

“FIBS DON’T LIE”

Fibonacci Time Projection Analysis

Most market technicians have espoused the Fibonacci sequences when analyzing price movements such as retracements. But time is also just as important. The purpose of this article is to emphasize the when (time) and not the what (price). As W. D. Gann said, time is just as important as price. In fact they are really one of the same.

The sequence, in which **each number is the sum of the two preceding numbers**, is known as the **Fibonacci series**: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, where each number is the sum of the previous two.

The ratio of successive pairs is the **golden section** 1.618033989. I won't get into the theory of how the Golden Ratio can be applied to nature in numerous ways. Suffice it to say just about anything in the universe can be quantified as an expression of numbers. Man's fear and greed is expressed as numbers in the freely traded markets and those numbers encompass a hidden sequence that can be expressed using the Fibonacci sequence and its available ratios of 1.382, 1.618..etc.,.

To do this I have written a program that finds all swing highs and swing lows. I have the ability to determine just what a swing point is. For instance a swing high point that is accompanied with only three lower highs on each side of the high point is not as important as one with 8, 13 or even 21 bars that have lower highs on each side of the highest point.

As each high or low point is identified, I simply add the Fibonacci sequence starting with the high or low swing point. So if the first swing point is a high in the file and is the 100th trading in the file, I would add the sequence to 100. The sequence would then be 101, 102, 103, 105, 108, 113, 121, 134, 155, 189, 244, and 333. The Fibonacci numbers represent energy points in the future that are spun out from each significant swing high or swing low. Figure A depicts a market moving with swing points forming a high (HIP) and a low (LOP). We mark off all of the Fibonacci series points from one swing point to another. The program seeks out the clusters and calculates the projected dates.

Table A and Table B below illustrates identifying all swing points with dates using an 8 bar strength value and a 21 bar strength respectively to define the individual high and low swing values of the daily S&P continuous contract. Each of the swing points has its calculated Fibonacci sequence. The first line in Table A looks like the following.

20060208	LOP	17	18	19	20	22	25	30	38	51	72	106	161	250
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It is interpreted as follows; On Feb. 8th 2006 there was a low swing point (LOP) which was the 17th bar in the database. The Fibonacci sequence was spun out in time using the sequence, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, and 233 in which each Fibonacci term was added to the 17th trading bar. This process is repeated for each swing high and swing low.

Once this database has been created, the program then searches for a cluster of each number that must occur within two trading bars of each other and there must be an occurrence of at least three of these numbers to form a cluster. It is these clusters that form a potential future date in which the market will have a strong tendency to change market direction, see Table C and Table D. For instance, we may have a time period two weeks from now on an intraday bar chart that turns out to be 13 hours from a recent high, 144 hours from a low several weeks ago, 89 hours from some high or low, and maybe 233 hours from a turn a long time back. We could potentially find that all these swing highs and swing lows have a common denominator coming in Fibonacci time periods right about now. This immediately gets our attention that there is a significant cycle coming due within an hour or two. In the following examples I am using an 8 bar strength and a 21 bar strength to define and locate the appropriate swing points.

Figure B below is a daily chart of the mini S&P from July 2011 thru late December 2011. The future dates from Table C and Table D were plotted on the chart to see if there is a correlation for locating turning points. There appears to be a clustering of these Fibonacci projection dates before some sort of a market turn. Particular attention should be noted when the 8 bar strength and the 21 bar strength project dates that coincide with each other. In fact they are at or very near important highs and lows. The 21 bar swing points would extend stronger Fibonacci projection dates than would the 8 bar swing points. If you have a very fertile mind and you are into astrological projections, then overlay full and new

moon dates with these same projected points. It becomes somewhat mind boggling.

