

SITE NAME Dawlish.99		PROFILE NO. Pit 1 (Asp 13)	SLOPE AND ASPECT 6°S	LAND USE Cer	Av Rainfall: 883 mm ATO: 1593 day °C	PARENT MATERIAL Dawlish sandstone
JOB NO. 12.99		DATE 11.2.99	GRID REFERENCE SX 9649 7937	DESCRIBED BY PB	FC Days: 188 Climatic Grade: 1 Exposure Grade: 1	PSD SAMPLES TAKEN TS 0-25 cm: MSL (S51:Z37:C12%)

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	28	MSL	7.5YR4/2	0% > 2 cm (v) 6% < 2 cm (s+d) 6% HR	0	0	-	-	-	-	CF, VF	-	Grad Smooth
2	70	FSL/SCL	7.5YR5/4, 4/2	0 (v)	0	0	WKCAB	FR	G	G	FVF	-	Grad Smooth
3	105+	HCL	5YR5/4	0 (v)	0	F	WKCAB	FR	M	G	0	-	

Profile Gleyed From: Not gleyed

Slowly Permeable

Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 177 mm

Potatoes: 137 mm

Moisture Deficit Wheat: 104 mm

Potatoes: 97 mm

Moisture Balance Wheat: +73 mm

Potatoes: +40 mm

Droughtiness Grade: 1 (Calculated to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Erosion risk

Remarks:

SITE NAME		PROFILE NO.	SLOPE AND ASPECT		LAND USE		Av Rainfall: 883 mm		PARENT MATERIAL			
Dawlish 99		Pit 2 (Nr Asp 40)	10 °SE		Cer		ATO: 1593 day °C		Dawlish sandstone			
JOB NO.		DATE	GRID REFERENCE		DESCRIBED BY		FC Days: 182		PSD SAMPLES TAKEN			
12.99		11.2.99	SX 9732 7912		PB		Climatic Grade: 1		TS 0-25 cm: LMS (S83:Z9:C8%)			
Exposure Grade: 1												

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	27	LMS	5YR4/6	1% > 2 cm (v) 4% < 2 cm (s+d) 5% HR	0	0	-	-	-	-	MF, VF	-	Abrupt Wavy
2	70	MS	2.5YR4/6	0 (v)	0	C (staining)	MDCAB	VF	G	G	FF, VF	-	Grad Wavy
3	116+	MS	2.5YR4/8	0 (v)	0	F (staining)	WKCAB*	VF	M	G	O	-	

Profile Gleyed From: Not gleyed

Slowly Permeable Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 74 mm

Potatoes: 58 mm

Moisture Deficit Wheat: 104 mm

Potatoes: 97mm

Moisture Balance Wheat: -30 mm

Potatoes: -39 mm

Droughtiness Grade: 3b (Calculated to 120 cm)

Final ALC Grade: 3b

Main Limiting Factor(s): Gr, Dr

Remarks: H3 structure tending to platy.

SITE NAME		PROFILE NO.	SLOPE AND ASPECT		LAND USE		Av Rainfall: 900 mm		PARENT MATERIAL			
Dawlish. 99		Pit 3 (Asp 50)	5°SW		PLO		ATO: 1570 day °C		Dawlish sandstone			
JOB NO.		DATE	GRID REFERENCE		DESCRIBED BY		FC Days: 186		PSD SAMPLES TAKEN			
12.99		12.2.99	SX 9584 7882		PB		Climatic Grade: 1		TS 0-25 cm: MSL (S76:Z15:C9%)			
							Exposure Grade: 1					

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	37	MSL	5YR4/2	2% > 2 cm (v) 18% < 2 cm (s+d) 20% HR	0	0	-	-	-	-	FVF	-	Grad Smooth
2	55	LMSMSL	5YR5/4	1% > 2 cm (v) 9% < 2 cm (s+d) 10% HR	0	0	MDCAB	VF	M	G	FVF	-	Grad Smooth
3	105+	MSL*	2.5YR4/8	0 (v)	0	0	WKCAB	VF	G	G	0	-	

Profile Gleyed From: Not gleyed

Slowly Permeable Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 146 mm

Potatoes: 88 mm

Moisture Deficit Wheat: 104 mm

Potatoes: 97mm

Moisture Balance Wheat: +42 mm

Potatoes: -9 mm

Droughtiness Grade: 2 (Calculated to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Dr

