

must be aware, that unless the land is well tilled, the crops will be very indifferent. Deep ploughing brings new earth to the surface, and forms a deeper, active soil, altering both its physical and chemical composition. There are certain substances contained in the soil which have all a natural tendency to sink, such as lime, marl, &c., &c. The rains also assist in carrying on this process, so that in the course of time, many valuable fertilizing substances are sunk below the reach of ordinary ploughing, rendering it necessary from time to time to increase the depth of the furrow a few inches, in order to bring to the surface a portion of these substances. Many deep-rooted plants possess this property to a great extent. And when lupins, buckwheat, &c., are sown to plough down, they enrich the soil by bringing to the surface the ingredients thus lost.

Many experiments have been made to prove the immense advantage the farmer will derive from deep ploughing and subsoiling, with the most satisfactory results, as is shown by the following table:

Ploughed to 8 inches Subsoiled to 15 inches Difference	TURNIPS		BARLEY		POTATOES	
	TONS	CWT'S	TONS	CWT'S	TONS	CWT'S
6	30	67 1/2	28	6	14	14
10	36	81 1/2	34	7	17	17
14	42	95 1/2	40	8	20	20
18	48	109 1/2	46	9	23	23
22	54	123 1/2	52	10	26	26
26	60	137 1/2	58	11	29	29
30	66	151 1/2	64	12	32	32
34	72	165 1/2	70	13	35	35
38	78	179 1/2	76	14	38	38
42	84	193 1/2	82	15	41	41
46	90	207 1/2	88	16	44	44
50	96	221 1/2	94	17	47	47
54	102	235 1/2	100	18	50	50
58	108	249 1/2	106	19	53	53
62	114	263 1/2	112	20	56	56
66	120	277 1/2	118	21	59	59
70	126	291 1/2	124	22	62	62
74	132	305 1/2	130	23	65	65
78	138	319 1/2	136	24	68	68
82	144	333 1/2	142	25	71	71
86	150	347 1/2	148	26	74	74
90	156	361 1/2	154	27	77	77
94	162	375 1/2	160	28	80	80
98	168	389 1/2	166	29	83	83
102	174	403 1/2	172	30	86	86
106	180	417 1/2	178	31	89	89
110	186	431 1/2	184	32	92	92
114	192	445 1/2	190	33	95	95
118	198	459 1/2	196	34	98	98
122	204	473 1/2	202	35	101	101
126	210	487 1/2	208	36	104	104
130	216	501 1/2	214	37	107	107
134	222	515 1/2	220	38	110	110
138	228	529 1/2	226	39	113	113
142	234	543 1/2	232	40	116	116
146	240	557 1/2	238	41	119	119
150	246	571 1/2	244	42	122	122
154	252	585 1/2	250	43	125	125
158	258	599 1/2	256	44	128	128
162	264	613 1/2	262	45	131	131
166	270	627 1/2	268	46	134	134
170	276	641 1/2	274	47	137	137
174	282	655 1/2	280	48	140	140
178	288	669 1/2	286	49	143	143
182	294	683 1/2	292	50	146	146
186	300	697 1/2	298	51	149	149
190	306	711 1/2	304	52	152	152
194	312	725 1/2	310	53	155	155
198	318	739 1/2	316	54	158	158
202	324	753 1/2	322	55	161	161
206	330	767 1/2	328	56	164	164
210	336	781 1/2	334	57	167	167
214	342	795 1/2	340	58	170	170
218	348	809 1/2	346	59	173	173
222	354	823 1/2	352	60	176	176
226	360	837 1/2	358	61	179	179
230	366	851 1/2	364	62	182	182
234	372	865 1/2	370	63	185	185
238	378	879 1/2	376	64	188	188
242	384	893 1/2	382	65	191	191
246	390	907 1/2	388	66	194	194
250	396	921 1/2	394	67	197	197
254	402	935 1/2	400	68	200	200
258	408	949 1/2	406	69	203	203
262	414	963 1/2	412	70	206	206
266	420	977 1/2	418	71	209	209