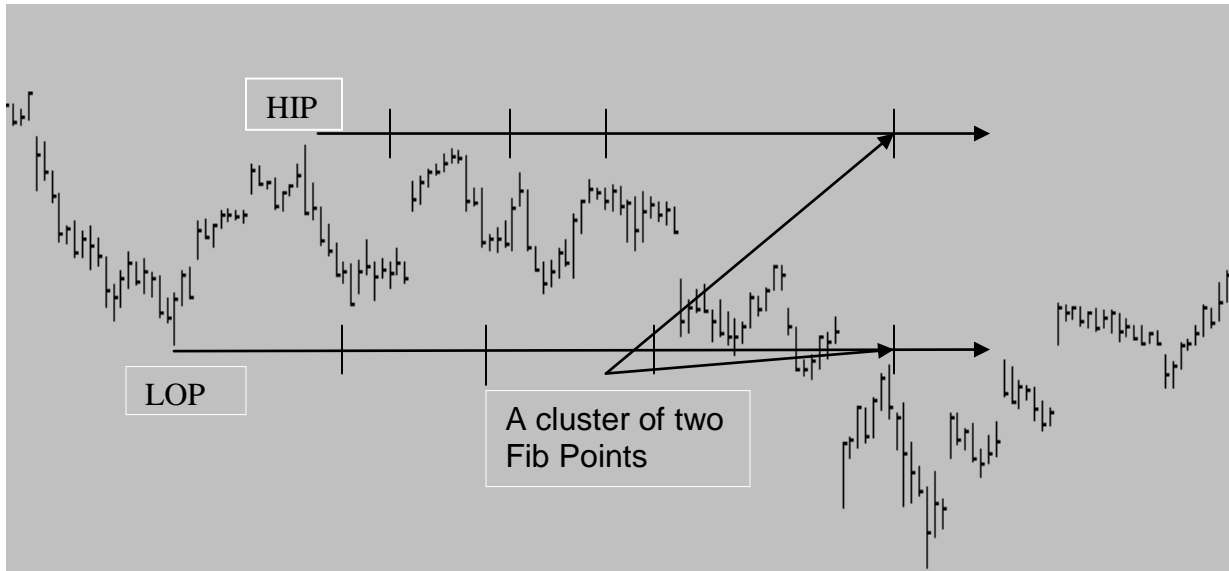


Figure A

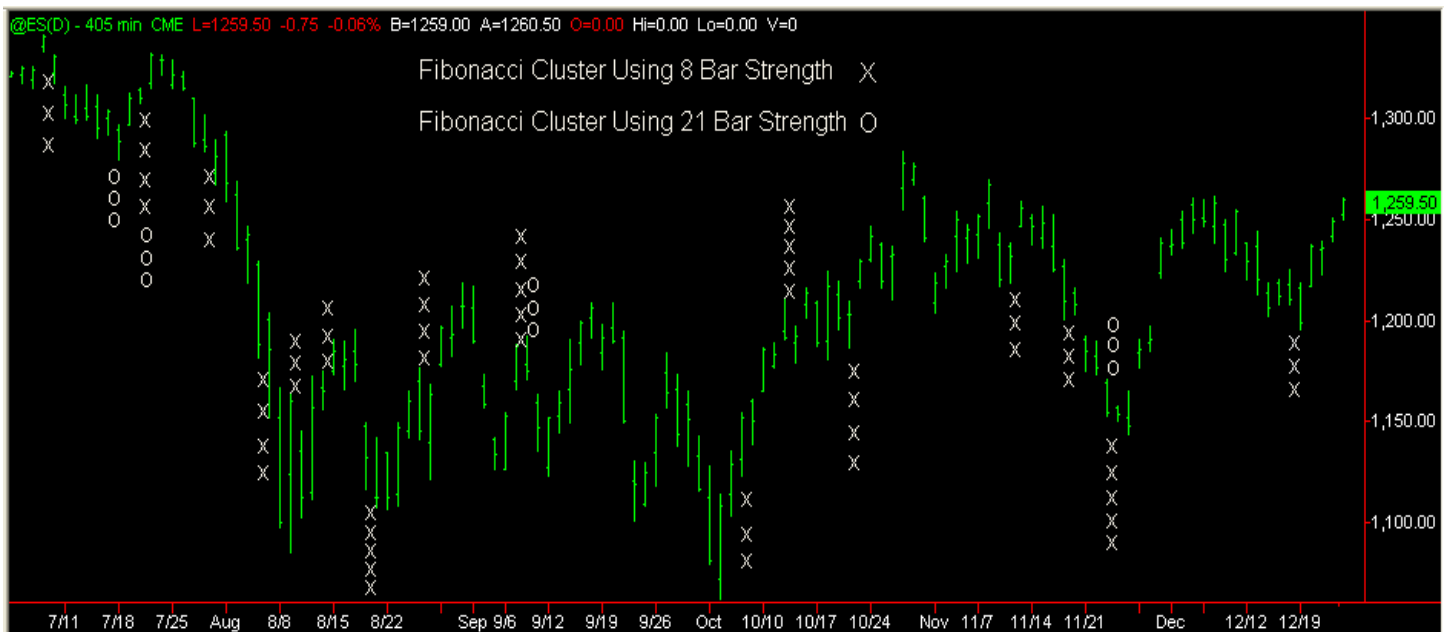


FIGURE B

Daily Mini S&P with Fibonacci Time Clusters
Using 8 and 21 Bar Strength

**Fibonacci Time Clusters
Daily Mini S&P
8 Bar Strength for Swing Points**

DATE	TYPE	START TRADE BAR	FIB 1	FIB 2	FIB 3	FIB 5	FIB 8	FIB 13	FIB 21	FIB 34	FIB 55	FIB 89	FIB 144	FIB 233
20060208	LOP	17	18	19	20	22	25	30	38	51	72	106	161	250
20060227	HIP	29	30	31	32	34	37	42	50	63	84	118	173	262
20060308	LOP	36	37	38	39	41	44	49	57	70	91	125	180	269
20060328	LOP	50	51	52	53	55	58	63	71	84	105	139	194	283
20060417	LOP	63	64	65	66	68	71	76	84	97	118	152	207	296
20060420	HIP	66	67	68	69	71	74	79	87	100	121	155	210	299
20060505	HIP	77	78	79	80	82	85	90	98	111	132	166	221	310
20060524	LOP	90	91	92	93	95	98	103	111	124	145	179	234	323
20060602	HIP	96	97	98	99	101	104	109	117	130	151	185	240	329
20060614	LOP	104	105	106	107	109	112	117	125	138	159	193	248	337
20060628	LOP	114	115	116	117	119	122	127	135	148	169	203	258	347
20060707	HIP	120	121	122	123	125	128	133	141	154	175	209	264	353
20091127	LOP	976	977	978	979	981	984	989	997	1010	1031	1065	1120	1209
20091204	HIP	981	982	983	984	986	989	994	1002	1015	1036	1070	1125	1214
20100111	HIP	1005	1006	1007	1008	1010	1013	1018	1026	1039	1060	1094	1149	1238
20100205	LOP	1023	1024	1025	1026	1028	1031	1036	1044	1057	1078	1112	1167	1256
20100426	HIP	1077	1078	1079	1080	1082	1085	1090	1098	1111	1132	1166	1221	1310
20100506	LOP	1085	1086	1087	1088	1090	1093	1098	1106	1119	1140	1174	1229	1318
