ANCIENT MON



REPORT

2130

DRATORY

	100.01		-	
	1631	3-2	Acher	
	ALC: N	1		
中心に	人の言	外 上公		
1.2		1	1.	
	8 A I			
1920	and .	1412		
1. A.	N Sac		E LA	
1 Salas	Parts		3 2 1	32

TIL

1 the should

ENVIRONMENTAL	54/76
C A Keepax	8. 11.76
A brief experiment or	n the recovery of seeds
from modern soils.	

A BRIEF EXPERIMENT ON THE RECOVERY OF SEEDS FROM MODERN SOILS

During investigations into modern contamination on archaeological sites it is sometimes desirable to count the numbers of uncharred seeds present in the modern soil. One such case was a topsoil sample from Winklebury, Hants, (on chalk). It was thought that the standard separation techniques used for archaeological deposits might not be suitable, as the modern soil had a well developed crumb structure which might 'lock' the seeds into the matrix. Also, the seeds of interest were not charred or waterlogged, as is usual with archaeological material. Therefore, the following recovery experiment was carried out on the sample:-

1kg of the dry sample was placed in a bowl, water added, and it was agitated by hand. The excess water was poured off and the flotant collected on a 300/4sieve. The sample was divided and one half was treated with 50 vols hydrogen per oxide for 30 mins. The flotant was again collected on a 300/4 sieve. The non-flotant was rinsed with water through a stack of sieves (minimum 300/4) and this residue quickly sorted by eye at x12 magnification in order to extract any remaining seeds. The sorted residue was then treated by the paraffin flotation method.² The second half of the sample was treated by the paraffin flotation method only.

The seeds obtained by these methods are presented in the form of a histogram (Fig 1). Eight species are represented by a few seeds in the initial water flotation only, and do not appear in subsequent separations. It may be that very few seeds of these species were present in the sample and that they were all removed by the first treatment. An additional four species and additional seeds of many of the species already recorded were recovered by treatment with hydrogen per oxide. Sorting of the residue by hand produced a single new species, and paraffin flotation of the sorted residue yielded two more species.

1

Fig. 1

		Waten flat	Hydrogen	flot Hous	nesidue	(after H.	2 ⁰ 2)	Para	only
1 2 7.	Ranunculus bulbosus L. R. sp.	1 f				1	/* ; ;		
י ג	Rumex sp. Polygonum aviculare L.	10	10					3	2. A
5 6	Chenopodium album L. Atriplex patula L.	121 4D	8 8			2		7	
7 8 9	Thlaspi arvense L. Brassica sp. Urtica dioica L.	1		201 4			174		146
10	Stellaria media (L.)	2	2						
11 12 13	Silene alba (Nill)Krau Rubus sp. Convolvulus arvensis L Aegonodium podagrenia	1 176f 3	30	£	10	7			32
15	Sambucus nigra L.	58 £	1	6		3			4
16	Lamium album L. (Hoff	12		2		2			3
17 18	Galeopsis angustifolia Solanum ap.	32	3						
19 20	(Astereae) Compositae		1						
21	Arenaria serpyllifolia	1	5	1		2			
22	Potentilla sp.		2						
23 24	Poa sp. Fumaria sp.								£
25	Papaver rhoeasL.	:			· · · · · · · · · · · · · · · · · · ·	4	· · · · · · · · · · · · · · · · · · ·		
26	"Apiaceae"						Ì		
						· · · · · · · · · · · · · · · · · ·			
						·			
				1	· · ·				
				· · · · · · · · · · · · · · · · · · ·					
				· • • •			.		
						· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
		0 10 100 1	000	0 1	0 100 1	000	-	0 10	100
		Pho.seeds		00 1000		0 10		1000	
			- - - -	· · · · · · · · · · · · · · · · · · ·			<u> </u>		
			- ;						
			- · · • • • · · · · ·						
		· · · · · · · · · · · · · · · · · · ·						++-	
	i, <u></u>		· · · · · · · · · · · · · · · · · · ·				<u></u>		
	(· · · · ·							
			ם, ו	IDENTIC		By Mon) D.		
-	1		<u> </u>	<u>INFOULT 1</u>		NY MISS	T . T	175-71-21/91	
				I .			t	·	