

Vessey Pasture Dale Auger Transect 1										
Auger Point	Depth*	Description**	Colour	Depth*	Description**	Colour	Depth*	Description**	Colour	Depth*
VP1/1	36	ZL	10YR3/2	70	ZL	10YR4/3				
VP1/2	9	ZL	10YR2/2							
VP1/3	44	ZL	10YR3/2	77	ZCL	10YR3/2	110	CL	10YR5/4	149
VP1/4	25	ZL	10YR3/4	56	ZCL	10YR3/6				150
VP1/5	11	ZL	10YR3/3	61	ZCL	10YR3/3	120	CL	10YR4/4	150
VP1/6	55	ZL	10YR3/3	88	ZCL	10YR4/6				
VP1/7	29	ZL	10YR2/2	78	ZCL	10YR4/4	125	CL	10YR4/2	
VP1/8	78	ZL	10YR4/2	147	ZCL	10YR4/3				

Vessey Pasture Dale Auger Transect 2										
Auger Point	Depth*	Description**	Colour	Depth*	Description**	Colour	Depth*	Description**	Colour	Depth*
VP2/1	87	ZL	10YR3/3	137	ZCL	10YR4/2				
VP2/2	56	ZL	10YR4/2	150	ZCL	10YR4/2				
VP2/3	35	ZL	10YR4/2	90	ZCL	10YR4/2	147	ZCL/gravel	10YR4/2	
VP2/4	46	ZL	10YR3/3	67	ZCL	10YR3/3	122	ZCL	10YR5/4	
VP2/5	65	ZL	10YR3/2	127	ZCL	10YR4/4	150	CL	10YR4/4	
VP2/6	30	ZL	10YR3/2	74	ZCL	10YR2/2	135	CL	10YR4/4	
VP2/7	9	ZL	10YR2/2	92	ZCL	10YR3/2				
VP2/8	36	ZL	10YR3/2	70	ZL	10YR3/4				
VP2/9	42	ZL	10YR3/2							

* Depth in cumulative cm

** ZL = silty loam ZCL = silty clay loam CL = clay loam ZC = silty clay

Table 1 Auger records Vessey Pasture Dale 2005

Vessey Pasture Test Pit 1											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phos*	LOI%**	Coarse %	Stone shape***	Stone size****
VP1	364	10YR 4/2	10YR 2/2	ZL	1.0-2.0	7.9	2	16.66	53.2	A	vs-m
VP2	501	10YR 4/3	10YR 2/2	ZCL	2.0-5.0	7.9	4	16.4	50	SR	s-l
VP3	634	10YR 5/6	10YR 4/6	ZCL	5.0-10	8.71	5	22.81	50.9	V	vs-vl
VP4	476	10YR 7/2	10YR 5/2	ZCL	5.0-10	8.6	5	9.21	56.8	V	s-l
Vessey Pasture Test Pit 2											
Sample No	Sample dry weight(g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phos	LOI%*	Coarse %	Stone shape**	Stone size***
VP5	510	10YR 4/3	10YR 2/2	ZL	1.0-2.0	5.41	1	20.56	7.5	SR	vs- s
VP6	1721	10YR 5/6	10YR 3/3	ZL	<0.1	6.3	1	10	34.3	SA	s
VP7	634	10YR 5/6	10YR 3/4	ZCL	<0.1	6.75	1	7.45	9.2	SR	vs-m
VP8	476	10YR 6/3	10YR 4/4	ZCL	5.0-10	8.53	5	16.46	33.3	SA	vs -m
Vessey Pasture Test Pit 3											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phos	LOI%*	Coarse %	Stone shape**	Stone size***
VP9	258	10YR 4/3	10YR 2/2	ZL	<0.1	7.88	1	14.82	9.3	A	s
VP10	593	10YR 4/2	10YR 2/2	ZL	0.5-1.0	7.54	1	18.87	2.9	SA	vs
VP11	300	10YR 5/4	10YR 3/6	ZCL	0.1-0.5	7.75	1	17.15	51.4	A	s-l
VP12	1010	10YR 7/3	10YR 5/6	L	5.0-10	8.43	4	12.14	88	SA	vs-vl

* Phosphate value based on qualitative spot test

** Loss on Ignition

*** R = rounded, SR = sub-rounded, SA = sub-angular, A = angular, V = variable

**** vs = very small, s = small, m = medium, l = large, vl = very large

Table 2 Sediment test results Vessey Pasture Dale 2005

Sample numbers		
Species	VP 1	VP 2
<i>Helicella itala</i>	0	1
<i>Trichia sp.</i>	2	0
Totals	2	1

Table 3 Mollusc results Vessey Pasture Dale 2005

Fairy Dale Auger Transect 1											
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour	Depth*	Colour
FD1/1	17	ZL	10YR3/3	50	ZCL	10YR4/3	98	CL	10YR5/4	109	10YR6/4
FD1/2	Failed	x 4									
FD1/3	50	ZL	10YR3/2				150	CL	10YR7/3		
FD1/4	35	ZL	10YR3/2	115	ZCL	10YR4/2					
FD1/5	54	ZL	10YR3/2	114	ZCL	10YR5/4					
FD1/6	56	ZL	10YR3/3	132	ZCL	10YR4/4					
FD1/7	26	ZL	10YR3/3				74	CL	10YR4/4 (charcoal)		
FD1/8	31	ZL	10YR4/3								
FD1/9	Failed =	badger set									
FD1/10	42	ZL	10YR4/3	55	ZCL	10YR4/4					
FD1/11	50	ZL	10YR4/3	72	ZCL	10YR4/4					
FD1/12	56	ZL	10YR3/3	97	ZCL	10YR4/4	114	CL	10YR4/4		

Fairy Dale Auger Transect 2											
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour	Depth*	Colour
FD2/1	27	ZL	10YR4/2	44	ZCL loess	2.5YR3/2	75	CL	10YR3/3	104	10YR5/4
FD2/2	26	ZL	10YR4/4	69	ZCL	10YR3/3	105	CL	10YR5/6		
FD2/3	25	ZL	10YR3/2	44	ZCL	10YR4/1	102	CL	10YR5/4		
FD2/4	54	ZL	10YR3/3	70	ZCL	10YR5/2				150	10YR6/4
FD2/5	37	ZL	10YR3/2	79	ZCL	10YR2/2	127	CL	10YR7/3		
FD2/6	14	ZL	10YR3/2	60	ZCL	10YR2/2	141	CL/solifluction	10YR5/4		
FD2/7	72	L	10YR2/2	137	ZCL	10YR3/4					
FD2/8	37	ZL	10YR3/3	84	ZCL	10YR3/4	139	CL	10YR4/4		
FD2/9	78	ZCL	10YR3/3	145	CL	10YR4/4					
FD2/10	35	ZL	10YR3/2	85	L	10YR3/3	148	ZCL	10YR4/4		
FD2/11	40	ZL	10YR2/2	143	ZCL	10YR3/3					
FD2/12	24	ZL	10YR3/3	84	ZCL	10YR4/4	143	CL	10YR4/4		

* Depth in cumulative cm

** ZL = silty loam ZCL = silty clay loam CL = clay loam ZC = silty clay

Table 4 Auger records Fairy Dale 2005 (continued overleaf)

Fairy Dale Auger Transect 3									
Ag Point	Depth *	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour
FD3/1	26	ZL	10YR3/1	40	ZCL	10YR3/2	150	CL	10YR4/4
FD3/2	17	ZL	10YR3/2	70	ZCL	10YR2/2			

* Depth in cumulative cm
 ** ZL = silty loam ZCL = silty clay loam CL = clay loam ZC = silty clay

Table 4 Auger records Fairy Dale 2005 (continued from previous page)

Sample Number	Depth	Item Description	Number
1		Unidentified bone fragment	1
3	92cm	Small horse tooth	1
4		Modern ceramics	2
4		Modern glass	1
4		CBM	4
4		Unidentified bone fragment	1
5	29cm	Unidentified ceramic	1
5		Calcite gritted ware	1
5		Sheep/goat incisor	1
5		Sheep/goat radius	1
5		Roe deer metatarsal	1
5		Cattle tooth	1
5		Bird tibia tarsus	1
5		Water vole left upper incisor	1
6		Maxillary molars sheep/goat	2
6		Small cattle metacarpal	1
6		Unidentified bone fragment	4
6		Iron Age pottery fragment	1
8		Modern glass fragment	1
9		Unidentified bone fragment	4
13	31cm	Roman amphora fragment	1
13	50cm	Iron Age pottery fragment	1
14	62cm	Calcite gritted ware fragment	2
		Total	35

Table 5 Artefacts and ecofacts Fairy Dale 2005

Fairy Dale Test Pit 1											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI% **	Coarse %	Stone shape ***	Stone size****
FD1	1367	10YR 4/2	10YR 2/2	ZL	0.5-1.0	7.84	2	22.5	25.7	SA	s-l
FD2	944	10YR 4/3	10YR 3/3	ZL	2.0-5.0	8.29	2	17.36	65.3	SR	vs-vl
FD3	1212	10YR 5/3	10YR 3/3	CL	5.0-10	8.57	4	22.81	52.3	SR	s-l

Fairy Dale Test Pit 2											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI% **	Coarse %	Stone shape ***	Stone size****
FD4	229	10YR 3/2	10YR 2/2	ZL	0.5-1.0	7.65	2	23.5	8.2	SR	s
FD5	1004	10YR 3/2	10YR 2/2	ZL	1.0-2.0	8.14	4	22.92	64.6	A	l
FD6	704	10YR 4/2	10YR 2/2	ZCL	2.0-5.0	8.2	4	14.83	51.2	A	s
FD7	1184	10YR 3/2	10YR 2/2	ZC	2.0-5.0	8.51	5	18.75	70.8	A	l

Fairy Dale Gully Section											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI% **	Coarse %	Stone shape ***	Stone size****
FD8	603	10YR 3/2	10YR 2/2	ZL	5.0-10	8.05	2	27.14	78.1	SA	vs-m
FD9	717	10YR 6/2	10YR 5/2	ZCL	5.0-10	8.51	5	17.02	60.3	SA	vs-m
FD10	324	10YR 7/3	10YR 6/3	CL	5.0-10	8.55	5	14.82	64.1	A	vs-s

* Phosphate value based on qualitative spot test

**Loss on Ignition

*** R = rounded, SR = sub-rounded, SA = sub-angular, A = angular, V = variable

**** vs = very small, s = small, m = medium, l = large, vl = very large

Table 6 Sediment test results Fairy Dale 2005 (continued overleaf)

Fairy Dale Test Pit 3											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI%**	Coarse %	Stone shape***	Stone size****
FD11	547	10YR 4/2	10YR 2/2	ZL	0.5-1.0	8.21	3	26.38	60.7	SR	s-l
FD12	1369	10YR 4/3	10YR 3/2	ZCL	2.0-5.0	8.88	1	22.92	64.6	SR	m-l
FD13	1021	10YR 6/4	10YR 4/4	ZCL	2.0-5.0	8.39	5	20.56	59.5	SR	vs-s
FD14	1128	10YR 5/2	10YR 3/3	CL	5.0-10	8.63	5	15.5	69.1	A	s-m