20100525	LOP	1098	1099	1100	1101	1103	1106	1111	1119	1132	1153	1187	1242	1331
20100608	LOP	1107	1108	1109	1110	1112	1115	1120	1128	1141	1162	1196	1251	1340
20100621	HIP	1116	1117	1118	1119	1121	1124	1129	1137	1150	1171	1205	1260	1349
20100706	LOP	1126	1127	1128	1129	1131	1134	1139	1147	1160	1181	1215	1270	1359
20100720	LOP	1136	1137	1138	1139	1141	1144	1149	1157	1170	1191	1225	1280	1369
20100805	HIP	1148	1149	1150	1151	1153	1156	1161	1169	1182	1203	1237	1292	1381
20100825	LOP	1162	1163	1164	1165	1167	1170	1175	1183	1196	1217	1251	1306	1395

20110502	HIP	1334	1335	1336	1337	1339	1342	1347	1355	1368	1389	1423	1478	1567
20110601	HIP	1355	1356	1357	1358	1360	1363	1368	1376	1389	1410	1444	1499	1588
20110616	LOP	1366	1367	1368	1369	1371	1374	1379	1387	1400	1421	1455	1510	1599
20110708	HIP	1381	1382	1383	1384	1386	1389	1394	1402	1415	1436	1470	1525	1614
20110718	LOP	1387	1388	1389	1390	1392	1395	1400	1408	1421	1442	1476	1531	1620
20110722	HIP	1391	1392	1393	1394	1396	1399	1404	1412	1425	1446	1480	1535	1624
20110809	LOP	1403	1404	1405	1406	1408	1411	1416	1424	1437	1458	1492	1547	1636
20110831	HIP	1419	1420	1421	1422	1424	1427	1432	1440	1453	1474	1508	1563	1652
20111004	LOP	1442	1443	1444	1445	1447	1450	1455	1463	1476	1497	1531	1586	1675
20111027	HIP	1459	1460	1461	1462	1464	1467	1472	1480	1493	1514	1548	1603	1692
20111125	LOP	1479	1480	1481	1482	1484	1487	1492	1500	1513	1534	1568	1623	1712
20111208	HIP	1488	1489	1490	1491	1493	1496	1501	1509	1522	1543	1577	1632	1721