270	426	991 1/2	424	72	212	212
274	432	1005 1/2	430	73	215	215
278	438	1019 1/2	436	74	218	218
282	444	1033 1/2	442	75	221	221
286	450	1047 1/2	448	76	224	224
290	456	1061 1/2	454	77	227	227
294	462	1075 1/2	460	78	230	230
298	468	1089 1/2	466	79	233	233
302	474	1103 1/2	472	80	236	236
306	480	1117 1/2	478	81	239	239
310	486	1131 1/2	484	82	242	242
314	492	1145 1/2	490	83	245	245
318	498	1159 1/2	496	84	248	248
322	504	1173 1/2	502	85	251	251
326	510	1187 1/2	508	86	254	254
330	516	1201 1/2	514	87	257	257
334	522	1215 1/2	520	88	260	260
338	528	1229 1/2	526	89	263	263
342	534	1243 1/2	532	90	266	266
346	540	1257 1/2	538	91	269	269
350	546	1271 1/2	544	92	272	272
354	552	1285 1/2	550	93	275	275
358	558	1299 1/2	556	94	278	278
362	564	1313 1/2	562	95	281	281
366	570	1327 1/2	568	96	284	284
370	576	1341 1/2	574	97	287	287
374	582	1355 1/2	580	98	290	290
378	588	1369 1/2	586	99	293	293
382	594	1383 1/2	592	100	296	296
386	600	1397 1/2	598	101	299	299
390	606	1411 1/2	604	102	302	302
394	612	1425 1/2	610	103	305	305
398	618	1439 1/2	616	104	308	308
402	624	1453 1/2	622	105	311	311
406	630	1467 1/2	628	106	314	314
410	636	1481 1/2	634	107	317	317
414	642	1495 1/2	640	108	320	320
418	648	1509 1/2	646	109	323	323
422	654	1523 1/2	652	110	326	326
426	660	1537 1/2	658	111	329	329
430	666	1551 1/2	664	112	332	332
434	672	1565 1/2	670	113	335	335
438	678	1579 1/2	676	114	338	338
442	684	1593 1/2	682	115	341	341
446	690	1607 1/2	688	116	344	344
450	696	1621 1/2	694	117	347	347
454	702	1635 1/2	700	118	350	350
458	708	1649 1/2	706	119	353	353
462	714	1663 1/2	712	120	356	356
466	720	1677 1/2	718	121	359	359
470	726	1691 1/2	724	122	362	362
474	732	1705 1/2	730	123	365	365
478	738	1719 1/2	736	124	368	368
482	744	1733 1/2	742	125	371	371
486	750	1747 1/2	748	126	374	374
490	756	1761 1/2	754	127	377	377
494	762	1775 1/2	760	128	380	380
498	768	1789 1/2	766	129	383	383
502	774	1803 1/2	772	130	386	386
506	780	1817 1/2	778	131	389	389
510	786	1831 1/2	784	132	392	392
514	792	1845 1/2	790	133	395	395
518	798	1859 1/2	796	134	398	398
522	804	1873 1/2	802	135	401	401
526	810	1887 1/2	808	136	404	404
530	816	1901 1/2	814	137	407	407
534	822	1915 1/2	820	138	410	410
538	828	1929 1/2	826	139	413	413
542	834	1943 1/2	832	140	416	416
546	840	1957 1/2	838	141	419	419
550	846	1971 1/2	844	142	422	422
554	852	1985 1/2	850	143	425	425
558	858	1999 1/2	856	144	428	428
562	864	2013 1/2	862	145	431	431
566	870	2027 1/2	868	146	434	434
570	876	2041 1/2	874	147	437	437
574	882	2055 1/2	880	148	440	440
578	888	2069 1/2	886	149	443	443
582	894	2083 1/2	892	150	446	446
586	900	2097 1/2	898	151	449	449
590	906	2111 1/2	904	152	452	452
594	912	2125 1/2	910	153	455	455
598	918	2139 1/2	916	154	458	458
602	924	2153 1/2	922	155	461	461
606	930	2167 1/2	928	156	464	464
610	936	2181 1/2	934	157	467	467
614	942	2195 1/2	940	158	470	470
618	948	2209 1/2	946	159	473	473
622	954	2223 1/2	952	160	476	476
626	960	2237 1/2	958	161	479	479
630	966	2251 1/2	964	162	482	482
634	972	2265 1/2	970	163	485	485
638	978	2279 1/2	976	164	488	488
642	984	2293 1/2	982	165	491	491
646	990	2307 1/2	988	166	494	494
650	996	2321 1/2	994	167	497	