Fairy Dale Test Pit 4											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI%**	Coarse %	Stone shape***	Stone size****
FD15	473	10YR 3/2	10YR 2/2	ZL	2.0-5.0	6.98	1	18.62	10.6	A	vs-s
FD16	974	10YR 5/2	10YR 3/2	ZL	<0.1	7.34	1	16.58	40.9	A	vs-s
FD17	1374	10YR 4/4	10YR 3/3	CL	1.0-2.0	7.58	2	14.14	22.6	A-SA	m
FD18	939	10YR 5/6	10YR 3/6	ZCL	<0.1	7.91	1	10.64	46	A	s-l
FD19	1428	10YR 5/6	10YR 4/4	CL	0.5-1.0	8.06	2	10.05	75.8	A	vl

* Phosphate value based on qualitative spot test
 ** Loss on Ignition

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**** vs = very small, s = small, m = medium, l = large, vl = very large

Table 6 Sediment test results Fairy Dale 2005 (continued from previous page)

Species	Sample numbers												
	FD 3	FD 4	FD 5	FD 6	FD 7	FD 8	FD 9	FD 10	FD 11	FD 12	FD 13	FD 14	FD 18
<i>Carychium tridentatum</i>	0	0	0	0	4	0	0	0	0	0	0	0	0
<i>Cochlicopa lubrica</i>	2	0	0	2	0	0	0	0	0	0	0	1	0
<i>Vertigo pygmaea</i>	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Vertigo sp.</i>	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pupilla muscorum</i>	2	0	0	0	0	0	0	0	0	0	0	1	0
<i>Vallonia costata</i>	10	0	0	1	0	0	0	0	1	1	0	4	0
<i>Vallonia pulchella</i>	0	0	0	2	0	0	0	0	0	0	0	3	0
<i>Vallonia excentrica</i>	20	0	0	0	0	0	0	5	0	0	0	1	0
<i>Vallonia sp.</i>	0	0	0	0	0	0	0	0	0	3	0	0	0
<i>Punctum pygmaeum</i>	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>Discus rotundatus</i>	0	0	0	1	7	0	1	0	0	0	0	0	0
<i>Vitrea crystallina</i>	0	0	0	1	1	0	0	0	0	0	0	0	0
<i>Aegopinella pura</i>	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Oxvchilus alliarius</i>	0	0	0	1	1	0	0	0	1	0	0	0	0
<i>Cecilioides acicula</i>	1	0	0	2	2	0	0	11	0	6	0	5	1
<i>Clausilia bidentata</i>	0	0	0	0	1	0	0	0	0	0	0	0	0
<i>Helicella itala</i>	0	0	0	0	0	0	0	0	1	1	0	0	0
<i>Trichia plebeia</i>	0	0	0	0	0	0	0	0	0	0	0	3	0
<i>Trichia hispida</i>	0	0	3	0	0	0	0	12	1	1	0	4	0
<i>Trichia sp.</i>	83	1	0	0	0	0	0	12	4	6	0	0	0
<i>Arianta arbustorum</i>	0	6	0	0	0	0	0	0	0	0	0	6	0
<i>Cepaea nemoralis</i>	1	0	6	0	0	4	0	0	0	0	0	0	0
<i>Cepaea hortensis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cepaea sp.</i>	0	15	0	0	0	0	0	0	0	0	0	0	0
<i>Unidentifiable</i>	0	1	0	0	0	4	0	2	2	0	1	0	0
Total	121	23	9	10	18	8	1	42	10	18	1	28	1

Table 7 Mollusc results Fairy Dale 2005

Whay Dale Auger Transect 1											
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour	Depth*	Desc**
WD1/1	12	ZL	10YR3/3	113	ZCL	10YR6/4					
WD1/2	8	empty		110	mainly chalk						
WD1/3	17	empty		46	hit chalk						
WD1/4	10	empty		60	mainly chalk						
WD1/5	47	ZL	10YR3/3	90	ZCL	10YR3/4					
WD1/6	52	ZL	10YR3/3	74	ZCL	10YR3/4	150	CL	10YR6/4		
WD1/7	50	ZL	10YR3/3	84	ZCL	10YR3/3	150	CL	10YR3/4		
WD1/8	70	ZL	10YR3/3	100	ZCL	10YR3/4	123	CL	10YR3/4		
WD1/9	54	ZL	10YR3/2	76	ZCL	10YR3/3	143	ZL/sol	10YR5/4		
WD1/10	79	ZL	10YR3/3	107	ZCL	10YR4/4	120	CL	10YR4/4		
WD1/11	21	ZL	10YR3/3	40	ZCL	10YR3/2	60	CL	10YR3/4	78	ZCL/sol
WD1/12	30	empty									

Whay Dale Auger Transect 2											
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour	Depth*	Desc**
WD2/1	68	ZL	10YR3/3	80	ZCL	10YR3/3	113	CL	10YR4/4	150	ZCL/sol
WD2/2	55	ZL/char	10YR3/2	82	ZCL/char	10YR3/2	148	CL	10YR3/4		
WD2/3	20	ZL	10YR2/1	60	ZCL	10YR3/1	112	CL	10YR3/3		
WD2/4	55	ZL	10YR3/2	86	ZCL	10YR3/3	148	CL	10YR3/4		

* Depth in cumulative cm

** ZL = silty loam ZCL = silty clay loam CL = clay loam ZC = silty clay

Table 8 Auger Records Whay Dale 2005 (continued overleaf)

Whay Dale Auger Transect 3									
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour
WD3/1	48	ZL	10YR3/3	76	ZCL	10YR3/3	149	CL	10YR4/4
WD3/2	58	ZL	10YR3/2	86	ZCL	10YR3/3	150	CL	10YR4/4
WD3/3	43	ZLstoneless	10YR2/2	70	ZCL	10YR3/3	100	ZCL/sol	10YR6/3
WD3/4	52	ZLstoneless	10YR3/2	90	ZCL	10YR3/3	150	CL	10YR4/4

Whay Dale Auger Transect 4									
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour
WD4/1	58	ZL	10YR3/1	80	ZCL	10YR3/3	150	CL	10YR4/4
WD4/2	70	empty		140	hit chalk				
WD4/3	49	ZL	10YR3/3	90	ZCL	10YR3/3	110	CL	10YR3/4

* Depth in cumulative cm

** ZL = silty loam ZCL = silty clay loam CL = clay loam ZC = silty clay

Table 8 Auger Records Whay Dale 2005 (continued from previous page)

Sample Number	Depth	Item Description	Number
2		Roman greyware fragment	1
5		Modern glass fragment	1
5		CBM fragments	12
5		Roof tile fragment	1
6		Clay pipe fragment	1
6		Unidentified ceramic fragment	1
7	60cm	Unidentified bone fragment	1
7		Cattle pelvis fragment	1
7		Charcoal fragment	1
7	60cm	Anglian pottery fragment	1
7	85cm	Samian ware fragment	1
8		CBM fragments	2
8		Charcoal fragment	1
		Total	25

Table 9 Artefacts and ecofacts Whay Dale 2005

Test Pit 1											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI%**	Coarse %	Stone shape***	Stone size****
WD1	771	10YR 3/2	10YR 2/2	ZL	0.1-0.5	8.41	2	40.29	37.2	SR	vs-m
WD2	962	10YR 3/3	10YR 3/3	ZC	2.0-5.0	8.17	4	19.68	72	A	vs-vl
WD3	866	10YR 5/4	10YR 3/4	CL	5.0-10	8.17	4	7.92	72.2	A	s-l
WD4	680	10YR 5/3	10YR 4/2	CL	5.0-10	8.1	2	14.16	64.1	A	vs-m
Test Pit 2											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI%**	Coarse %	Stone shape***	Stone size****
WD5	764	10YR 3/2	10YR 2/2	ZL	<0.1	7.05	1	17.07	17.9	SR	s
WD6	986	10YR 4/3	10YR 3/4	ZCL	0.5-1.0	8.04	5	14.67	43.9	V	s-l
WD7	1034	10YR 5/4	10YR 4/3	ZC	0.5-1.0	7.91	4	9.74	22.1	V	s-m
Test Pit 3											
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	LOI%**	Coarse %	Stone shape***	Stone size****
WD8	952	10YR 3/1	10YR 2/1	ZL	<0.1	7.66	4	24.27	13.3	V	vs-m
WD9	820	10YR 3/2	10YR 2/2	ZCL	0.1-0.5	8.65	1	23.04	43.6	SR	m-l
WD10	933	10YR 4/4	10YR 5/4	CL	2.0-5.0	8.4	5	12.55	51.1	SR	vs-m
WD11	1123	10YR 6/4	10YR 4/3	CL	1.0-2.0	8.38	4	7.92	22.6	A	s

* Phosphate value based on qualitative spot test

** Loss on Ignition

*** R = rounded, SR = sub-rounded, SA = sub-angular, A = angular, V = variable

**** vs = very small, s = small, m = medium, l = large, vl = very large

Table 10 Sediment results Whay Dale 2005

Species	Sample Number										
	WD 2	WD 3	WD 4	WD 5	WD 9	WD 10	WD 11				
<i>Cochlicopa lubrica</i>	1	0	0	0	0	0	0				
<i>Cochlicopa nitens</i>	0	0	0	0	0	1	0				
<i>Vallonia costata</i>	0	2	0	0	0	2	2				
<i>Vallonia pulchella</i>	0	0	1	0	0	0	0				
<i>Vallonia excentrica</i>	0	2	0	0	0	2	0				
<i>Vallonia</i> sp.	0	0	0	0	0	2	0				
<i>Vitrea crystallina</i>	0	1	0	0	0	0	0				
<i>Zonitidae</i> sp.	0	0	0	0	0	0	1				
<i>Cecilioides acicula</i>	0	10	0	0	3	7	9				
<i>Trichia plebeia</i>	0	0	0	0	0	0	1				
<i>Trichia hispida</i>	2	0	1	0	0	1	1				
<i>Trichia</i> sp.	7	0	0	0	1	0	0				
Unidentifiable	0	0	1	1	0	0	0				
Total	10	15	3	1	4	15	14				

Table 11 Mollusc results Whay Dale 2005

Whay Dale Auger Transect 1										
Ag Point	Depth*	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour	Depth*
1	40	ZCL	10YR3/2	67	ZCL	10YR3/2	118	ZCL	10YE4/4	140
2	80	ZCL	10YR3/2	120	CL	10YR4/3	125	gravel		
3	50	ZCL	10YR3/3	84	ZCL	10YR4/2	110	ZL	10YR5/4	135
4	64	ZCL	10YR3/2	90	ZCL	10YR4/3	115	gravel		
5	26	ZCL	10YR3/3	76	CL	10YR4/3	120	CL/sol	10YR5/4	
6	50	ZCL	10YR3/2	73	CL	10YR4/3	79	sol		
7	64	ZCL	10YR3/2	100	CL	10YR4/3	105	sol		
8	68	ZCL	10YR3/2	82	ZCLstony	10YR3/2	144	CL	10YR4/4	
9	70	ZCL	10YR3/2	120	CL	10YR4/2	132	CL	10YR4/3	
10	60	ZCL	10YR3/2	78	ZCLstony	10YR3/2	150	CL	10YR4/3	

Whay Dale Auger Transect 2										
Ag Point	Depth *	Description**	Colour	Depth*	Desc**	Colour	Depth*	Desc**	Colour	Depth*
11	57	ZCL	10YR3/2	107	ZCLstony	10YR3/2	150	CL	10YR4/4	
12	40	ZCL	10YR3/2	71	ZCLstony	10YR4/3	150	CL	10YR4/6	
13	31	ZCL	10YR3/2	92	ZCL	10YR4/3	107	CL	10YR4/3	
14	76	ZCL	10YR3/2	98	ZCLstony	10YR4/3	130	CL	10YR4/3	
15	95	ZCL	10YR3/2	120	CL	10YR4/3				
16	53	ZCL	10YR3/2	106	CL	10YR4/3				
17	74	ZCL	10YR3/2	96	ZCL	10YR4/4	136	CL	10YR5/6	
18	129	ZCL	10YR3/2	136	ZCL	10YR4/4				*