TABLE A

**Fibonacci Time Clusters
Daily Mini S&P
21 Bar Strength for Swing Points**

DATE	TYPE	START TRADE BAR	FIB 1	FIB 2	FIB 3	FIB 5	FIB 8	FIB 13	FIB 21	FIB 34	FIB 55	FIB 89	FIB 144	FIB 233
20060505	HIP	77	78	79	80	82	85	90	98	111	132	166	221	310
20060614	LOP	104	105	106	107	109	112	117	125	138	159	193	248	337
20060718	LOP	127	128	129	130	132	135	140	148	161	182	216	271	360
20061215	HIP	233	234	235	236	238	241	246	254	267	288	322	377	466
20070110	LOP	249	250	251	252	254	257	262	270	283	304	338	393	482
20070222	HIP	278	279	280	281	283	286	291	299	312	333	367	422	511
20070314	LOP	292	293	294	295	297	300	305	313	326	347	381	436	525
20070601	HIP	347	348	349	350	352	355	360	368	381	402	436	491	580
20070716	HIP	377	378	379	380	382	385	390	398	411	432	466	521	610
20070816	LOP	400	401	402	403	405	408	413	421	434	455	489	544	633
20071011	HIP	439	440	441	442	444	447	452	460	473	494	528	583	672
20071127	LOP	471	472	473	474	476	479	484	492	505	526	560	615	704
20071211	HIP	481	482	483	484	486	489	494	502	515	536	570	625	714
20080122	LOP	508	509	510	511	513	516	521	529	542	563	597	652	741
20080317	LOP	546	547	548	549	551	554	559	567	580	601	635	690	779
20080519	HIP	590	591	592	593	595	598	603	611	624	645	679	734	823
20080715	LOP	629	630	631	632	634	637	642	650	663	684	718	773	862
20080811	HIP	648	649	650	651	653	656	661	669	682	703	737	792	881
20081121	LOP	721	722	723	724	726	729	734	742	755	776	810	865	954
20090106	HIP	750	751	752	753	755	758	763	771	784	805	839	894	983
20090306	LOP	791	792	793	794	796	799	804	812	825	846	880	935	1024
20090605	HIP	854	855	856	857	859	862	867	875	888	909	943	998	1087
20090708	LOP	876	877	878	879	881	884	889	897	910	931	965	1020	1109
20100111	HIP	1005	1006	1007	1008	1010	1013	1018	1026	1039	1060	1094	1149	1238
20100205	LOP	1023	1024	1025	1026	1028	1031	1036	1044	1057	1078	1112	1167	1256
20100426	HIP	1077	1078	1079	1080	1082	1085	1090	1098	1111	1132	1166	1221	1310
20100525	LOP	1098	1099	1100	1101	1103	1106	1111	1119	1132	1153	1187	1242	1331
20100621	HIP	1116	1117	1118	1119	1121	1124	1129	1137	1150	1171	1205	1260	1349
20100706	LOP	1126	1127	1128	1129	1131	1134	1139	1147	1160	1181	1215	1270	1359
20100805	HIP	1148	1149	1150	1151	1153	1156	1161	1169	1182	1203	1237	1292	1381
20100825	LOP	1162	1163	1164	1165	1167	1170	1175	1183	1196	1217	1251	1306	1395
20110218	HIP	1285	1286	1287	1288	1290	1293	1298	1306	1319	1340	1374	1429	1518
20110317	LOP	1303	1304	1305	1306	1308	1311	1316	1324	1337	1358	1392	1447	1536
20110502	HIP	1334	1335	1336	1337	1339	1342	1347	1355	1368	1389	1423	1478	1567
20110616	LOP	1366	1367	1368	1369	1371	1374	1379	1387	1400	1421	1455	1510	1599
20110708	HIP	1381	1382	1383	1384	1386	1389	1394	1402	1415	1436	1470	1525	1614
20110809	LOP	1403	1404	1405	1406	1408	1411	1416	1424	1437	1458	1492	1547	1636
20111004	LOP	1442	1443	1444	1445	1447	1450	1455	1463	1476	1497	1531	1586	1675
20111027	HIP	1459	1460	1461	1462	1464	1467	1472	1480	1493	1514	1548	1603	1692

