

Fleetwood Mussel Inspection 03-08-2023

Officers: AP, JH

LW: 07:50 0.8m (Liverpool Tides)

The Fleetwood mussel beds of Perch and Black Scar were surveyed as these are the historically commercial beds Figure 1.

Black Scar

The 2023 mussel settlement on Black Scar is still present and has grown on to approximately 20 mm in size (Figure 5), with 80-90% coverage over the bed (Figure 2, 7 and 8). The mussel has put down significant mussel mud from previous surveys (Figure 3, 7, 10 and 11). This mussel mud covered the extent of the bed, and in the centre had formed 'hillocks' (Figure 7, 8 and 10). The mussel mud had grown deeper since the previous survey and in some areas was approximately a metre deep, with mussels above becoming loose. Officers were unable to access the centre of the bed due to the depth of mussel mud. Coverage of mussel mud was thick across the main extent of the bed, however, near the lower edges, there was evidence of scour (Figure 10). Mussels thin out at the western edge of the bed (Figure 9)

There is a small area of size mussel along the channel edge (Figure 4 and 6). The approximate area of mussel is 4.1 hectares.

Perch Scar

The 2023 mussel settlement on Perch Scar is still present and has grown on to approximately 20 mm (Figure 13). Coverage of mussel over the bed is 70-80% (Figure 12, 17, 18 and 22), and similar to Black Scar the mussel mud was thick (Figure 21 and 26) (in places up to a metre thick) and had grown since the previous survey to form hillocks (Figure 14, 17, and 26) with channels cutting between where the mussel mud was coming loose (Figure 16). There was some evidence of scour near the channel edge of the bed (Figure 15). There was a strip of size mussel still present along the edge of the bed (Figure 19) with some of it becoming loose and forming mounds (Figure 20). There was no exposed cobble or bare substrate, and mussel mud covered the main extent. The approximate area of the mussel was 9.7 hectares.

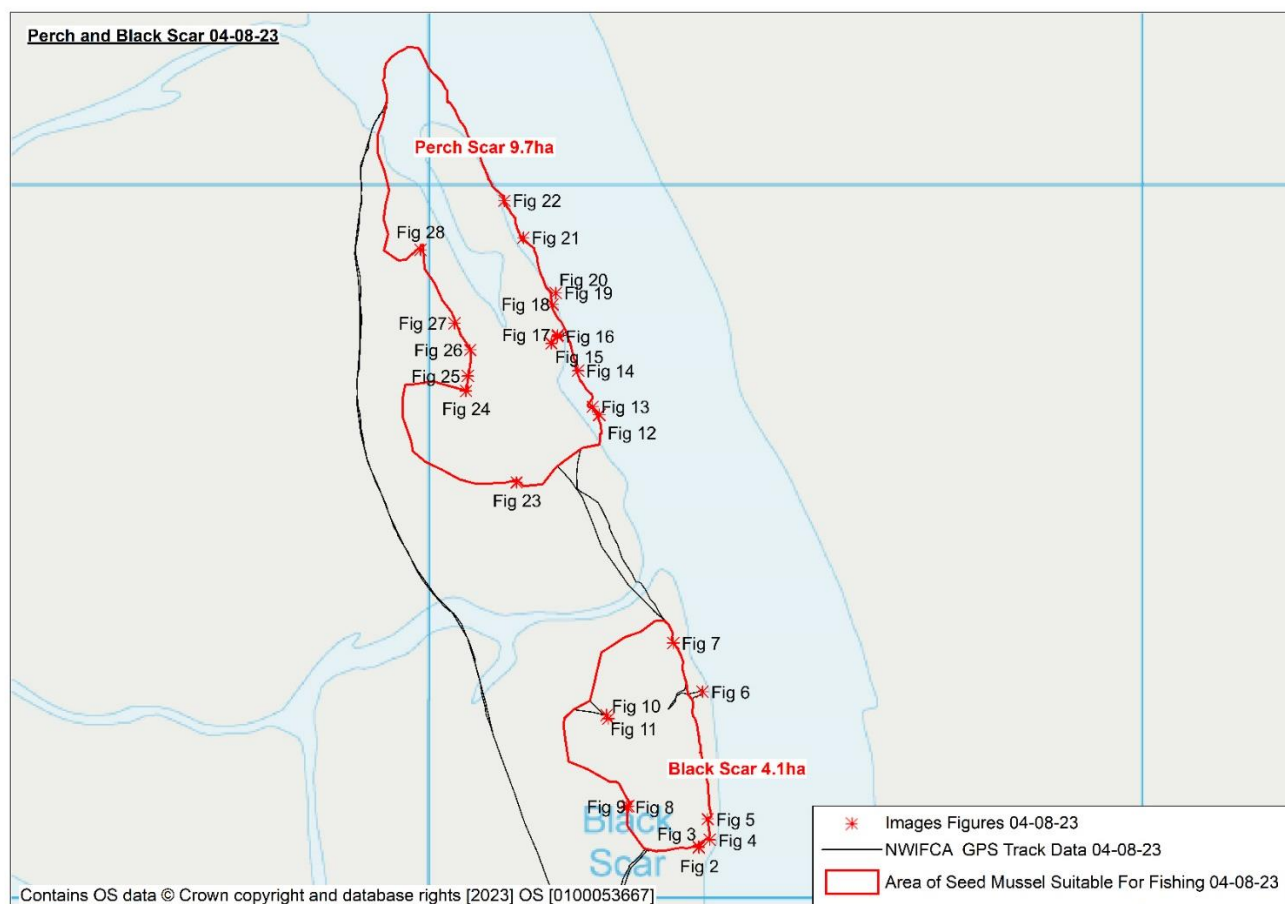


Figure 1. Location and extent of the Perch and Black Scar seed mussel beds with figure numbers included to show the location of photographs taken.