* Depth in cumulative cm

** ZL = silty loam ZCL = silty clay loam CL = clay loam ZC = silty clay

Table 12 Auger record Whay Dale 2006

Layer number	Description	Relevant sample numbers													
1	A horizon	1	6	11	17	23									
2 and 4	A horizon (stony)	2	7	12	18	24									
3, 5, 6, 8 and 11	B horizon	3	4	8	10	13	14	19	20	25	26				
7 and 9	Bt horizon	5	9	15	21										
10 and 12	Cr horizon	16	22	27											

Table 13 Sample numbers related to stratigraphic grouping Whay Dale 2006

Sample number	Depth	Item Description	Number
1		CBM fragment	1
1		Unidentified bone fragment	1
8		Calcite gritted ware fragment	1
Machine excavated surface	c120cm	Worked flint	1
Square feature fill		Carbonised barley seeds	2

Table 14 Artefacts and ecofacts Whay Dale 2006

Whay Dale 2006 Section A										
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
A1	1039	10YR 4/2	10YR 3/2	ZCL	<0.1	7.51	2	9.15	8.91	
A2	2858	10YR 5/3	10YR 3/3	ZCL	0.5-1.0	8.02	1	12.98	67	
A3	3221	10YR 5/6	10YR 4/6	CL	0.5 – 1.0	8.26	2	8.48	48.93	
A4	3856	10YR 6/4	10YR 5/4	CL	2.0-5.0	8.67	5	33.67	64.7	
A5	1541	10YR 7/3	10YR 4/4	C	2.0-5.0	8.52	4	15.81	69	
Whay Dale 2006 Section B										
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
B6	1960	10YR 3/2	10YR 3/1	ZCL	<0.1	7.64	1	34.78	20.4	
B7	3273	10YR 5/2	10YR 4/2	ZCL	<0.1	7.76	2	13.1	71.69	
B8	3478	10YR 4/3	10YR 3/4	CL	0.5-1.0	8.4	2	9.57	42.29	
B9	4046	7.5YR 5/4	7.5YR 4/4	C	<0.1	8.27	2	12.14	16.9	
B10	3218	10YR 6/4	10YR 4/4	CL	2.0-5.0	8.55	3	37.79	71.33	
Whay Dale 2006 Section C										
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
C11	546	10YR 4/2	10YR 3/2	ZL	<0.1	7.59	4	19.92	17.74	
C12	1970	10YR 4/3	10YR 3/2	ZCL	0.5-1.0	8.17	4	17.74	67.67	
C13	not recorded	10YR 4/4	10YR 3/4	CL	1.0-2.0	8.32	4	13.3	50	
C14	1865	10YR 5/4	10YR 4/4	CL	0.5-1.0	8.43	3	8.2	40	
C15	1484	10YR 5/8	10YR 4/6	C	<0.1	8.39	2	7.1	8.64	
C16	976	10YR 6/4	10YR 5/4	C	2.0-5.0	8.51	5	10.62	64.7	

* Phosphate value based on qualitative spot test

Table 15 Sedimentary results Whay Dale 2006 (continued overleaf)

Whay Dale 2006 Section D										
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
D17	742	10YR 4/1	10YR 3/1	ZCL	<0.1	7.59	1	19.8	18.3	
D18	1522	10YR 4/3	10YR 3/3	ZCL	5.0-10.0	8.27	2	15.98	44	
D19	1630	10YR 4/4	10YR 3/4	CL	1.0-2.0	8.08	2	14.23	25.67	
D20	1956	7.5YR 5/3	7.5YR 3/3	C	1.0-2.0	8.04	1	8	37	
D21	1974	10YR 4/6	10YR3/6	C	<0.1	8.27	1	13.06	19.1	
D22	1286	10YR 7/3	10YR 5/3	ZC	5.0-10	8.3	2	33.25	71.53	
Whay Dale 2006 Section E										
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
E23	847	10YR 3/2	10YR 2/2	ZL	<0.1	6.65	1	69.89	19.35	
E24	1866	10YR 4/2	10YR 3/3	ZCL	0.5-1.0	7.99	2	13.96	62.5	
E25	2074	10YR 4/4	10YR 3/4	ZC	1.0-2.0	8.43	3	16.53	57.77	
E26	1365	10YR 4/4	10YR 3/4	CL	1.0-2.0	8.3	1	13.16	60.42	
E27	1543	10YR 4/4	10YR 3/4	C	0.5-1.0	8.25	1	10.41	90.68	
Whay Dale 2006 Square Feature										
Sample No	Sample dry weight (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
Feature Fill	6152	7.5YR 5/6	7.5YR 4/4	C	0.1-0.5	8.23	1	8.64	8.23	

* Phosphate value based on qualitative spot test

Table 15 Sedimentary results Whay Dale 2006 (continued from previous page)

Layer 1 A horizon		Sample number					
	A1	B6	C11	D17	E23		
Colour Dry	10YR 4/2	10YR 3/2	10YR 4/2	10YR 4/1	10YR 3/2		
Colour Wet	10YR 3/2	10YR 3/1	10YR 3/2	10YR 3/1	10YR 2/2		
Texture	ZCL	ZCL	ZL	ZCL	ZL		
CaCO3 %	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		
pH	7.51	7.64	7.59	7.59	6.65		
Phosphate	2	1	4	1	1		
Loss on ignition %	9.15	34.78	19.92	19.8	69.89		
Coarse %	8.91	20.4	17.74	18.3	19.35		

Layers 2 and 4 Stony A horizon		Sample number					
	A2	B7	C12	D18	E24		
Colour Dry	10YR 5/3	10YR 5/2	10YR 4/3	10YR 4/3	10YR 4/2		
Colour Wet	10YR 3/3	10YR 4/2	10YR 3/2	10YR 3/3	10YR 3/3		
Texture	ZCL	ZCL	ZCL	ZCL	ZCL		
CaCO3 %	0.5-1.0	< 0.1	0.5-1.0	5.0-10.0	0.5-1.0		
pH	8.02	7.76	8.17	8.27	7.99		
Phosphate	1	2	4	2	2		
Loss on ignition %	12.98	13.1	17.74	15.98	13.96		
Coarse %	67	71.69	67.67	44	62.5		

Table 16 Sedimentary results by stratigraphic group Whay Dale 2006 (continued overleaf)

Layers 3, 5, 6, 8 and 11 B Horizon											
Sample number											
	A3	A4	B8	B10	C13	C14	D19	D20	E25	E26	
Colour Dry	10YR 5/6	10YR 6/4	10YR 4/3	10YR 6/4	10YR 4/4	10YR 5/4	10YR 4/4	7.5YR 5/3	10YR 4/4	10YR 4/4	
Colour Wet	10YR 4/6	10YR 5/4	10YR 3/4	10YR 4/4	10YR 3/4	10YR 4/4	10YR 3/4	7.5YR 3/3	10YR 3/4	10YR 3/4	
Texture	CL	CL	CL	CL	CL	CL	CL	C	ZC	CL	
CaCO3 %	0.5-1.0	2.0-5.0	0.5-1.0	2.0-5.0	1.0-2.0	0.5-1.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	
pH	8.26	8.67	8.4	8.55	8.32	8.43	8.08	8.04	8.43	8.3	
Phosphate	2	5	2	3	4	3	2	1	3	1	
Loss on ignition %	8.48	33.67	9.57	37.79	13.3	8.2	14.23	8	16.53	13.16	
Coarse %	48.93	64.7	42.29	71.33	50	40	25.67	32	57.77	60.42	

Layers 7 and 9 Bt horizon											
Sample number											
	A5	B9	C15	D21	Layers 10 and 12 Cr Horizon						
	Sample number				Sample number						
Colour Dry	10YR 7/3	7.5YR 5/4	10YR 5/8	10YR 4/6	Colour Dry	10YR 6/4	10YR 7/3	10YR 4/4			
Colour Wet	10YR 4/4	7.5YR 4/4	10YR 4/6	10YR 3/6	Colour Wet	10YR 5/4	10YR 5/3	10YR 3/4			
Texture	C	C	C	C	Texture	C	ZC	C			
CaCO3 %	2.0-5.0	<0.1	<0.1	<0.1	CaCO3 %	2.0-5.0	5.0-10	0.5-1.0			
pH	8.52	8.27	8.39	8.27	pH	8.51	8.3	8.25			
Phosphate	4	2	2	1	Phosphate	5	2	1			
Loss on ignition %	15.81	12.14	7.1	13.06	Loss on ignition %	10.62	33.25	10.41			
Coarse %	69	16.9	8.64	19.1	Coarse %	64.7	71.53	90.68			

Table 16 Sedimentary results by stratigraphic group Whay Dale 2006 (continued from previous page)

Burdale 2006 Archaeological Site, Context F1108										
Sample No	Sample weight dry (g)	Colour Dry	Colour Wet	Texture	CaCO3%	pH	Phosphate*	Loss on Ignition %	Coarse %	
F1108/1	1120	10YR 4/1	10YR 3/2	L	1.0-2.0	7.78	5	18.5	58.57	
F1108/2	1102	10YR 4/1	10YR 2/1	ZL	1.0-2.0	7.8	4	25.95	48	
F1108/3	699	10YR 4/2	10YR 3/2	CL	5.0-10.0	7.83	4	18.68	73.78	
F1108/4	776	10YR 5/2	10YR 3/2	CL	2.0-5.0	8.01	5	28.2	78.75	

* Phosphate value based on qualitative spot test

Table 17 Sedimentary results context number F1108, Burdale 2006

Sample number or description																											
Section A					Section B					Section C					Section D					Section E					Excavated		
	1	2	3	4	5	7	8	9	11	12	13	14	15	17	18	19	20	21	23	24	25	26	27	square feature			
Species	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Cochlicopa lubrica</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
<i>Vertigo</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
<i>Pupilla muscorum</i>	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Vallonia costata</i>	0	4	0	0	0	1	2	0	0	1	0	0	3	1	1	0	1	0	0	0	1	0	0	0	4		
<i>Vallonia pulchella</i>	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
<i>Vallonia excentrica</i>	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4		
<i>Vallonia</i> sp.	0	0	1	0	0	2	8	1	0	0	0	1	0	0	0	2	4	0	0	1	0	1	0	0	0		
<i>Oxychilus alliarius</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0		
<i>Cecilioides acicula</i>	0	2	16	8	0	0	17	10	0	0	0	0	1	0	5	13	8	2	1	2	2	7	6	2	2		
<i>Helicella itala</i>	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
<i>Trichia plebeia</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
<i>Trichia hispida</i>	0	0	2	0	1	1	3	0	0	0	0	0	2	0	1	0	0	1	0	0	1	0	0	0	0		
<i>Trichia</i> sp.	0	2	1	4	0	1	1	5	2	2	0	1	1	0	0	3	0	1	0	8	0	0	0	0	2		
<i>Cepaea nemoralis</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<i>Unidentifiable</i>	0	0	1	2	0	3	0	2	0	2	0	0	0	0	1	1	4	0	0	0	0	2	0	1	1		
Total	1	8	21	15	1	8	34	18	2	7	1	3	8	2	8	19	18	4	1	12	4	11	6	16	16		