TABLE B

**Mini S&P
Daily 8 Bar Strength
Projected Time Clusters with Date & Time
204 Clusters Found**

DATE	PROJECTED TRADING BAR	CLUSTERS FOUND	DATE	PROJECTED TRADING BAR	CLUSTERS FOUND
20060316	42	3	20110812	1406	3
20060329	51	3	20110818	1410	5
20060406	57	3	20110825	1415	4
20060428	72	6	20110907	1423	5
20060516	84	5	20111006	1444	3
20060605	97	4	20111012	1448	5
20060608	100	3	20111020	1454	4
20060613	103	3	20111110	1469	3
20060615	105	3	20111117	1474	3
20060623	111	5	20111123	1478	5
20060705	118	4	20111216	1493	3
20060710	121	3	20111228	1500	4
20060717	126	4	20120111	1509	3
20060725	132	3	20120217	1535	3
20060728	135	3	20110506	1338	3
20060804	140	4	20110510	1340	6
20060823	153	4	20110523	1349	3
-----			20110607	1359	5
20110302	1292	4	20110621	1369	3
20110321	1305	3	20110628	1374	4
20110322	1306	4	20110705	1378	3
20110328	1310	5	20110707	1380	3
20110407	1318	3	20110720	1389	4
20110418	1325	3	20110728	1395	3
20110427	1331	4	20110804	1400	4
			20110809	1403	3

TABLE C

**Mini S&P
Daily 21 Bar Strength
Projected Time Clusters with Date & Time
23 Clusters Found**

DATE	PROJECTED TRADING BAR	CLUSTERS FOUND	DATE	PROJECTED TRADING BAR	CLUSTERS FOUND
20060623	111	3	20100806	1149	3
20070323	299	3	20100902	1168	3
20071008	436	3	20100907	1170	3
20071226	491	4	20100923	1182	3
20071231	494	3	20110302	1292	3
20080131	515	3	20110328	1310	3
20080221	529	3	20110511	1341	3
20080529	597	3	20110718	1387	3
20080724	636	3	20110720	1389	3
20100614	1111	3	20110908	1424	3
20100615	1112	3	20111123	1478	3
20100715	1133	4			

TABLE D

Figure C is an hourly bar chart of the mini S&P from November 20th to December 27th of 2011. Tables F & H are used to plot their respective projected dates for 8 and 21 bar strengths. Again “8” and “21” bar strength were used to define the swing values. Again we are looking for a clustering effect to take place. The more points coming into close proximity of each other the greater the potential will be for the market to change direction. The majority of the clusters located highs and lows in this chart. As of this writing, the 8 bar swing points gave clusters on December 27th 2011 that were not plotted on the chart and the market did change direction to the downside.