Remarks: H3 texture variable LMS-SCL
H3 structure tending to platy

SITE NAME Dawlish.99		PROFILE NO. Pit 4 (Asp 89)	SLOPE AND ASPECT 4°S	LAND USE PGR	Av Rainfall: 929 mm ATO: 1554 day °C	PARENT MATERIAL Sandstone/breccia boundary
JOB NO. 12.99		DATE 18.2.99	GRID REFERENCE SX 9562 7833	DESCRIBED BY PB	FC Days: 189 Climatic Grade: 1 Exposure Grade: 1	PSD SAMPLES TAKEN TS 0-25 cm: MSL (S72: Z17: C11%)

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	30	MSL	5YR4/3	1% > 2 cm (s+v) 9% < 2 cm (s+d) 10% HR	0	0	-	-	-	-	MF, VF	-	Grad Smooth
2	50	MSLMS	5YR4/4	1% > 2 cm (s+v) 18% < 2 cm (s+d) 19% HR	0	0	WKMA B	VF	G	G	CVF	-	Grad Smooth
3	94	MSL	2.5YR4/4	1% > 2 cm (s+v) 27% < 2 cm (s+d) 28% HR	0	0	WKCAB	VF	G	G	FVF	-	Abrupt Smooth
4	110+	MS	2.5YR4/6	0% > 2 cm (v) 12% < 2 cm (s+d) 12% HR	0	0	WKMA B	VF	M	G	0	-	

Profile Gleyed From: Not gleyed

Slowly Permeable Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 125mm

Potatoes: 99 mm

Moisture Deficit Wheat: 104 mm

Potatoes: 97mm

Moisture Balance Wheat: +21mm

Potatoes: +2 mm

Droughtiness Grade: 2 (Calculated to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Dr

Remarks:

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 929 mm	PARENT MATERIAL
Dawlish.99		Pit 5 (Asp 67)	3° NW	PGR	ATO: 1554 day °C	
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 189	PSD SAMPLES TAKEN
12.99		18.2.99	SX 9542 7885	PB	Climatic Grade: 1	
					Exposure Grade: 1	

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	28	MSLMS	5YR4/2	1% > 2 cm (s+v) 13% < 2 cm (s+d) 14% HR	0	0	-	-	-	-	MF, VF	-	Clear Smooth
2	48	LMS	2.5YR4/4	0 (v)	0	0	WKCAB	VR	M	G	FF, VF	-	Grad Smooth
3	90	MS	2.5YR4/6	0 (v)	0	0	WKCAB	VR	M	G	0	-	Grad smooth
4	100+	MSST	2.5YR4/6	Rock	0	0	-	-	-	-	0	-	

Profile Gleyed From: Not gleyed

Slowly Permeable Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 79mm

Potatoes: 68 mm

Moisture Deficit Wheat: 104 mm

Potatoes: 97mm

Moisture Balance Wheat: -25 mm

Potatoes: -29 mm

Droughtiness Grade: 3b (Calculated to 120 cm)

Final ALC Grade: 3b

Main Limiting Factor(s): Dr

Remarks: H3 is soft sandstone but with worm channels containing roots and topsoil.

SITE NAME Dawlish.99		PROFILE NO. Pit 6 (Asp 117)	SLOPE AND ASPECT 3° NE		LAND USE Cer		Av Rainfall: 929 mm ATO: 1554 day °C		PARENT MATERIAL Teignmouth breccia			
JOB NO. 12.99		DATE 19.2.99	GRID REFERENCE SX 9570 7784		DESCRIBED BY PB		FC Days: 189 Climatic Grade: 1 Exposure Grade: 1		PSD SAMPLES TAKEN TS 0-25 cm : MSL (S75:Z12: C13%)			

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	24	MSL	5YR4/2	1% > 2 cm (s+v) 22% < 2 cm (s+d) 23% HR	0	0	-	-	-	-	FF,VF	-	Abrupt Smooth
2	40	LMS	2.5YR4/4	1% > 2 cm (s+v) 29% < 2 cm (s+d) 30% HR	FDFOM	F	WKCAB	VF	M	G	FVF	-	Grad Smooth
3	90	MSL	2.5YR4/4	1% > 2 cm (s+v) 36% < 2 cm (s+d) 37% HR	0	F	WKCAB	VF	M	P	0	-	Clear Wavy
4	100+	LMS	2.5YR4/6	37% HR (v)	FDMPM 5YR7/3 Local patches	F locally C	WKMA B	VF	M	P	0	-	