Table 18 Mollusc results Whay Dale 2006

Species	Sample numbers			
	F1108/1	F1108/3	F1108/4	
<i>Cecilioides acicula</i>	0	3	5	
<i>Trichia</i> sp.	1	1	0	
Totals	1	4	5	

Table 19 Mollusc results F1108

Depth cm	Sample Number	Fine material			Peds			Inclusions			Voids			Coatings
		Colour	Limpidity	Interference colour	Shape	Size	Degree of development	Colour	Shape	Size	Morph	Size	Count for porosity	
0-7	α (2)	Reddish brown	Speckled /opaque	Speckled	Subang. blocky	<1mm – 100mm	Moderate	Black	Round to Sub- rounded	S	Planar/ Vesicles	S-L	31%	Absent
10-17	β (1)	Reddish brown	Masked	Speckled	Subang. blocky	<1mm – 100mm	Moderate to weak	Black	Sub- rounded	VS	Planar/ Vesicles	S (+) - L	17%	Absent
26-33	γ (3)	Yellowish brown	Speckled	Speckled	Subang. blocky	<1mm- 20mm	Moderate	Black	Sub- rounded	S-M	Planar/Vesicles	M-L	46%	Channel coatings present

Table 20 Micromorphology results Whay Dale 2006

Sample number	
59/02	76/1
Fossilised foraminifera	<i>Apodemus</i> sp. fragments
<i>Atriplex</i> x 2	<i>Atriplex</i> x 2
<i>Triticum</i> cf. <i>Dicoccon</i> x1	<i>Galium aparine</i> x 1
Scrap of wood charcoal	

Table 21 Faunal and other environmental material recovered from Thwing 2006 samples

Species	Sample number	
	76 / 1	59 / 2
<i>Carychium tridentatum</i>	1	0
<i>Cochlicopa lubrica</i>	3	1
<i>Vertigo pygmaeum</i>	2	0
<i>Vertigo angustior (sinistral)</i>	1	0
<i>Vertigo</i> sp. (1 burnt)	0	3
<i>Vallonia costata</i>	2	0
<i>Vallonia excentrica</i>	1	1
<i>Vallonia</i> sp.	2	0
<i>Punctum pygmaeum</i>	3	1
<i>Vitrea crystallina</i>	2	1
<i>Limacidae</i> sp.	0	1
<i>Cecilioides acicula</i>	301	211
<i>Aegopinella pura</i>	6	0
<i>Helicella itala</i>	0	1
<i>Helicella</i> sp.	0	3
<i>Trichia hispida</i>	1	0
<i>Trichia plebia</i>	0	1
<i>Trichia</i> sp. (<i>hispida/plebeia</i>)	27	17
Broken shell fragments	0	0.07 grammes
Total	352	241

Table 22 Mollusc results from Thwing 2006

Sample numbers		
1029	1033	2018
Small rodent caudal vertebrae	1 x degraded cereal	Burnt fragment bone
Small rodent neural arch	3 x fragments charcoal	Small rodent metatarsal
		Upper vole incisor
		Small bird 3rd phalanx

Table 23 Faunal and other environmental material from Wharram Grange Crossroads 2004

Species	Sample number and Description				
	1029	1033	2018	2023	
	Middle fill Area 7 ditch	Primary silt Area 7 ditch	Lower fill Area 8 ditch	Middle fill Area 8 ditch	
<i>Carychium minimum</i>	2	0	4	0	
<i>Carychium tridentatum</i>	17	112+21j*	87	3	
<i>Cochlicopa lubrica</i>	38+23j*	62+24j*	16 + 8j*	6+3j*	
<i>Vertigo pygmaea</i>	0	0	1	0	
<i>Pupilla muscorum</i>	13+8j*	1j*	7	6+2j*	
<i>Vallonia costata</i>	97	80	242 +7j*	20	
<i>Vallonia pulchella</i>	45	0	16	0	
<i>Vallonia excentrica</i>	34	6	36	17	
<i>Vallonia sp.</i>	90j*	6+45j*	32+72j*	1j*	
<i>Punctum pygmaeum</i>	6	5	20	13	
<i>Discus rotundatus</i>	23+15j*	6+6j*	0	0	
<i>Vitrea crystallina</i>	50	148	54	6	
<i>Aegopinella pura</i>	0	0	8	5	
<i>Aegopinella nitidula</i>	2	0	1	2+1j*	
<i>Oxychilus alliarius</i>	1	9	0	0	
<i>Cecilioides acicula</i>	5	0	32	4	
<i>Helicella itala</i>	4+5j*	4+2j*	31j*	13j*	
<i>Trichia plebia</i>	0	0	3	0	
<i>Trichia hispida</i>	32+5j*	62	37	8	
<i>Trichia striolata</i>	6	10	0	6	
<i>Trichia sp.</i>	7	10	39	7	
<i>Cepea nemoralis</i>	1	3	0	1	
<i>Cepea hortensis</i>	0	1	0	0	
<i>Cepea sp.</i>	1	0	0	0	
<i>Arianta arbustorum</i>	2	0	0	0	
<i>Ena obscura</i>	0	6j*	4+5j*	0	
<i>Cerunella virgata</i>	0	6	1	0	
<i>Monacha cantiana</i>	0	0	1	0	
<i>Nesovitrea hammonis</i>	0	0	1	0	
<i>Candidula intersecta</i>	0	0	3	0	
<i>Zonitidae sp.</i>	34j*	93j*	41j*	2j*	
<i>Helicidae sp.</i>	102j*	206j*	161j*	2j*	
Unidentifiable	9j*	93j*	22j*	0	
Broken shell fragments	2.5g	21.5g	3.5g	2g	
Total numbers	677	1027	954	128	

j* = juvenile

Table 24 Complete mollusc results Wharram Grange Crossroads 2004

Species	Sample number			
	1029	1033	2018	2023
<i>Carychium minimum</i>	2	0	4	0
<i>Carychium tridentatum</i>	17	133	87	3
<i>Cochlicopa lubrica</i>	61	86	24	9
<i>Vertigo pygmaea</i>	0	0	1	0
<i>Pupilla muscorum</i>	21	1	7	8
<i>Vallonia costata</i>	97	80	249	20
<i>Vallonia pulchella</i>	45	0	16	0
<i>Vallonia excentrica</i>	34	6	36	17
<i>Vallonia sp.</i>	90	51	66	1
<i>Punctum pygmaeum</i>	6	5	20	13
<i>Discus rotundatus</i>	38	12	0	0
<i>Vitra crystallina</i>	50	148	54	6
<i>Aegopinella pura</i>	0	0	8	5
<i>Aegopinella nitidula</i>	2	0	1	3
<i>Helicella itala</i>	9	6	31	13
<i>Trichia plebia</i>	0	0	3	0
<i>Trichia hispida</i>	37	62	37	8
<i>Trichia sp.</i>	6	10	39	6
<i>Cepea nemoralis</i>	7	10	0	7
<i>Cepea hortensis</i>	1	3	0	1
<i>Cepea sp.</i>	0	1	0	0
<i>Arianta arbustorum</i>	1	0	0	0
<i>Ena obscura</i>	2	0	9	0
<i>Monacha cantiana</i>	0	6	1	0
<i>Nesovitrea hammonis</i>	0	0	1	0
<i>Zonitidae sp.</i>	34	93	41	2
<i>Helicidae sp.</i>	102	206	161	2

Table 25 Mollusc results Wharram Grange Crossroads 2004 with burrowing snails removed and juvenile snails incorporated

Sample number	Brillouin Index (HB) nat. log.	Brillouin Evenness (E)
C1029	2.471	0.832
C1033	2.191	0.771
C2018	2.309	0.762
C2023	2.344	0.903

Table 26 Results for the calculation of Brillouin Index and Evenness, Wharram Grange Crossroads 2004

Site 2005	Test Pit number	Location	Nature of Boundaries	Description	Interpretation
Vessey Pasture	1	Top of northern slope	Sharp	Silty loam onto silty clay loam and chalk gravel, very small to very large angular to sub-rounded stones. Shallow deposits	Thin rendzina, stable deposit
	2	Base of southern slope	Diffuse	Silty loam onto silty clay loam, very small to medium sub-rounded to sub-angular stones. Low coarse components at 9% in one layer	Hillwash deposit
	3	Base of northern slope	Gradual	Silty loam, silty clay loam and clay loam, very small to very large angular and sub-angular stones. Undulating base, shallow yellowish deposits.	Stable deposit onto periglacial surface
Fairy Dale	1	Base of eastern slope	Diffuse	Silty loam onto clay loam, very small to very large sub-angular to sub-rounded stones. Stony and deep deposits	Hillwash deposit
	2	Top of western slope	Gradual	Very dark silty loam, silty clay loam and clay loam with charcoal through profile. Large chalk blocks. Mixed artefacts.	Disturbed deposits alongside Fairy Stones
	Gully	Valley head to east	Sharp	Silty loam, silty clay loam onto clay loam. Very small to medium angular and sub-angular stones. Shallow pale deposits. Chalk blocks.	Thin rendzina, unstable gully, weathering
Whay Dale	3	Base of western slope	Diffuse	Silty loam, silty clay loam onto clay loam. Very small to large, sub-rounded to angular stones. Heterogeneous, deep deposit with artefacts.	Hillwash deposit
	4	Top of eastern slope	Sharp	Silty loam, clay loam, silty clay loam and clay loam. Stony pulsed deposits.	Overburden deposits derived from interfluvium
	1	Base of eastern slope	Diffuse	Silty loam, silty clay onto clay loam. Very small to very large sub-rounded to angular stones.	Heterogeneous hillwash
	2	Base of valley towards west	Gradual	Silty loam, silty clay loam onto silty clay. Small to large stones of varied shapes. Relatively low coarse components near base (22%)	Pulsed hillwash
	3	Base of valley towards west	Sharp / gradual	Silty loam, silty clay loam onto clay loam. Very small to large sub-rounded to angular stones. Relatively low coarse components near base (22%).	Pulsed hillwash

Table 27 Synthesis of deposits from test pits

% Coarse components	Description
< 1	Stoneless
1-5	Very slightly stony
6-15	Slightly stony
16-35	Moderately stony
36-70	Very stony
>70	Extremely stony

Appendix B Assessment of stoniness (after Hodgson 1997, 33)

WD2006	NGR			
	Easting	Northing	Elevation	
	1	487825.8	462118.7	97.08
	2	487831.4	462116.8	96.62
	3	487838.3	462114.3	96.23
	4	487842.8	462112.3	95.93
	5	487848.7	462109.8	95.87
	6	487853.3	462107.6	96.27
	7	487858.5	462104.4	96.86
	8	487863.4	462102.1	97.15
	9	487868.6	462098.7	97.62
	10	487873.3	462095.1	98.36
	11	487871	462101.5	98.28
	12	487865.9	462104.8	97.51
	13	487861.2	462107.7	96.9
	14	487856	462111.1	96.79
	15	487850.8	462113.7	97.04
	16	487845.4	462117	96.71
	17	487839.4	462120.9	97.12
	18	487832.2	462121.1	97.08
WD2005				
	01:01	488045.2	462155.8	150.42
	01:02	488015.3	462155.4	142.52
	01:03	487971.4	462153.1	130.64
	01:04	487915.1	462157	112.33
	01:05	487890	462162.8	101.62
	01:06	487881	462157.8	98.43
	01:07	487873.3	462160.7	98.24
	01:08	487863.1	462164.8	98
	01:09	487853.3	462172.2	98.53
	01:10	487842.8	462177.9	102.92
	01:11	487831.4	462187	106.35
	01:12	487795.1	462207.2	120.73
	01:13	487761.9	462223.7	125.85
	02:01	487841.3	462153.1	96.92
	02:02	487848.8	462149	96.86
	02:03	487861.4	462143.2	96.63
	02:04	487876.2	462136.9	98.56
	03:01	487874.1	462119.4	98.69
	03:02	487864.3	462121.3	97.34
	03:03	487850.4	462126.1	96.48
	03:04	487837.2	462132.5	97.41
	04:01	487862.4	462187.4	98.55
	04:02	487868.4	462183.4	98.32
	04:03	487875.5	462180.4	97.88