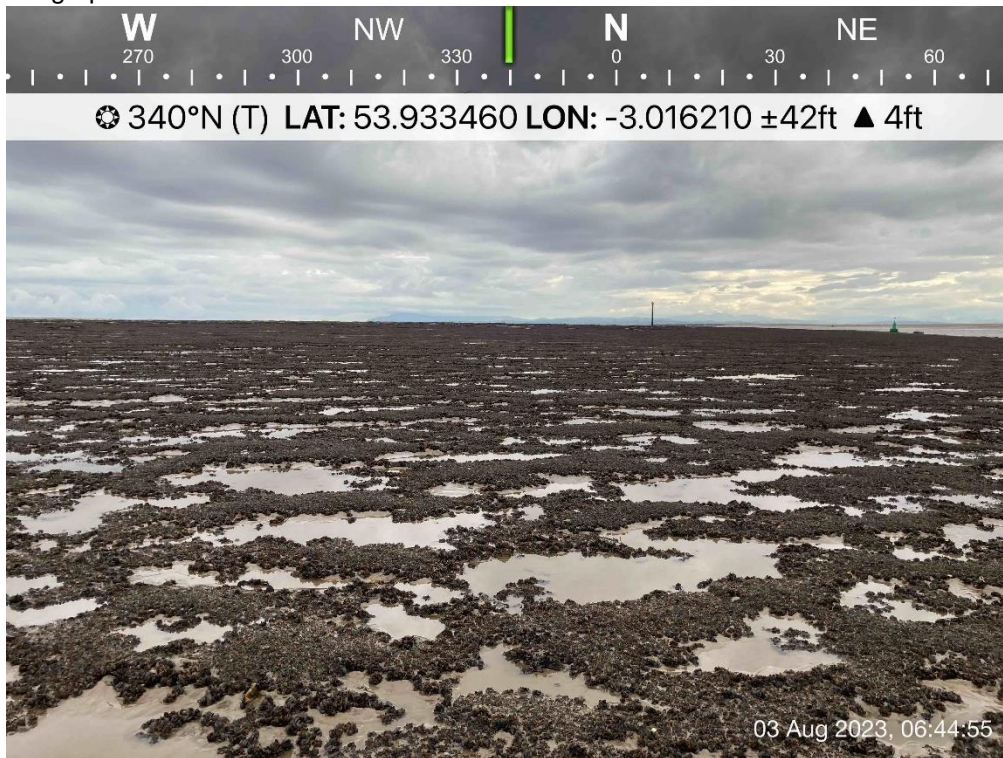


Figure 2. Dense seed settlement on Black Scar 03-08-2023.

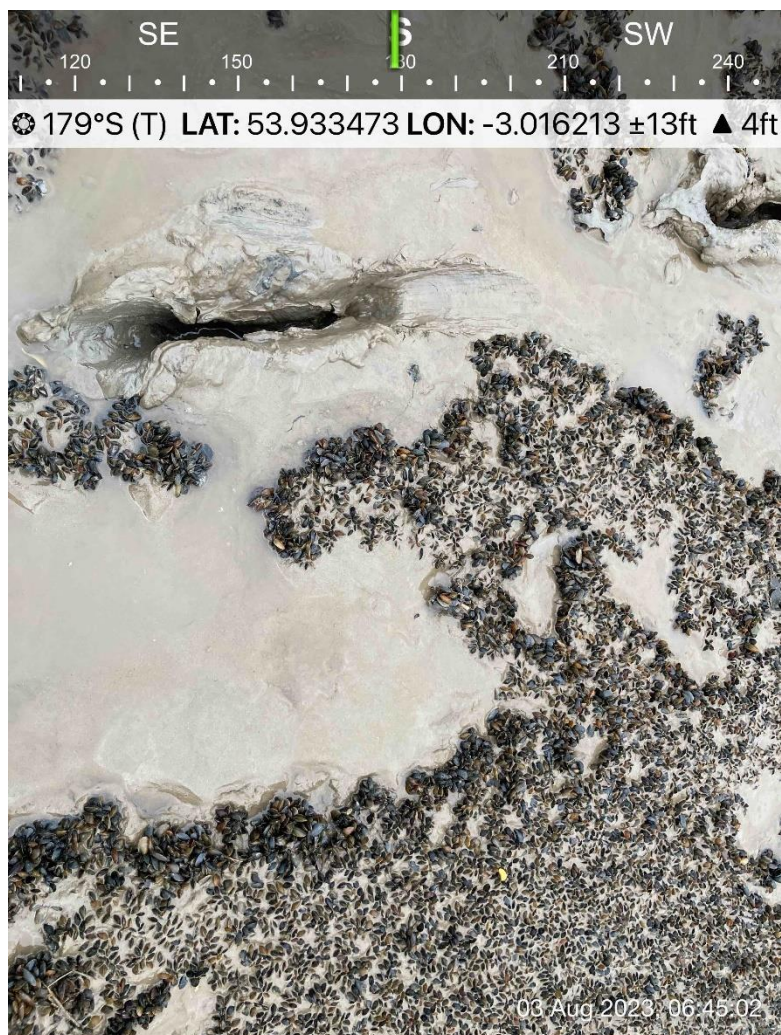


Figure 3. dense mussel on thick mud on Black Scar 03-08-2023.

