stands of soft rush.

The lower slopes on the northern-western tip of unit 67 are located on the northern edge of Dartmoor National Park. Here acid grassland is widespread which is heavily grazed by sheep. Upland dry heath is present on higher slopes. Negative indicators including soft rush are present in the surrounds. Low growing, young heath shrubs including heather *Calluna vulgaris*, cross-leaved heath *Erica tetralix* and bilberry *Vaccinium myrtillus* are present. Quite large patches of dead bracken are present in the surrounds, and trees and scrub cover

approximately 10% of the surrounds. Acid grassland is found near the low-lying channel coming in to this unit from the west. The landscape gets wetter further south where wet heath is present and *Molinia caerulea* becomes abundant again.

Wet Heath

Two samples were taken in wet heath interest feature in Unit 67. Based on this record, surveyor comments and the whole feature assessment results, Unit 67 wet heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified.

For an upland interest feature 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 wet heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 67 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least 50% of vegetation cover should consist of species from *Erica* spp. Heather *Calluna vulgaris*, Bilberry *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 11% was found against the first target and a mean of 6% for the second target, with both stops failing 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 78% graminoid cover was found at visible extent scale. However, at quadrat scale 60% graminoid cover was recorded and the dwarf shrub cover at a quadrat scale was within the target with a mean of 16% recorded.
- Less than 10% of the vegetation cover should consist of soft rush *Juncus effusus*. Fails this monitoring attribute as 11% cover of soft rush was found at a visible extent scale. However, no soft rush was found at a quadrat scale.
- Less than 10% of the ground should be disturbed bare ground. Fails this monitoring attribute as a mean of 10% bare ground was found at both a quadrat and visible extent scale.
- 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 10% which is high and it is therefore reasonable to conclude that peat erosion is an issue affecting condition of wet heath.

It is recommended that further assessment stops are made to give a more accurate reflection of the wet heath habitat and the management issues that are impacting on condition.

Subalpine Dwarf Shrub Heath

Four samples were taken within subalpine dwarf shrub heath interest feature. Based on these records, surveyor comments and the whole feature assessment results, Unit 67 subalpine dwarf shrub heath interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as ascertaining change in the trajectory of condition by comparing data with past surveys is not possible with four sample points.

Surveyors commented that in areas the heath was heavily grazed, this was particularly noticeable on a fire site where heath recovery was being hindered by over grazing. Surveyors also commented that gorse and bracken dominated in some areas, the high coverage of bracken is also reflected in the assessment. **Land management – overgrazing should be recorded as a pressure**, new stocking levels should be agreed and implemented to restore favourable condition. **Land management – Weeds / Inappropriate species should also be added as a pressure** in relation to bracken and possibly also gorse cover.

For an upland interest feature 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 subalpine dwarf shrub heath sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 67 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 at a whole feature scale as a mean of 36% was recorded, with 75% of stops failing to meet the target.
- Less than 10% of the vegetation cover should be made up of bracken. Fails this monitoring attribute as a mean of 10% was recorded, with 50% of stops failing this target.
- Heather should be present in all growth phases throughout the area. Fails this monitoring attribute due to 0% pioneer heath recorded (if mean of 0.3 is rounded down). Mean values of 30% in building/late mature, 1% degenerate and 1% dead were recorded. 100% of stops failed to meet the target.

It is recommended that further assessment stops are made to give a more accurate reflection of the subalpine dwarf shrub heath habitat and the management issues that are impacting on condition.

Acid Grassland

Five samples were taken in acid grassland habitat. Based on these records and surveyor comments, Unit 67 acid grassland interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as ascertaining change in the trajectory of condition by comparing data with past surveys is not possible with five sample points.

Grazing was observed to be intensive in some areas and therefore **Land management – over grazing should be included as a pressure**. Surveyors also commented that bracken was invasive in some locations, this should be further investigated to ascertain whether this is a pressure causing declining condition. **Land management – Weeds/Inappropriate species should be included as a pressure**.

For an upland interest feature 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 acid grassland sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 67 found the following attributes mean failing to meet the monitoring attribute targets:-

- 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 21% with 60% of stops failing to meet the monitoring target. Bracken coverage is recorded with a mean of 19%.
- 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. Fails the monitoring attribute as a mean value of 3% of live leaves are more than 5cm and 56% are less than 5cm, with all stops failing to meet the target.

It is recommended that further assessment stops are made to give a more accurate reflection of the acid grassland habitat and the management issues that are impacting on condition.

Blanket and Valley Bogs

Seven samples were taken in blanket and valley bog habitat. Based on these records, surveyor comments and whole feature assessment results, Unit 67 blanket and valley bog interest feature is found to be in **unfavourable no change** condition. Unfavourable no change condition is given as there are no comparative past surveys from which the trajectory of condition movement can be identified

Surveyors observed that bracken was encroaching on the blanket bog habitat, however, it has not been noted as a pressure. It is recommended that the bracken cover is monitored to ascertain whether it is a factor causing unfavourable condition.

For an upland interest feature 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 blanket and valley bogs sample stops failed the assessment. An analysis of the whole feature assessment data located within Unit 67 found the following attributes mean failing to meet the monitoring attribute targets:-

- At least four positive indicator species should be present, fails the whole feature assessment as mean of 3 and 71% of stops failing to meet the monitoring attribute target.
- At least 50% of vegetation cover should consist of at least 3 of the listed positive indicator species. The mean of 45% fails the monitoring attribute target, 57% of stops also failed to meet the target.