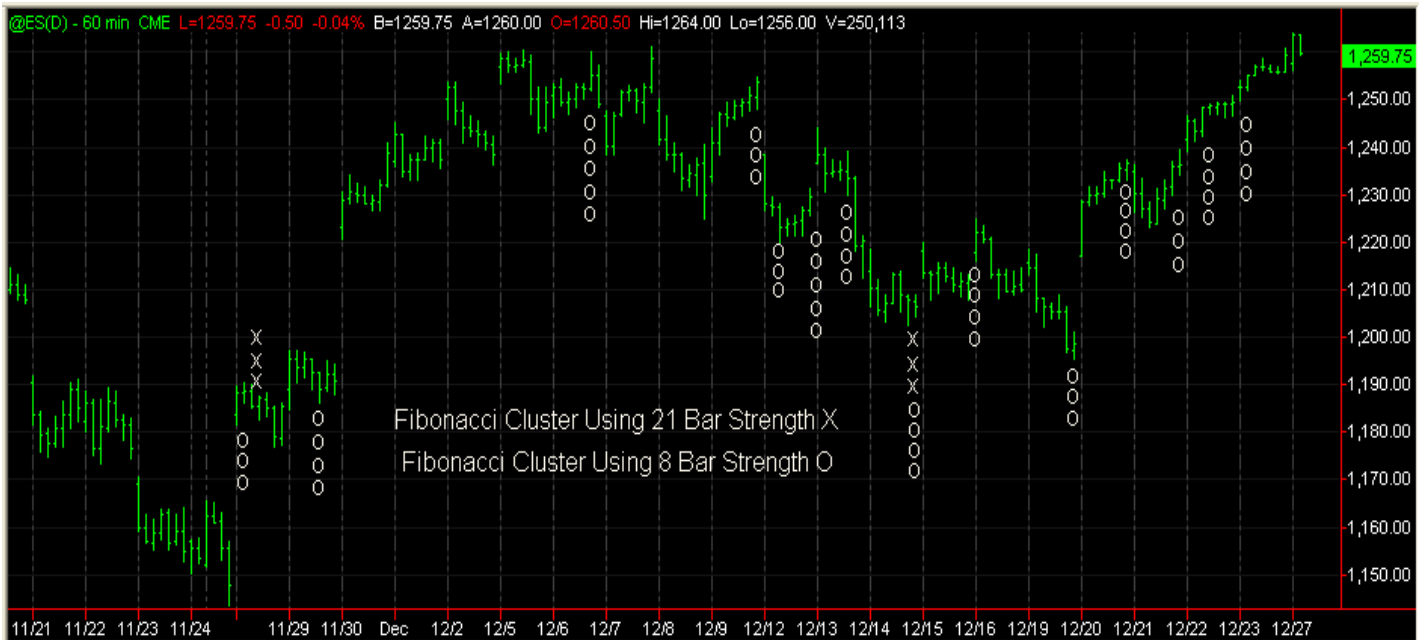


FIGURE C
Hourly Mini S&P with Fibonacci Time Clusters
Using 8 and 21 Bar Strength

Fibonacci Time Clusters
Mini S&P 60 min
8 Bar Strength for Swing Points

DATE	TIME	TYPE	START TRADE BAR	FIB 1	FIB 2	FIB 3	FIB 5	FIB 8	FIB 13	FIB 21	FIB 34	FIB 55	FIB 89	FIB 144	FIB 233
20110224	1330	LOP	23	24	25	26	28	31	36	44	57	78	112	167	256
20110301	930	HIP	40	41	42	43	45	48	53	61	74	95	129	184	273
20110301	1515	LOP	46	47	48	49	51	54	59	67	80	101	135	190	279
20110303	1430	HIP	59	60	61	62	64	67	72	80	93	114	148	203	292

20110307	1230	LOP	71	72	73	74	76	79	84	92	105	126	160	215	304
20110308	1130	HIP	77	78	79	80	82	85	90	98	111	132	166	221	310
20110311	1515	HIP	102	103	104	105	107	110	115	123	136	157	191	246	335