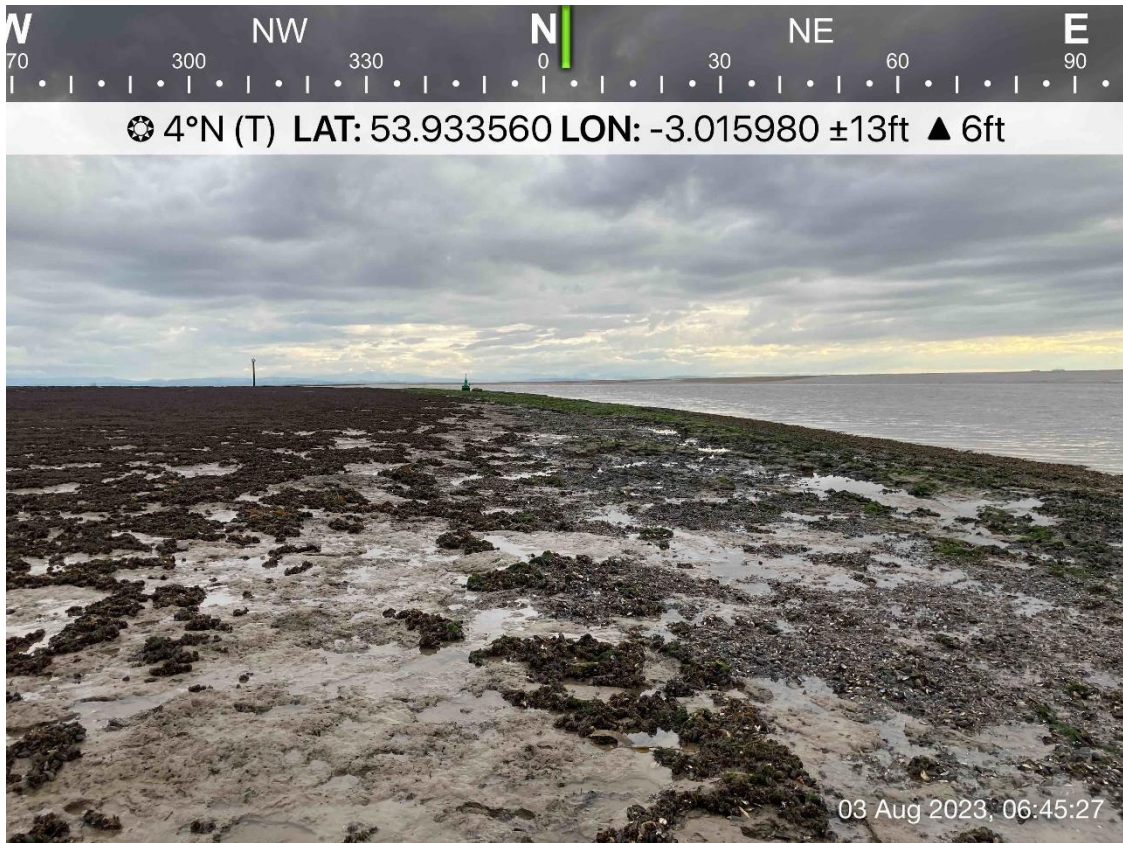


Figure 4. Strip of old, size mussel along Black Scar channel edge 03-08-2023

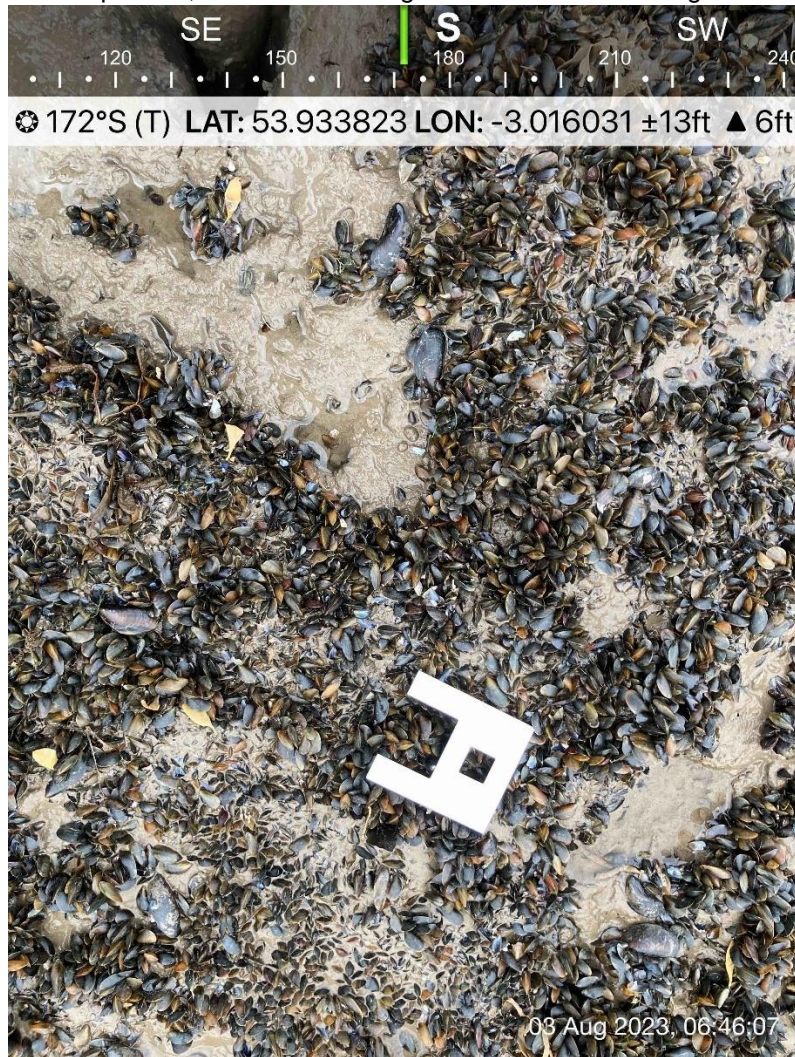


Figure 5. Loose, dense mussel on thick mud 03-08-2023



Figure 6. Large, old mussel present on the channel edge strip of Black Scar 03-08-2023



Figure 7. Dense mussel on deep mud on Black Scar seaward end 03-08-2023.