Appendix C Spatial data from primary field work

VP2005	NGR			
	Easting	Northing	Elevation	
	01:01	483291	462300	182.34
	01:02	483293.5	462266.7	170.05
	01:03	483298.1	462241.9	170.61
	01:04	483301.1	462224.7	161.57
	01:05	483302.6	462205.7	162.23
	01:06	483308.4	462174.9	168.36
	01:07	483306.5	462120.3	184.96
	01:08	483307.4	462078.2	194.23
	02:01	483252.6	462323	188.14
	02:02	483252	462293.1	180.71
	02:03	483254.5	462261.5	168.57
	02:04	483253.7	462239.3	161.36
	02:05	483256	462220	163.08
	02:06	483257.5	462239.3	161.36
	02:07	483260.6	462159.7	174.31
	02:08	483258.1	462110.3	187.94
	02:09	483259.6	462075.3	195.3
FD2005				
	01:01	487280.2	463216.7	166.97
	01:02	487249.2	463240.8	152.44
	01:03	487218.6	463262.1	143.22
	01:04	487186.3	463281.8	132.04
	01:05	487170.7	463292.2	126.21
	01:06	487155.6	463301.7	122.31
	01:07	487146.7	463305.9	122.99
	01:08	487132.7	463310.3	123.46
	01:09	487095.3	463328.2	139.58
	01:10	487048.5	463363.5	164.45
	01:11	487035.1	463372	174.19
	01:12	487022.8	463379	180.66
	02:01	487267.7	463192.2	165.01
	02:02	487246.2	463202	157.65
	02:03	487222.7	463214.5	148.2
	02:04	487191.8	463227	140.25
	02:05	487169.2	363239.7	131.05
	02:06	487140.6	463255.1	117.67
	02:07	487166.7	463268.9	120.671
	02:08	487102.3	463277.7	124.22
	02:09	487086.7	463285.4	129.24
	02:10	487066.7	463292.6	136.59
	02:11	487043.3	463299.7	145.04
	02:12	486996.9	463318.5	168.99
	03:01	487551.2	463500.2	148.09
	03:02	487555.2	463496.6	146.805

Code	Taxon	Vernacular	Site	Gridref	Vice Count	Quantity	Date
19	Potamopyrgus antip	Jenkins' Spire Sn	Thixendale	SE8461	61	0	01-Apr-95
42	Lymnaea truncatula	Dwarf Pond Snail	Thixendale	SE8461	61	0	01-Apr-95
272	Pisidium personatum		Thixendale	SE8461	61	0	01-Apr-95
120	Ena obscura	Lesser Bulin	Thixendale	SE8461	61	0	01-Apr-95
127	Discus rotundatus	Rounded Snail	Thixendale	SE8461	61	0	01-Apr-95
136	Arion circumscriptus		Thixendale	SE8461	61	0	01-Apr-95
141	Arion distinctus		Thixendale	SE8461	61	0	01-Apr-95
143	Arion intermedius	Hedgehog Slug	Thixendale	SE8461	61	0	01-Apr-95
161	Oxychilus alliarius	Garlic Snail	Thixendale	SE8461	61	0	01-Apr-95
186	Deroceras reticulatum	Field (Netted?) Sl	Thixendale	SE8461	61	0	01-Apr-95
223	Monacha cantiana	Kentish Snail	Thixendale	SE8461	61	0	01-Apr-95
233	Trichia striolata	Strawberry Snail	Thixendale	SE8461	61	0	01-Apr-95
237	Trichia hispida	Hairy Snail	Thixendale	SE8461	61	0	01-Apr-95
243	Arianta arbustorum	Copse Snail	Thixendale	SE8461	61	0	01-Apr-95
247	Cepaea hortensis	White-lipped Sna	Thixendale	SE8461	61	0	01-Apr-95
248	Helix aspersa	Garden or Comm	Thixendale	SE8461	61	0	01-Apr-95

Browse all Records for a <10k square> [se86]

Code	Taxon	Vernacular	Site	Gridref	Vice Count	Quantity	Date
111	Lauria cylindracea	Common Chrysal	Burdale	SE8762	61	0	13-Jul-68
127	Discus rotundatus	Rounded Snail	Burdale	SE8762	61	0	13-Jul-68
131	Arion ater	Large Black Slug	Burdale	SE8762	61	0	13-Jul-68
186	Deroceras reticulatum	Field (Netted?) Sl	Burdale	SE8762	61	0	13-Jul-68
207	Candidula intersecta	Wrinkled Snail	Burdale	SE8762	61	0	13-Jul-68
211	Ceruella virgata	Striped or Zoned	Burdale	SE8762	61	0	13-Jul-68
243	Arianta arbustorum	Copse Snail	Burdale	SE8762	61	0	13-Jul-68
246	Cepaea nemoralis	Grove or Brown-l	Burdale	SE8762	61	0	13-Jul-68
42	Lymnaea truncatula	Dwarf Pond Snail	Burdale	SE8762	61	0	01-Apr-95
47	Lymnaea peregra	Wandering Pond	Burdale	SE8762	61	0	01-Apr-95
111	Lauria cylindracea	Common Chrysal	Burdale	SE8762	61	0	01-Apr-95
113	Vallonia costata	Ribbed Grass Sn	Burdale	SE8762	61	0	01-Apr-95
127	Discus rotundatus	Rounded Snail	Burdale	SE8762	61	0	01-Apr-95
131	Arion ater	Large Black Slug	Burdale	SE8762	61	0	01-Apr-95
141	Arion distinctus		Burdale	SE8762	61	0	01-Apr-95
143	Arion intermedius	Hedgehog Slug	Burdale	SE8762	61	0	01-Apr-95
154	Aegopinella pura	Clear Glass Snail	Burdale	SE8762	61	0	01-Apr-95
156	Aegopinella nitidula	Smooth Glass Sn	Burdale	SE8762	61	0	01-Apr-95
160	Oxychilus cellarius	Cellar Snail	Burdale	SE8762	61	0	01-Apr-95
161	Oxychilus alliarius	Garlic Snail	Burdale	SE8762	61	0	01-Apr-95
180	Lehmanna marginata	Tree Slug	Burdale	SE8762	61	0	01-Apr-95
186	Deroceras reticulatum	Field (Netted?) S	Burdale	SE8762	61	0	01-Apr-95
207	Candidula intersecta	Wrinkled Snail	Burdale	SE8762	61	0	01-Apr-95
211	Ceruella virgata	Striped or Zoned	Burdale	SE8762	61	0	01-Apr-95
223	Monacha cantiana	Kentish Snail	Burdale	SE8762	61	0	01-Apr-95
233	Trichia striolata	Strawberry Snail	Burdale	SE8762	61	0	01-Apr-95
237	Trichia hispida	Hairy Snail	Burdale	SE8762	61	0	01-Apr-95
243	Arianta arbustorum	Copse Snail	Burdale	SE8762	61	0	01-Apr-95
246	Cepaea nemoralis	Grove or Brown-l	Burdale	SE8762	61	0	01-Apr-95
19	Potamopyrgus antip	Jenkins' Spire Sn	North Grim	SE8467	61	0	26-Jun-71
42	Lymnaea truncatula	Dwarf Pond Snail	North Grim	SE8467	61	0	26-Jun-71
47	Lymnaea peregra	Wandering Pond	North Grim	SE8467	61	0	26-Jun-71

Appendix D Modern mollusc distributions (courtesy of Adrian Norris, Yorkshire Naturalists Union)

111	<i>Lauria cylindracea</i>	Common Chrysal	North Grim SE8467	61	0	14-Jun-02
120	<i>Ena obscura</i>	Lesser Bulin	North Grim SE8467	61	0	14-Jun-02
194	<i>Cochlodina laminata</i>	Plaited Door Snail	North Grim SE8467	61	0	14-Jun-02
197	<i>Clausilia bidentata</i>	Common or Two-	North Grim SE8467	61	0	14-Jun-02
193	<i>Cecilioides acicula</i>	Blind or Agate Sn	North Grim SE8467	61	0	14-Jun-02
243	<i>Arianta arbustorum</i>	Copse Snail	North Grim SE8467	61	0	14-Jun-02
247	<i>Cepaea hortensis</i>	White-lipped Sna	North Grim SE8467	61	0	14-Jun-02
246	<i>Cepaea nemoralis</i>	Grove or Brown-li	North Grim SE8467	61	0	14-Jun-02
248	<i>Helix aspersa</i>	Garden or Comm	North Grim SE8467	61	0	14-Jun-02
237	<i>Trichia hispida</i>	Hairy Snail	North Grim SE8467	61	0	14-Jun-02
223	<i>Monacha cantiana</i>	Kentish Snail	North Grim SE8467	61	0	14-Jun-02
207	<i>Candidula intersecta</i>	Wrinkled Snail	North Grim SE8467	61	0	14-Jun-02
211	<i>Cernuella virgata</i>	Striped or Zoned	North Grim SE8467	61	0	14-Jun-02
213	<i>Helicella itala</i>	Heath Snail	North Grim SE8467	61	0	14-Jun-02
127	<i>Discus rotundatus</i>	Rounded Snail	North Grim SE8467	61	0	14-Jun-02
143	<i>Arion intermedius</i>	Hedgehog Slug	North Grim SE8467	61	0	14-Jun-02
131	<i>Arion ater</i>	Large Black Slug	North Grim SE8467	61	0	14-Jun-02
160	<i>Oxychilus cellarius</i>	Cellar Snail	North Grim SE8467	61	0	14-Jun-02
154	<i>Aegopinella pura</i>	Clear Glass Snail	North Grim SE8467	61	0	14-Jun-02
84	<i>Cochlicopa lubrica</i>	Slippery Moss Sn	North Grim SE8467	61	0	26-Jun-71
111	<i>Lauria cylindracea</i>	Common Chrysal	North Grim SE8467	61	0	26-Jun-71
113	<i>Vallonia costata</i>	Ribbed Grass Sn	North Grim SE8467	61	0	26-Jun-71
197	<i>Clausilia bidentata</i>	Common or Two-	North Grim SE8467	61	0	26-Jun-71
243	<i>Arianta arbustorum</i>	Copse Snail	North Grim SE8467	61	0	26-Jun-71
248	<i>Helix aspersa</i>	Garden or Comm	North Grim SE8467	61	0	26-Jun-71
233	<i>Trichia striolata</i>	Strawberry Snail	North Grim SE8467	61	0	26-Jun-71
237	<i>Trichia hispida</i>	Hairy Snail	North Grim SE8467	61	0	26-Jun-71
225	<i>Ashfordia granulata</i>	Silky Snail	North Grim SE8467	61	0	26-Jun-71
223	<i>Monacha cantiana</i>	Kentish Snail	North Grim SE8467	61	0	26-Jun-71
127	<i>Discus rotundatus</i>	Rounded Snail	North Grim SE8467	61	0	26-Jun-71
141	<i>Arion distinctus</i>		North Grim SE8467	61	0	26-Jun-71
131	<i>Arion ater</i>	Large Black Slug	North Grim SE8467	61	0	26-Jun-71
160	<i>Oxychilus cellarius</i>	Cellar Snail	North Grim SE8467	61	0	26-Jun-71
186	<i>Deroceras reticulatum</i>	Field (Netted?) S	North Grim SE8467	61	0	26-Jun-71
42	<i>Lymnaea truncatula</i>	Dwarf Pond Snail	North Grim SE8467	61	0	14-Jun-02
47	<i>Lymnaea peregra</i>	Wandering Pond	North Grim SE8467	61	0	14-Jun-02
78	<i>Succinea putris</i>	Large Amber Sna	North Grim SE8467	61	0	14-Jun-02
108	<i>Pupilla muscorum</i>	Moss Chrysalis S	North Grim SE8467	61	0	14-Jun-02
156	<i>Aegopinella nitidula</i>	Smooth Glass Sn	North Grim SE8467	61	0	14-Jun-02
144	<i>Vitrina pellucida</i>	Pellucid Glass Sr	North Grim SE8467	61	0	14-Jun-02
173	<i>Limax maximus</i>	Great Grey Slug	North Grim SE8467	61	0	14-Jun-02
186	<i>Deroceras reticulatum</i>	Field (Netted?) S	North Grim SE8467	61	0	14-Jun-02
213	<i>Helicella itala</i>	Heath Snail	Wharram C SE8665	61	0	12-Aug-73
121	<i>Punctum pygmaeum</i>	Dwarf Snail	Wharram C SE8665	61	0	12-Aug-73
127	<i>Discus rotundatus</i>	Rounded Snail	Wharram C SE8665	61	0	12-Aug-73
143	<i>Arion intermedius</i>	Hedgehog Slug	Wharram C SE8665	61	0	12-Aug-73
141	<i>Arion distinctus</i>		Wharram C SE8665	61	0	12-Aug-73
131	<i>Arion ater</i>	Large Black Slug	Wharram C SE8665	61	0	12-Aug-73
149	<i>Vitrea crystallina</i>	Crystal Snail	Wharram C SE8665	61	0	12-Aug-73
150	<i>Vitrea contracta</i>	Milky Crystal Sna	Wharram C SE8665	61	0	12-Aug-73
160	<i>Oxychilus cellarius</i>	Cellar Snail	Wharram C SE8665	61	0	12-Aug-73
161	<i>Oxychilus alliarius</i>	Garlic Snail	Wharram C SE8665	61	0	12-Aug-73
154	<i>Aegopinella pura</i>	Clear Glass Snail	Wharram C SE8665	61	0	12-Aug-73
156	<i>Aegopinella nitidula</i>	Smooth Glass Sn	Wharram C SE8665	61	0	12-Aug-73
144	<i>Vitrina pellucida</i>	Pellucid Glass Sr	Wharram C SE8665	61	0	12-Aug-73
186	<i>Deroceras reticulatum</i>	Field (Netted?) S	Wharram C SE8665	61	0	12-Aug-73