Profile Gleyed From: Not gleyed

Slowly Permeable Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 88mm

Potatoes: 69 mm

Moisture Deficit Wheat: 104 mm

Potatoes: 97 mm

Moisture Balance Wheat: -16mm

Potatoes: -28mm

Droughtiness Grade: 3a (Calculated to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Dr

Remarks:

SITE NAME		PROFILE NO.	SLOPE AND ASPECT		LAND USE		Av Rainfall: 930 mm		PARENT MATERIAL			
Dawlish.99		Pit 7 (Asp 139)	6° N		Cer		ATO: 1509day °C		Teignmouth breccia			
JOB NO.		DATE	GRID REFERENCE		DESCRIBED BY		FC Days: 189		PSD SAMPLES TAKEN			
12.99		22.2.99	SX 9572 7738		PB		Climatic Grade: 1		TS 0-25 cm : MSL/SCL (S59: Z24: C17%)			
							Exposure Grade: 2					

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	28	MSL/SCL	2.5YR4/2	2% > 2 cm (s+v) 23% < 2 cm (s+d) 25% HR	0	0	-	-	-	-	FF,CVF	-	Abrupt Smooth
2	70	CSL/SCL*	2.5YR4/3	1% > 2 cm (s+v) 34% < 2 cm (s+d) 35% HR	0	0	WKCSAB	VF	G	G	FVF	-	Grad Smooth
3	100+	CSL/SCL*	2.5YR4/4	4% > 2 cm (s+v) 44% < 2 cm (s+d) 48% HR	0	0	Too stony	VF	(M)	P	0	-	

Profile Gleyed From: Not gleyed

Slowly Permeable

Horizon From: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 118 mm

Potatoes: 98mm

Moisture Deficit Wheat: 104 mm

Potatoes: 91mm

Moisture Balance Wheat: +14 mm

Potatoes: +1 mm

Droughtiness Grade: 2 (Calculated to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Dr

Remarks: H2, H3 very gritty therefore difficult to assess texture by hand.

SITE NAME		PROFILE NO.	SLOPE AND ASPECT	LAND USE	Av Rainfall: 916 mm	PARENT MATERIAL
Dawlish.99		Pit 8 (Nr Asp 167)	4° W	Cer	ATO: 1510 day °C	Teignmouth breccia
JOB NO.		DATE	GRID REFERENCE	DESCRIBED BY	FC Days: 188	PSD SAMPLES TAKEN
12/99		24/2/99	SX 9517 7564	GN + PB	Climatic Grade: 1	TS 0-25 cm : SCL/MSL (S52:Z30:C18%)
					Exposure Grade: 1	

Horizon No.	Lowest Av. Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness: Size, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Mangan Concs	Structure: Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots: Abundance and Size	Calcium Carbonate Content	Horizon Boundary: Distinctness and form
1	22	SCL	2.5YR3/2	3% > 2 cm (s+v) 30% < 2 cm (s+d) 33% HR	0	0	-	-	-	-	MF, VF	-	Clear Wavy
2	45	C	2.5YR4/3	2% > 2 cm (s+v) 31% < 2 cm (s+d) 33% HR	0	0	WKCSAB	FR	M	G	CF, VF	-	Clear Smooth
3	105+	C	2.5YR4/4	4% > 2 (s+v) 36% < 2 (s+d) 40% HR	FFFO 10YR5/6	0	M	FM	P	P (low)	FVF	-	

Profile Gleyed From: Not gleyed
 Slowly Permeable Horizon From: No SPL
 Wetness Class: I
 Wetness Grade: 3a

Available Water Wheat: 86 mm
 Potatoes: 72 mm
 Moisture Deficit Wheat: 104 mm
 Potatoes: 97mm
 Moisture Balance Wheat: -18 mm
 Potatoes: -25 mm
 Droughtiness Grade: 3a (Calculated to 120 cm)

Final ALC Grade: 3a
 Main Limiting Factor(s): Dr

Remarks: Probed to 120 cm