Figure 8 dense mussel on mud on Black Scar 03-08-2023.



Figure 9. Edge of the bed – Black Scar 03-08-2023.

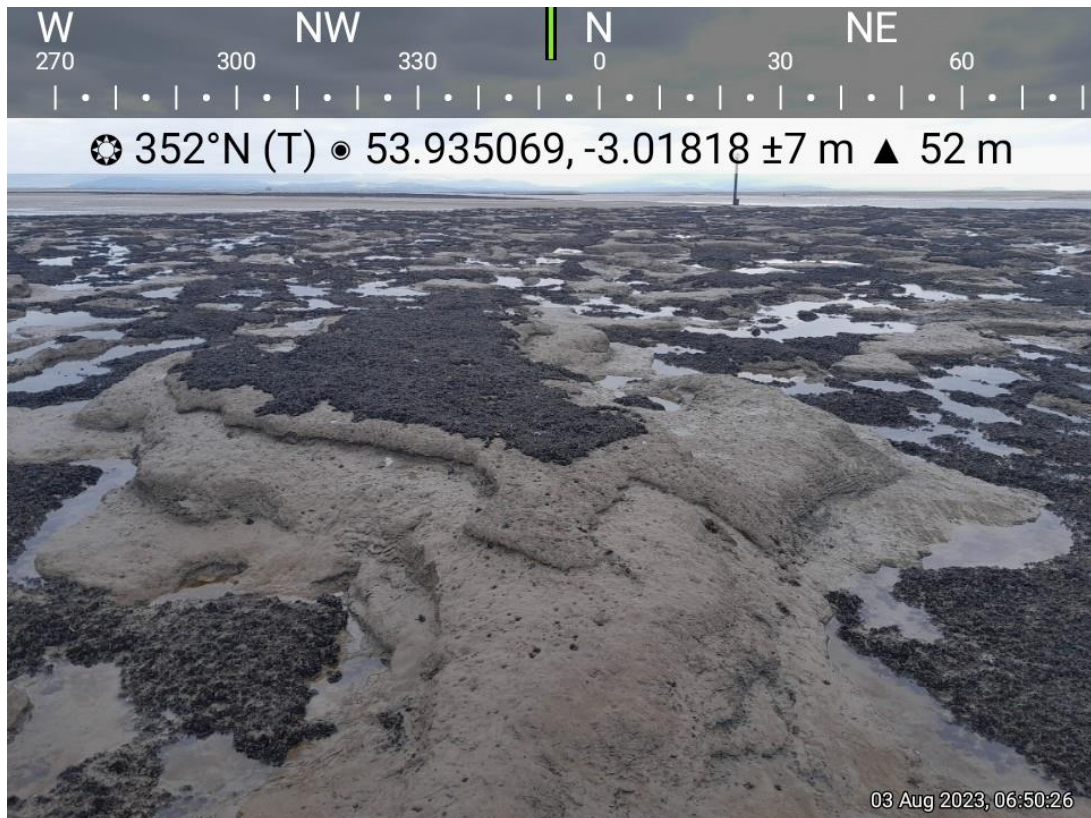


Figure 10. Deep mud and scour on Black Scar 03-08-2023.



Figure 11. Deep mussel mud on Black Scar 03-08-2023.



Figure 12. Dense coverage and 'fluffed' mussel on Perch Scar 03-08-2023.