211	<i>Ceruella virgata</i>	Striped or Zoned	Wharram (SE8665	61	0 17-Sep-67
127	<i>Discus rotundatus</i>	Rounded Snail	Wharram (SE8665	61	0 17-Sep-67
131	<i>Arion ater</i>	Large Black Slug	Wharram (SE8665	61	0 17-Sep-67
161	<i>Oxychilus alliarius</i>	Garlic Snail	Wharram (SE8665	61	0 17-Sep-67
151	<i>Nesovitrea hammonis</i>		Wharram (SE8665	61	0 17-Sep-67
173	<i>Limax maximus</i>	Great Grey Slug	Wharram (SE8665	61	0 17-Sep-67
180	<i>Lehmannia marginata</i>	Tree Slug	Wharram (SE8665	61	0 17-Sep-67
186	<i>Deroceras reticulatum</i>	Field (Netted?) Sl	Wharram (SE8665	61	0 17-Sep-67
34	<i>Carychium tridentatum</i>	Slender Herald S	Wharram (SE8665	61	0 12-Aug-73
84	<i>Cochlicopa lubrica</i>	Slippery Moss Sn	Wharram (SE8665	61	0 12-Aug-73
99	<i>Vertigo pygmaea</i>	Common Whorl £	Wharram (SE8665	61	0 12-Aug-73
108	<i>Pupilla muscorum</i>	Moss Chrysalis S	Wharram (SE8665	61	0 12-Aug-73
113	<i>Vallonia costata</i>	Ribbed Grass Sn	Wharram (SE8665	61	0 12-Aug-73
115	<i>Vallonia excentrica</i>	Eccentric Grass £	Wharram (SE8665	61	0 12-Aug-73
120	<i>Ena obscura</i>	Lesser Bulin	Wharram (SE8665	61	0 12-Aug-73
193	<i>Cecilioides acicula</i>	Blind or Agate Sn	Wharram (SE8665	61	0 12-Aug-73
243	<i>Arianta arbustorum</i>	Copse Snail	Wharram (SE8665	61	0 12-Aug-73
247	<i>Cepaea hortensis</i>	White-lipped Sna	Wharram (SE8665	61	0 12-Aug-73
246	<i>Cepaea nemoralis</i>	Grove or Brown-l	Wharram (SE8665	61	0 12-Aug-73
84	<i>Cochlicopa lubrica</i>	Slippery Moss Sn	Wharram (SE8665	61	0 17-Sep-67
99	<i>Vertigo pygmaea</i>	Common Whorl £	Wharram (SE8665	61	0 17-Sep-67
111	<i>Lauria cylindracea</i>	Common Chrysal	Wharram (SE8665	61	0 17-Sep-67
113	<i>Vallonia costata</i>	Ribbed Grass Sn	Wharram (SE8665	61	0 17-Sep-67
243	<i>Arianta arbustorum</i>	Copse Snail	Wharram (SE8665	61	0 17-Sep-67
248	<i>Helix aspersa</i>	Garden or Comm	Wharram (SE8665	61	0 17-Sep-67
233	<i>Trichia striolata</i>	Strawberry Snail	Wharram (SE8665	61	0 17-Sep-67
237	<i>Trichia hispida</i>	Hairy Snail	Wharram (SE8665	61	0 17-Sep-67
223	<i>Monacha cantiana</i>	Kentish Snail	Wharram (SE8665	61	0 17-Sep-67
207	<i>Candidula intersecta</i>	Wrinkled Snail	Wharram (SE8665	61	0 17-Sep-67
233	<i>Trichia striolata</i>	Strawberry Snail	Wharram (SE8665	61	0 12-Aug-73
237	<i>Trichia hispida</i>	Hairy Snail	Wharram (SE8665	61	0 12-Aug-73
223	<i>Monacha cantiana</i>	Kentish Snail	Wharram (SE8665	61	0 12-Aug-73
207	<i>Candidula intersecta</i>	Wrinkled Snail	Wharram (SE8665	61	0 12-Aug-73
211	<i>Ceruella virgata</i>	Striped or Zoned	Wharram (SE8665	61	0 12-Aug-73
84	<i>Cochlicopa lubrica</i>	Slippery Moss Sn	Mowthorpe SE8963	61	0 26-May-90
85	<i>Cochlicopa lubricella</i>		Mowthorpe SE8963	61	0 26-May-90
120	<i>Ena obscura</i>	Lesser Bulin	Mowthorpe SE8963	61	0 26-May-90
127	<i>Discus rotundatus</i>	Rounded Snail	Mowthorpe SE8963	61	0 26-May-90
136	<i>Arion circumscriptus</i>		Mowthorpe SE8963	61	0 26-May-90
141	<i>Arion distinctus</i>		Mowthorpe SE8963	61	0 26-May-90
144	<i>Vitrina pellucida</i>	Pellucid Glass Sn	Mowthorpe SE8963	61	0 26-May-90
150	<i>Vitrea contracta</i>	Milky Crystal Sna	Mowthorpe SE8963	61	0 26-May-90
156	<i>Aegopinella nitidula</i>	Smooth Glass Sn	Mowthorpe SE8963	61	0 26-May-90
160	<i>Oxychilus cellarius</i>	Cellar Snail	Mowthorpe SE8963	61	0 26-May-90
161	<i>Oxychilus alliarius</i>	Garlic Snail	Mowthorpe SE8963	61	0 26-May-90
173	<i>Limax maximus</i>	Great Grey Slug	Mowthorpe SE8963	61	0 26-May-90
186	<i>Deroceras reticulatum</i>	Field (Netted?) Sl	Mowthorpe SE8963	61	0 26-May-90
193	<i>Cecilioides acicula</i>	Blind or Agate Sn	Mowthorpe SE8963	61	0 26-May-90
207	<i>Candidula intersecta</i>	Wrinkled Snail	Mowthorpe SE8963	61	0 26-May-90
211	<i>Ceruella virgata</i>	Striped or Zoned	Mowthorpe SE8963	61	0 26-May-90
223	<i>Monacha cantiana</i>	Kentish Snail	Mowthorpe SE8963	61	0 26-May-90
233	<i>Trichia striolata</i>	Strawberry Snail	Mowthorpe SE8963	61	0 26-May-90
237	<i>Trichia hispida</i>	Hairy Snail	Mowthorpe SE8963	61	0 26-May-90
243	<i>Arianta arbustorum</i>	Copse Snail	Mowthorpe SE8963	61	0 26-May-90
246	<i>Cepaea nemoralis</i>	Grove or Brown-l	Mowthorpe SE8963	61	0 26-May-90
247	<i>Cepaea hortensis</i>	White-lipped Sna	Mowthorpe SE8963	61	0 26-May-90