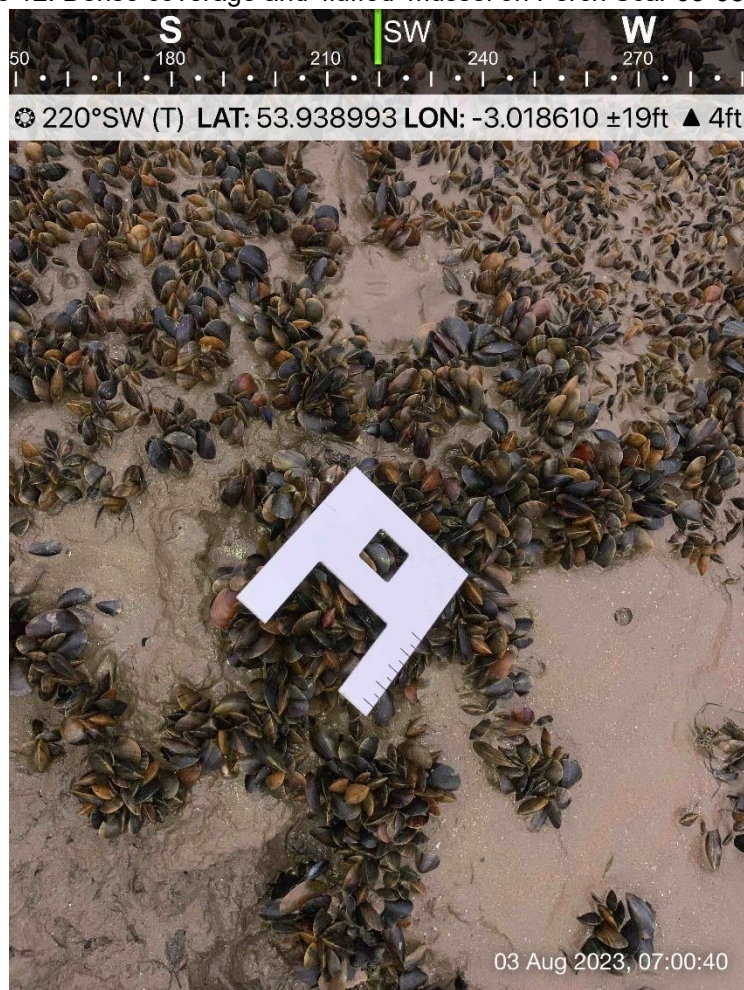


Figure 13. Mussel at 20 mm on Perch Scar 03-08-2023.



☉ 261°W (T) LAT: 53.939443 LON: -3.018934 ±22ft ▲ 4ft



Figure 14. Dense mussel on hillocks of mussel mud on Perch Scar 03-08-2023.



☉ 252°W (T) LAT: 53.939781 LON: -3.019511 ±301ft ▲ 31ft



Figure 15. Evidence of scour on Perch Scar 03-08-2023.

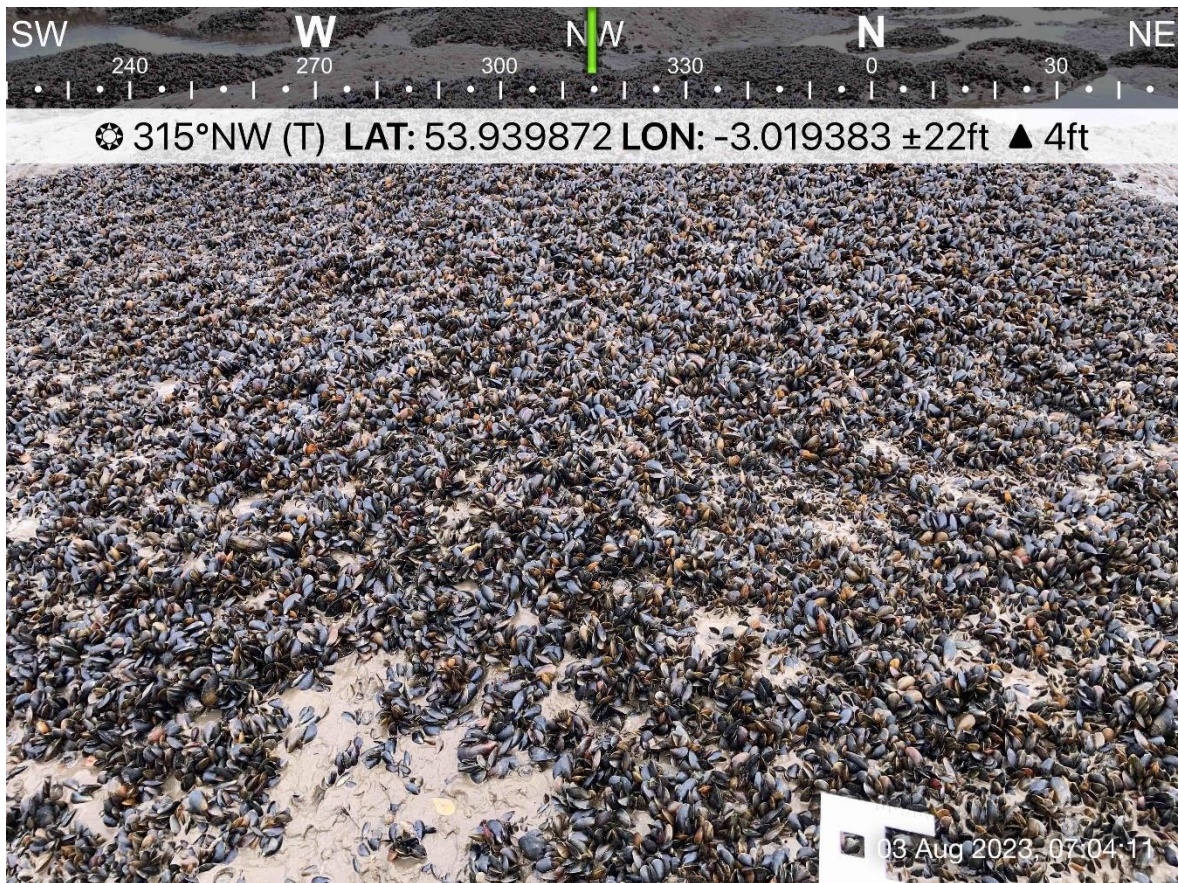


Figure 16. Dense loose mussel on Perch Scar 03-08-2023.



Figure 17. Dense loose mussel on deep mud Perch Scar 03-08-2023.