47	<i>Lymnaea peregra</i>	Wandering Pond	Mowthorpe	SE8963	61	0 26-May-90
268	<i>Musculium lacustre</i>	Lake or Capped	(Mowthorpe)	SE8963	61	0 26-May-90
63	<i>Gyraulus crista</i>	Nautilus Ram's-h	Big Dale	NE SE8961	61	0 01-Apr-95
113	<i>Vallonia costata</i>	Ribbed Grass Sn	Big Dale	NE SE8961	61	0 01-Apr-95
115	<i>Vallonia excentrica</i>	Eccentric Grass	Big Dale	NE SE8961	61	0 01-Apr-95
131	<i>Arion ater</i>	Large Black Slug	Big Dale	NE SE8961	61	0 01-Apr-95
144	<i>Vitrea pellucida</i>	Pellucid Glass Sn	Big Dale	NE SE8961	61	0 01-Apr-95
150	<i>Vitrea contracta</i>	Milky Crystal Sna	Big Dale	NE SE8961	61	0 01-Apr-95
154	<i>Aegopinella pura</i>	Clear Glass Snail	Big Dale	NE SE8961	61	0 01-Apr-95
156	<i>Aegopinella nitidula</i>	Smooth Glass Sn	Big Dale	NE SE8961	61	0 01-Apr-95
160	<i>Oxychilus cellarius</i>	Cellar Snail	Big Dale	NE SE8961	61	0 01-Apr-95
161	<i>Oxychilus alliarius</i>	Garlic Snail	Big Dale	NE SE8961	61	0 01-Apr-95
173	<i>Limax maximus</i>	Great Grey Slug	Big Dale	NE SE8961	61	0 01-Apr-95
186	<i>Deroceras reticulatum</i>	Field (Netted?) S	Big Dale	NE SE8961	61	0 01-Apr-95
193	<i>Cecilioides acicula</i>	Blind or Agate Sn	Big Dale	NE SE8961	61	0 01-Apr-95
207	<i>Candidula intersecta</i>	Wrinkled Snail	Big Dale	NE SE8961	61	0 01-Apr-95
211	<i>Ceriuella virgata</i>	Striped or Zoned	Big Dale	NE SE8961	61	0 01-Apr-95
223	<i>Monacha cantiana</i>	Kentish Snail	Big Dale	NE SE8961	61	0 01-Apr-95
233	<i>Trichia striolata</i>	Strawberry Snail	Big Dale	NE SE8961	61	0 01-Apr-95
236	<i>Trichia plebeia</i>		Big Dale	NE SE8961	61	0 01-Apr-95
237	<i>Trichia hispida</i>	Hairy Snail	Big Dale	NE SE8961	61	0 01-Apr-95
243	<i>Arianta arbustorum</i>	Copse Snail	Big Dale	NE SE8961	61	0 01-Apr-95
246	<i>Cepaea nemoralis</i>	Grove or Brown-li	Big Dale	NE SE8961	61	0 01-Apr-95
247	<i>Cepaea hortensis</i>	White-lipped Sna	Big Dale	NE SE8961	61	0 01-Apr-95
85	<i>Cochlicopa lubricella</i>		Burdale	SE8763	61	0 01-Apr-95
90	<i>Columella edentula</i>	Toothless Chrysa	Burdale	SE8763	61	0 01-Apr-95
99	<i>Vertigo pygmaea</i>	Common Whorl	Burdale	SE8763	61	0 01-Apr-95
108	<i>Pupilla muscorum</i>	Moss Chrysalis S	Burdale	SE8763	61	0 01-Apr-95
111	<i>Lauria cylindracea</i>	Common Chrysal	Burdale	SE8763	61	0 01-Apr-95
115	<i>Vallonia excentrica</i>	Eccentric Grass	Burdale	SE8763	61	0 01-Apr-95
120	<i>Ena obscura</i>	Lesser Bulin	Burdale	SE8763	61	0 01-Apr-95
121	<i>Punctum pygmaeum</i>	Dwarf Snail	Burdale	SE8763	61	0 01-Apr-95
127	<i>Discus rotundatus</i>	Rounded Snail	Burdale	SE8763	61	0 01-Apr-95
134	<i>Arion subfuscus</i>	Dusky Slug	Burdale	SE8763	61	0 01-Apr-95
136	<i>Arion circumscriptus</i>		Burdale	SE8763	61	0 01-Apr-95
150	<i>Vitrea contracta</i>	Milky Crystal Sna	Burdale	SE8763	61	0 01-Apr-95
151	<i>Nesovitrea hammonis</i>		Burdale	SE8763	61	0 01-Apr-95
156	<i>Aegopinella nitidula</i>	Smooth Glass Sn	Burdale	SE8763	61	0 01-Apr-95
161	<i>Oxychilus alliarius</i>	Garlic Snail	Burdale	SE8763	61	0 01-Apr-95
173	<i>Limax maximus</i>	Great Grey Slug	Burdale	SE8763	61	0 01-Apr-95
186	<i>Deroceras reticulatum</i>	Field (Netted?) S	Burdale	SE8763	61	0 01-Apr-95
197	<i>Clausilia bidentata</i>	Common or Two-	Burdale	SE8763	61	0 01-Apr-95
207	<i>Candidula intersecta</i>	Wrinkled Snail	Burdale	SE8763	61	0 01-Apr-95
223	<i>Monacha cantiana</i>	Kentish Snail	Burdale	SE8763	61	0 01-Apr-95
237	<i>Trichia hispida</i>	Hairy Snail	Burdale	SE8763	61	0 01-Apr-95
246	<i>Cepaea nemoralis</i>	Grove or Brown-li	Burdale	SE8763	61	0 01-Apr-95
19	<i>Potamopyrgus antipodum</i>	Jenkins' Spire Sn	Thixendale	SE8461	61	0 01-Apr-95
42	<i>Lymnaea truncatula</i>	Dwarf Pond Snail	Thixendale	SE8461	61	0 01-Apr-95
272	<i>Pisidium personatum</i>		Thixendale	SE8461	61	0 01-Apr-95
120	<i>Ena obscura</i>	Lesser Bulin	Thixendale	SE8461	61	0 01-Apr-95
127	<i>Discus rotundatus</i>	Rounded Snail	Thixendale	SE8461	61	0 01-Apr-95
136	<i>Arion circumscriptus</i>		Thixendale	SE8461	61	0 01-Apr-95
141	<i>Arion distinctus</i>		Thixendale	SE8461	61	0 01-Apr-95
143	<i>Arion intermedius</i>	Hedgehog Slug	Thixendale	SE8461	61	0 01-Apr-95
161	<i>Oxychilus alliarius</i>	Garlic Snail	Thixendale	SE8461	61	0 01-Apr-95
186	<i>Deroceras reticulatum</i>	Field (Netted?) S	Thixendale	SE8461	61	0 01-Apr-95

223	<i>Monacha cantiana</i>	Kentish Snail	Thixendale SE8461	61	0 01-Apr-95
233	<i>Trichia striolata</i>	Strawberry Snail	Thixendale SE8461	61	0 01-Apr-95
237	<i>Trichia hispida</i>	Hairy Snail	Thixendale SE8461	61	0 01-Apr-95
243	<i>Arianta arbustorum</i>	Copse Snail	Thixendale SE8461	61	0 01-Apr-95
247	<i>Cepaea hortensis</i>	White-lipped Snail	Thixendale SE8461	61	0 01-Apr-95
248	<i>Helix aspersa</i>	Garden or Comm	Thixendale SE8461	61	0 01-Apr-95

Browse all Records for a <site> [Fordon Bank Nature Reserve]

Code	Taxon	Vernacular	Site	Gridref
156	<i>Aegopinella nitidula</i>	Smooth Glass Snail	Fordon Bank Nature Reserve	TA0575
160	<i>Oxychilus cellarius</i>	Cellar Snail	Fordon Bank Nature Reserve	TA0575
161	<i>Oxychilus alliarius</i>	Garlic Snail	Fordon Bank Nature Reserve	TA0575
193	<i>Cecilioides acicula</i>	Blind or Agate Snail	Fordon Bank Nature Reserve	TA0575
207	<i>Candidula intersecta</i>	Wrinkled Snail	Fordon Bank Nature Reserve	TA0575
211	<i>Cerionella virgata</i>	Striped or Zoned Snail	Fordon Bank Nature Reserve	TA0575
213	<i>Helicella itala</i>	Heath Snail	Fordon Bank Nature Reserve	TA0575
223	<i>Monacha cantiana</i>	Kentish Snail	Fordon Bank Nature Reserve	TA0575
233	<i>Trichia striolata</i>	Strawberry Snail	Fordon Bank Nature Reserve	TA0575
237	<i>Trichia hispida</i>	Hairy Snail	Fordon Bank Nature Reserve	TA0575
246	<i>Cepaea nemoralis</i>	Grove or Brown-lipped Snail	Fordon Bank Nature Reserve	TA0575
84	<i>Cochlicopa lubrica</i>	Slippery Moss Snail	Fordon Bank Nature Reserve	TA0575
85	<i>Cochlicopa lubricella</i>		Fordon Bank Nature Reserve	TA0575
99	<i>Vertigo pygmaea</i>	Common Whorl Snail	Fordon Bank Nature Reserve	TA0575
108	<i>Pupilla muscorum</i>	Moss Chrysalis Snail	Fordon Bank Nature Reserve	TA0575
113	<i>Vallonia costata</i>	Ribbed Grass Snail	Fordon Bank Nature Reserve	TA0575
115	<i>Vallonia excentrica</i>	Eccentric Grass Snail	Fordon Bank Nature Reserve	TA0575
121	<i>Punctum pygmaeum</i>	Dwarf Snail	Fordon Bank Nature Reserve	TA0575
141	<i>Arion distinctus</i>		Fordon Bank Nature Reserve	TA0575
144	<i>Vitrina pellucida</i>	Pellucid Glass Snail	Fordon Bank Nature Reserve	TA0575
150	<i>Vitrea contracta</i>	Milky Crystal Snail	Fordon Bank Nature Reserve	TA0575
154	<i>Aegopinella pura</i>	Clear Glass Snail	Fordon Bank Nature Reserve	TA0575



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Vessey Pasture Dale and Back Dale SSSI

CONSENT OF ENGLISH NATURE

(SECTION 28(E) OF THE WILDLIFE AND COUNTRYSIDE ACT 1981)

English Nature gives you consent to carry out, cause or permit to be carried out, the operation specified in your letter of 15 April 2005.

Type of operation: Geoarchaeological fieldwork between 9 and 24 June 2005, involving soil sampling by augers and test pits.

This consent is issued subject to the following condition: When excavating test pits, turves should be removed and excavated spoil piled on plastic sheeting. Once the pits have been in-filled with excavated soil, turves should be replaced in their original location.

If you wish to change the proposed operation, or carry out additional operations for which consent has not yet been given, or if a time period given in letter of 15 April 2005 has expired, or if you wish to vary the conditions or time limits you are required to give further written notice to English Nature.

Signed for English Nature:

Date: 2 June 2005



Appendix E Consent letter English Nature

Thixendale

DesigUID DNY29 **Type:** Scheduled Monument
Status: Active
Preferred Ref **NMR Number** **Old County Number**
 20471
Name: A crossdyke from Birdsall Brow to Vessey Pasture Dale incorporating two bowl
 barrows and a
 cross dyke
Grade: **Date Assigned:** **Amended:**
Revoked:
Legal Description
Curatorial Notes
Designating

Location

Grid Centroid SE 8207 6280 (MBR: 1594m by 1318m)
Map sheet: SE86SW **Area (Ha):** 6.33

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale
 Civil Parish 3134 Thixendale; Ryedale

Sources - None recorded

Associated Monuments

NYM20500 Monument: A cross-dyke from Birdsall Brow to Vessey Pasture Dale
 incorporating two bowl
 barrows and a cross-dyke extending from Water Dale

Additional Information

DesigUID DNY31 **Type:** Scheduled Monument
Status: Active
Preferred Ref **NMR Number** **Old County Number**
 20473
Name: A cross dyke from Toisland Wold to Vessey Pasture Dale incorporating bowl
 barrow
Grade: **Date Assigned:** **Amended:**
Revoked:
Legal Description
Curatorial Notes
Designating

Location

Grid Centroid SE 8351 6256 (MBR: 299m by 665m)
Map sheet: SE86SW **Area (Ha):** 1.94

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale
 Civil Parish 3148 Wharram; Ryedale

Sources - None recorded

(C) NYCC Whilst every effort is made to provide useful information, NYCC can not be held for the accuracy of information not directly verified by NYCC Staff

DesigUID: DNY31 **Name:** A cross dyke from Toisland Wold to Vessey Pasture Dale incorporating bowl barrow

Associated Monuments

NYM20502 Monument: A cross-dyke from Toisland Wold to Vessey Pasture Dale incorporating a bowl barrow

NYM6765 Monument: MORTIMER BARROW 127

Additional Information

DesigUID DNY32 **Type:** Scheduled Monument

Status: Active

Preferred Ref **NMR Number** **Old County Number**

20474

Name: A cross dyke in Vessey Pasture Dale

Grade: **Date Assigned:** **Amended:**

Revoked:

Legal Description

Curatorial Notes

Designating

Location

Grid Centroid SE 8331 6228 (MBR: 50m by 99m)

Map sheet: SE86SW **Area (Ha):** 0.19

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale

Sources - None recorded

Associated Monuments

NYM20503 Monument: A cross-dyke in Vessay Pasture Dale

Additional Information

DesigUID DNY33 **Type:** Scheduled Monument

Status: Active

Preferred Ref **NMR Number** **Old County Number**

20475

Name: A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Grade: **Date Assigned:** **Amended:**

Revoked:

Legal Description

Curatorial Notes

Designating

Location

Grid Centroid SE 8202 6245 (MBR: 46m by 46m)

Map sheet: SE86SW **Area (Ha):**

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale

Sources - None recorded

Associated Monuments

NYM6376 Monument: A bowl barrow on Birdsall Wold, between Birdsall Dale and

Vessay Pasture Dale

Additional Information

DesigUID DNY34 **Type:** Scheduled Monument

Status: Active

Preferred Ref **NMR Number** **Old County Number**

(C) NYCC Whilst every effort is made to provide useful information, NYCC can not be held for the accuracy of information not directly verified by NYCC Staff

DesigUID: DNY34 **Name:** A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey

Pasture Dale

20476

Name: A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Grade: **Date Assigned:** **Amended:**

Revoked:

Legal Description

Curatorial Notes

Designating

Location

Grid Centroid SE 8169 6226 (MBR: 42m by 46m)

Map sheet: SE86SW **Area (Ha):**

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale

Sources - None recorded

Associated Monuments

NYM6354 Monument: A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Additional Information

DesigUID DNY35 **Type:** Scheduled Monument

Status: Active

Preferred Ref **NMR Number** **Old County Number**

20477

Name: Two bowl Barrows on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Grade: **Date Assigned:** **Amended:**

Revoked:

Legal Description

Curatorial Notes

Designating

Location

Grid Centroid SE 8161 6239 (MBR: 65m by 75m)

Map sheet: SE86SW **Area (Ha):** 0.27

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale

Sources - None recorded

Associated Monuments

NYM6367 Monument: Bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

NYM6370 Monument: Bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Additional Information

DesigUID DNY36 **Type:** Scheduled Monument
Status: Active
Preferred Ref **NMR Number** **Old County Number**
20478
Name: A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale
Grade: **Date Assigned:** **Amended:**
Revoked:
Legal Description
Curatorial Notes
Designating

(C) NYCC Whilst every effort is made to provide useful information, NYCC can not be held for the accuracy of information not directly verified by NYCC Staff

DesigUID: DNY36 **Name:** A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Location

Grid Centroid SE 8209 6219 (MBR: 46m by 47m)

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale

Sources - None recorded

Associated Monuments

NYM20507 Monument: A bowl barrow on Birdsall Wold, between Birdsall Dale and Vessey Pasture Dale

Additional Information

DesigUID DNY37 **Type:** Scheduled Monument
Status: Active
Preferred Ref **NMR Number** **Old County Number**
20479
Name: Two Bowl Barrows on Birdsall Wold, 850m E of Aldro Farm
Grade: **Date Assigned:** **Amended:**
Revoked:
Legal Description
Curatorial Notes
Designating

Location

Grid Centroid SE 8174 6293 (MBR: 43m by 86m)

Map sheet: SE86SW **Area (Ha):**

Administrative Areas

Civil Parish 3015 Birdsall; Ryedale

Sources - None recorded

Associated Monuments

NYM6464 Monument: MORTIMER BARROW 52
NYM6472 Monument: MORTIMER BARROW 53

Additional Information**DesigUID** DNY39**Type:** Scheduled Monument**Status:** Active**Preferred Ref****NMR Number****Old County Number**

20481

Name: A bowl barrow on Birdsall Wold, 750m E of Aldro Farm**Grade:****Date Assigned:****Amended:****Revoked:****Legal Description****Curatorial Notes****Designating****Location****Grid** Centroid SE 8163 6281 (MBR: 23m by 22m)**Map sheet:** SE86SW**Area (Ha):****Administrative Areas**

Civil Parish

3015 Birdsall; Ryedale

Sources - None recorded

(C) NYCC Whilst every effort is made to provide useful information, NYCC can not be held for the accuracy of information not directly verified by NYCC Staff

Dalton Estate Well -		26/02/1901	19.721	25/04/1901	19.442
SE965453		27/02/1901	19.729	26/04/1901	19.402
Date	Level	28/02/1901	19.737	27/04/1901	19.363
01/01/1901	17.567	01/03/1901	19.745	28/04/1901	19.324
02/01/1901	17.664	02/03/1901	19.753	29/04/1901	19.285
03/01/1901	17.762	03/03/1901	19.762	30/04/1901	19.245
04/01/1901	17.859	04/03/1901	19.77	01/05/1901	19.206
05/01/1901	17.957	05/03/1901	19.778	02/05/1901	19.167
06/01/1901	18.055	06/03/1901	19.786	03/05/1901	19.127
07/01/1901	18.152	07/03/1901	19.795	04/05/1901	19.088
08/01/1901	18.25	08/03/1901	19.803	05/05/1901	19.049
09/01/1901	18.348	09/03/1901	19.811	06/05/1901	19.01
10/01/1901	18.445	10/03/1901	19.819	07/05/1901	18.97
11/01/1901	18.543	11/03/1901	19.827	08/05/1901	18.931
12/01/1901	18.64	12/03/1901	19.836	09/05/1901	18.892
13/01/1901	18.738	13/03/1901	19.844	10/05/1901	18.852
14/01/1901	18.836	14/03/1901	19.852	11/05/1901	18.813
15/01/1901	18.933	15/03/1901	19.86	12/05/1901	18.774
16/01/1901	19.031	16/03/1901	19.868	13/05/1901	18.715
17/01/1901	19.129	17/03/1901	19.877	14/05/1901	18.694
18/01/1901	19.226	18/03/1901	19.888	15/05/1901	18.652
19/01/1901	19.324	19/03/1901	19.889	16/05/1901	18.61
20/01/1901	19.421	20/03/1901	19.886	17/05/1901	18.568
21/01/1901	19.561	21/03/1901	19.883	18/05/1901	18.526
22/01/1901	19.581	22/03/1901	19.88	19/05/1901	18.483
23/01/1901	19.584	23/03/1901	19.877	20/05/1901	18.441
24/01/1901	19.587	24/03/1901	19.875	21/05/1901	18.399
25/01/1901	19.59	25/03/1901	19.872	22/05/1901	18.357
26/01/1901	19.593	26/03/1901	19.869	23/05/1901	18.315
27/01/1901	19.595	27/03/1901	19.866	24/05/1901	18.273
28/01/1901	19.598	28/03/1901	19.863	25/05/1901	18.231
29/01/1901	19.601	29/03/1901	19.86	26/05/1901	18.188
30/01/1901	19.604	30/03/1901	19.858	27/05/1901	18.146
31/01/1901	19.607	31/03/1901	19.855	28/05/1901	18.104
01/02/1901	19.61	01/04/1901	19.852	29/05/1901	18.062
02/02/1901	19.612	02/04/1901	19.849	30/05/1901	18.02
03/02/1901	19.615	03/04/1901	19.846	31/05/1901	17.978
04/02/1901	19.618	04/04/1901	19.843	01/06/1901	17.936
05/02/1901	19.621	05/04/1901	19.84	02/06/1901	17.893
06/02/1901	19.624	06/04/1901	19.837	03/06/1901	17.851
07/02/1901	19.627	07/04/1901	19.835	04/06/1901	17.809
08/02/1901	19.63	08/04/1901	19.832	05/06/1901	17.767
09/02/1901	19.632	09/04/1901	19.829	06/06/1901	17.725
10/02/1901	19.635	10/04/1901	19.826	07/06/1901	17.683
11/02/1901	19.638	11/04/1901	19.823	08/06/1901	17.641
12/02/1901	19.641	12/04/1901	19.82	09/06/1901	17.598
13/02/1901	19.644	13/04/1901	19.817	10/06/1901	17.535
14/02/1901	19.647	14/04/1901	19.815	11/06/1901	17.515
15/02/1901	19.65	15/04/1901	19.808	12/06/1901	17.474
16/02/1901	19.653	16/04/1901	19.795	13/06/1901	17.432
17/02/1901	19.655	17/04/1901	19.756	14/06/1901	17.391
18/02/1901	19.66	18/04/1901	19.717	15/06/1901	17.35
19/02/1901	19.663	19/04/1901	19.677	16/06/1901	17.309
20/02/1901	19.671	20/04/1901	19.638	17/06/1901	17.268
21/02/1901	19.68	21/04/1901	19.599	18/06/1901	17.227
22/02/1901	19.688	22/04/1901	19.56	19/06/1901	17.186
23/02/1901	19.696	23/04/1901	19.52		
24/02/1901	19.704	24/04/1901	19.481		
25/02/1901	19.712				

Appendix G Extract of Environment Agency data for Dalton Estate Well and Gypsy Race at Boynton (EA and/or database rights 2007. All rights reserved)

Station name	Boynton		
Station number	F3004		
External number			
River	GYPSEY RACE		
Operator	-		
NGR	TA		
Easting	137		
Northing	677		
Parameter-name	Flow		
Parameter Type	FQ		
Time series name	F3004.FQ.DayMean		
Time series unit	m3/s		
Time level	Daily value		
Time series type	Mean value		
Equidistant time series	yes		
Time series value distance	1 Day(s)		
Time series quality	Production		
Time series measuring method	-		
Period of record in file:	29/01/1981 00:00:00 to 09/04/2007 00:00:00		
Quality code description	G = good; E = estimated; S = suspect; U = unchecked; M = missing; C = complete; I = incomplete; Ed = edited; WR = within rating; NR = no rating; EX> = extrapolated upper part; EX< = extrapolated lower part; BL> = beyond upper limit; BL< = beyond lower limit; MH = weir modular (head); NH = weir non modular (head); EH = weir extremely non modular (head); MT = weir modular (tail); NT = weir non modular (tail); ET = weir extremely non modular (tail); MC = weir modular (crest); NC = weir non modular (crest); EC = weir extremely non modular (crest); -H = weir head only; RAS = rastered time stamp; A = apportioned/interpolated; D = dry; SN = snow; T = trace M = missing C = complete		
Date	FQ [m3/s]	q [l/(s*km2)]	Quality flag: Comment s
	29/01/1981	0.352	1.47 C [G]]
	30/01/1981	0.35	1.46 C [G]]
	31/01/1981	0.346	1.44 C [G]]
	01/02/1981	0.346	1.44 C [G]]
	02/02/1981	0.357	1.49 C [G]]
	03/02/1981	0.355	1.48 C [G]]
	04/02/1981	0.348	1.45 C [G]]
	05/02/1981	0.346	1.44 C [G]]
	06/02/1981	0.337	1.4 C [G]]
	07/02/1981	0.333	1.39 C [G]]
	08/02/1981	0.339	1.41 C [G]]
	09/02/1981	0.425	1.77 C [G]]
	10/02/1981	0.405	1.69 C [G]]
	11/02/1981	0.399	1.66 C [G]]
	12/02/1981	0.403	1.68 C [G]]
	13/02/1981	0.411	1.71 C [G]]
	14/02/1981	0.426	1.78 C [G]]
	15/02/1981	0.442	1.84 C [G]]
	16/02/1981	0.452	1.88 C [G]]