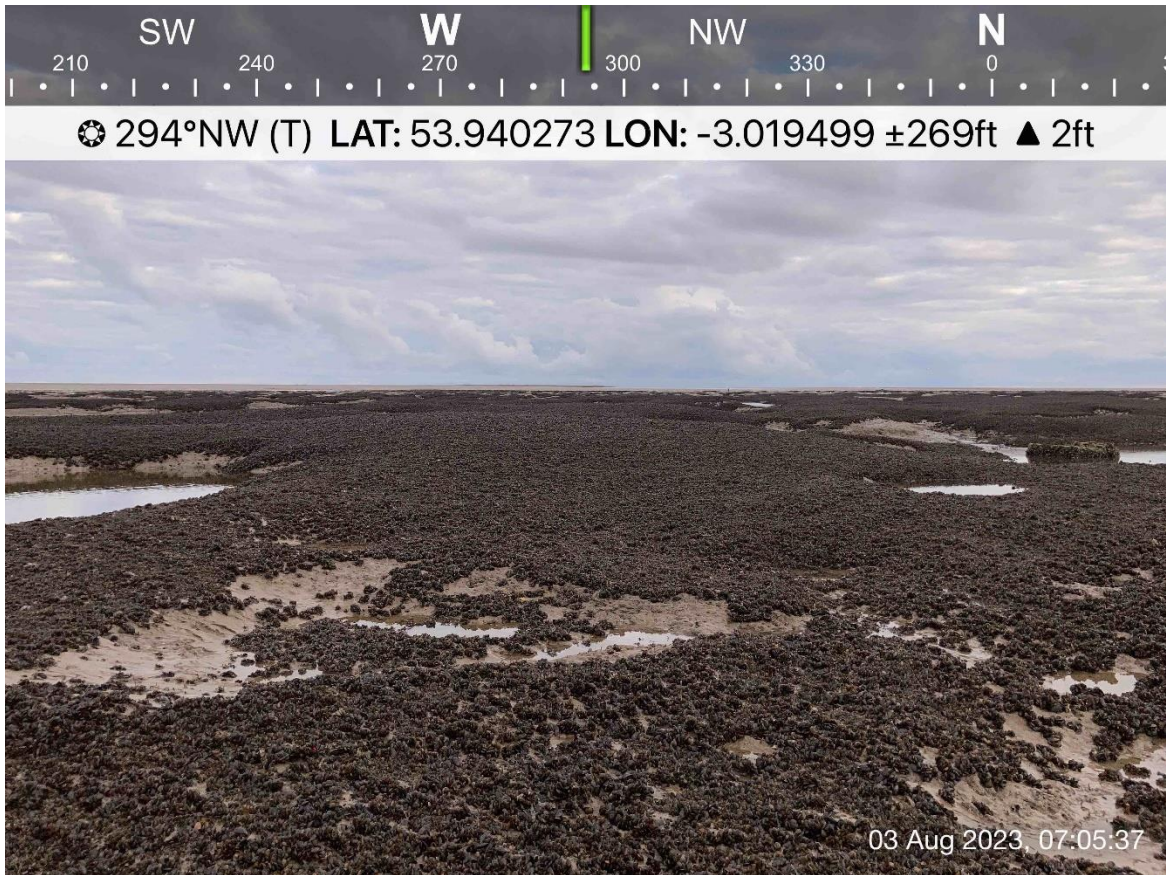


Figure 18. Dense settlement on Perch Scar 03-08-2023.

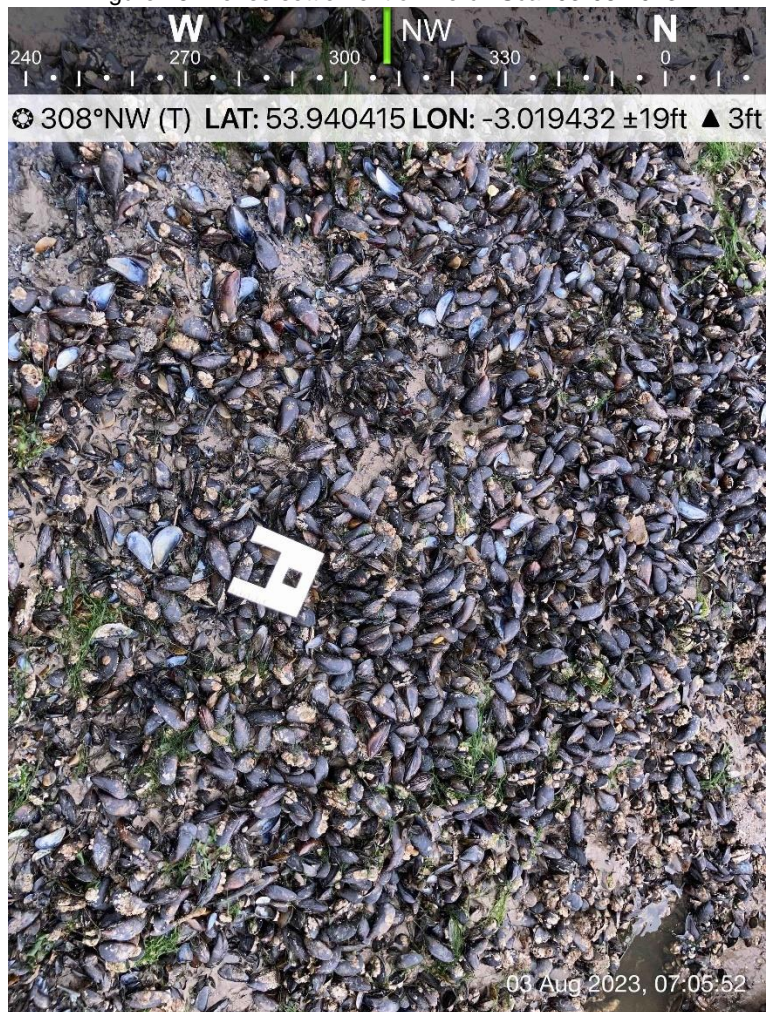


Figure 19. Size mussel on the edge of Perch Scar 03-08-2023



Figure 20. Size mussel on the edge of Perch Scar 03-08-2023



Figure 21. Deep mud and evidence of scouring on the end of Perch Scar 03-08-2023



Figure 22. Dense mussel on Perch Scar 03-08-2023

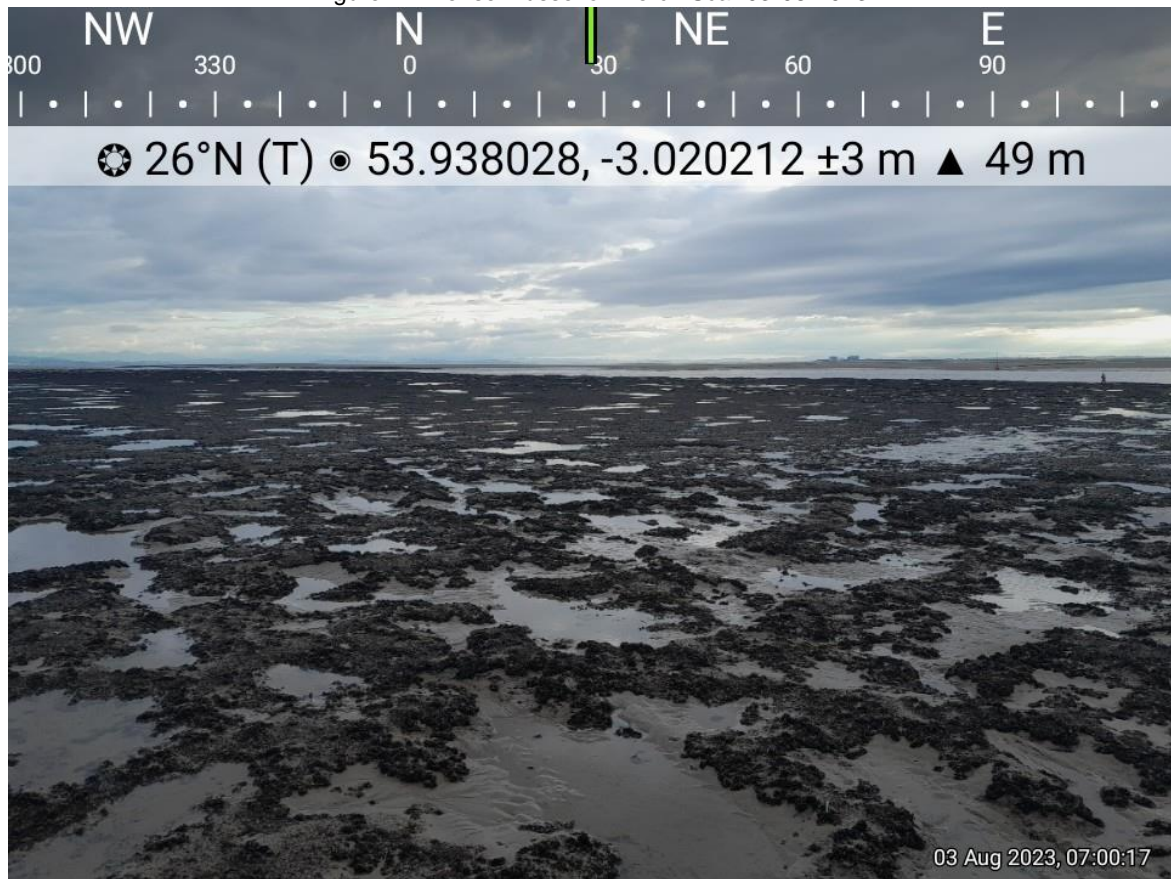


Figure 23. Landward end of Perch Scar 03-08-2023



Figure 24. far edge of Perch Scar 03-08-2023

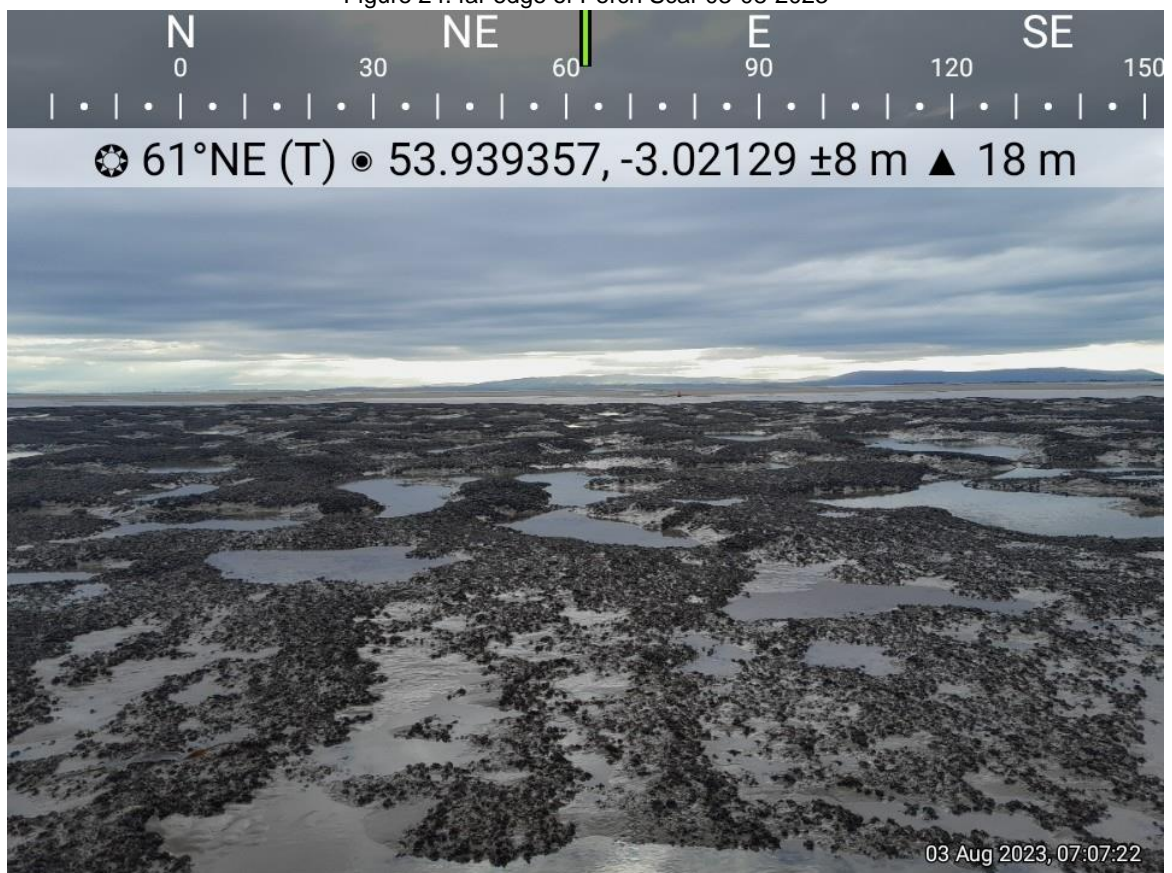


Figure 25. Thick mussel mud and dense mussel on Perch Scar 03-08-2023



Figure 26. Deep mussel mud on Perch Scar 03-08-2023



Figure 27. Hillocks of mussel mud and evidence of scour on Perch Scar 03-08-2023

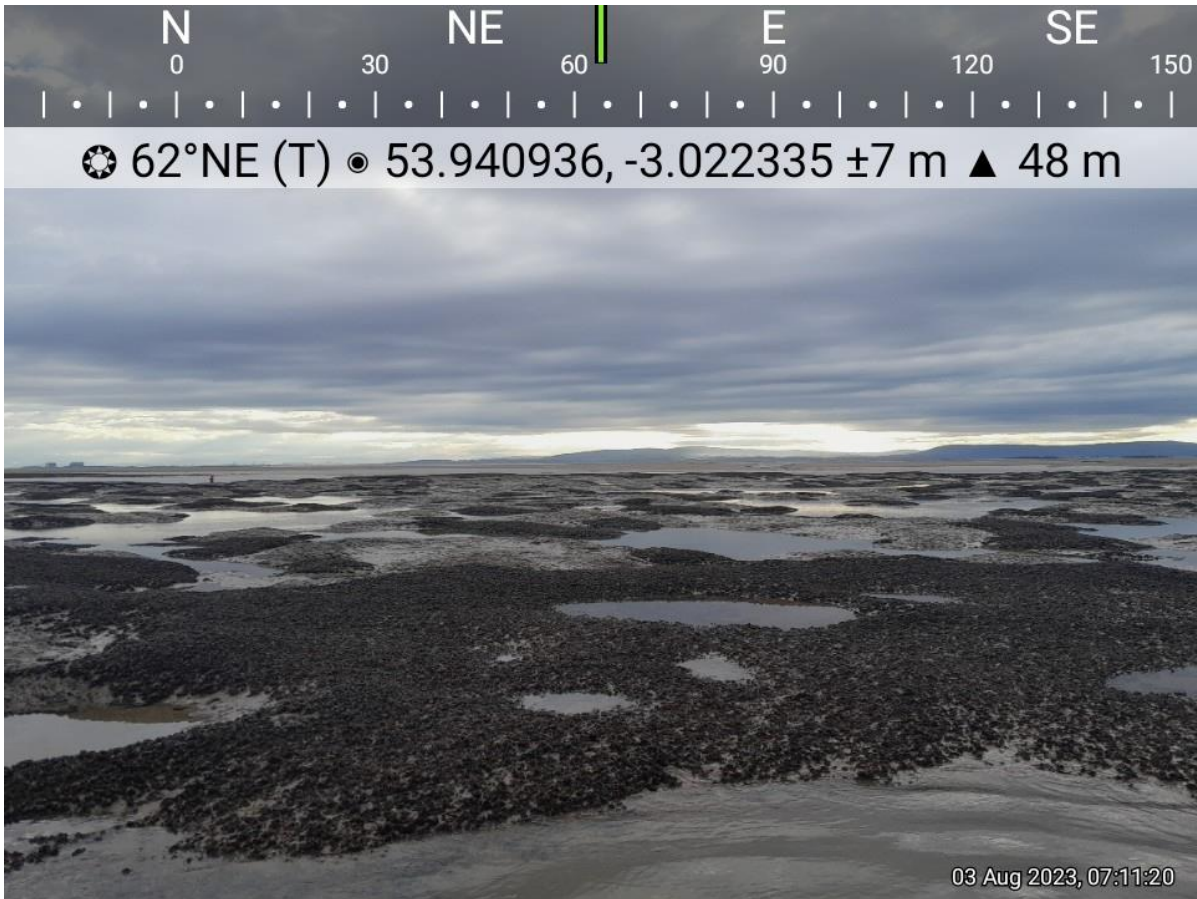


Figure 28. Hillocks of mussel mud and evidence of scour on Perch Scar 03-08-2023