20111013	1030	LOP	1147	1148	1149	1150	1152	1155	1160	1168	1181	1202	1236	1291	1380
20111014	1515	HIP	1159	1160	1161	1162	1164	1167	1172	1180	1193	1214	1248	1303	1392
20111018	930	LOP	1167	1168	1169	1170	1172	1175	1180	1188	1201	1222	1256	1311	1400
20111018	1430	HIP	1172	1173	1174	1175	1177	1180	1185	1193	1206	1227	1261	1316	1405
20111020	1130	LOP	1183	1184	1185	1186	1188	1191	1196	1204	1217	1238	1272	1327	1416
20111024	1330	HIP	1199	1200	1201	1202	1204	1207	1212	1220	1233	1254	1288	1343	1432
20111026	1030	LOP	1210	1211	1212	1213	1215	1218	1223	1231	1244	1265	1299	1354	1443
20111027	1430	HIP	1221	1222	1223	1224	1226	1229	1234	1242	1255	1276	1310	1365	1454
20111101	930	LOP	1237	1238	1239	1240	1242	1245	1250	1258	1271	1292	1326	1381	1470
20111103	1515	HIP	1257	1258	1259	1260	1262	1265	1270	1278	1291	1312	1346	1401	1490
20111107	1230	LOP	1268	1269	1270	1271	1273	1276	1281	1289	1302	1323	1357	1412	1501
20111108	1515	HIP	1278	1279	1280	1281	1283	1286	1291	1299	1312	1333	1367	1422	1511
20111109	1330	LOP	1283	1284	1285	1286	1288	1291	1296	1304	1317	1338	1372	1427	1516
20111111	1030	HIP	1294	1295	1296	1297	1299	1302	1307	1315	1328	1349	1383	1438	1527
20111115	1430	HIP	1312	1313	1314	1315	1317	1320	1325	1333	1346	1367	1401	1456	1545
20111123	1515	LOP	1355	1356	1357	1358	1360	1363	1368	1376	1389	1410	1444	1499	1588
20111205	1230	HIP	1394	1395	1396	1397	1399	1402	1407	1415	1428	1449	1483	1538	1627
20111207	1515	HIP	1411	1412	1413	1414	1416	1419	1424	1432	1445	1466	1500	1555	1644
20111208	1515	LOP	1418	1419	1420	1421	1423	1426	1431	1439	1452	1473	1507	1562	1651
20111209	1515	HIP	1425	1426	1427	1428	1430	1433	1438	1446	1459	1480	1514	1569	1658
20111212	1130	LOP	1428	1429	1430	1431	1433	1436	1441	1449	1462	1483	1517	1572	1661
20111214	1430	LOP	1445	1446	1447	1448	1450	1453	1458	1466	1479	1500	1534	1589	1678
20111216	930	HIP	1454	1455	1456	1457	1459	1462	1467	1475	1488	1509	1543	1598	1687
20111219	1515	LOP	1467	1468	1469	1470	1472	1475	1480	1488	1501	1522	1556	1611	1700
20111221	1130	LOP	1477	1478	1479	1480	1482	1485	1490	1498	1511	1532	1566	1621	1710

Table E

**Mini S&P
60 min 8 Bar Strength
Projected Time Clusters with Date & Time
167 Clusters Found**

DATE	PROJECTED TRADING TIME	PROJECTED TRADING BAR	CLUSTERS FOUND	DATE	PROJECTED TRADING TIME	PROJ TRADING BAR	CLUSTERS FOUND
20110302	1530	53	3	20111107	1530	1271	3
20110308	1330	79	5	20111108	1430	1277	3
20110309	1130	84	3	20111109	1030	1280	3
20110315	1130	112	4	20111110	1130	1288	4
20110317	1530	130	3	20111110	1430	1291	6
20110318	1330	135	3	20111111	1530	1299	3
20110318	1130	133	3	20111114	1230	1303	4
20110322	930	145	4	20111115	1430	1312	4
20110323	1430	157	3	20111116	1130	1316	3
20110324	1030	160	3	20111117	1530	1327	4
20110325	930	166	4	20111123	1430	1354	3

20110329	1330	184	3	20111128	930	1356	3
-----				20111129	1230	1366	4
20111021	1130	1190	5	20111206	1230	1401	5
20111021	1430	1193	3	20111209	1430	1424	3
20111025	1330	1206	5	20111212	1530	1432	5
20111025	1030	1203	3	20111212	1030	1427	3
20111026	1130	1211	4	20111213	1430	1438	4
20111027	1530	1222	4	20111214	1330	1444	4
20111027	1030	1217	3	20111216	930	1454	4
20111028	1430	1228	3	20111219	1530	1467	3
20111031	1230	1233	4	20111220	1530	1474	4
20111031	1530	1236	3	20111221	1430	1480	3
20111102	1130	1246	4	20111222	1130	1484	4
20111103	1230	1254	3	20111223	930	1489	4
20111103	1430	1256	4	20111227	1430	1501	5
20111107	930	1265	4	20111229	1030	1511	3
20111107	1030	1266	3	20111229	1530	1516	3

Table F

**Fibonacci Time Clusters
Mini S&P 60 min
21 Bar Strength for Swing Points**

DATE 1	TIME	TYPE	START TIME BAR	FIB 1	FIB 2	FIB 3	FIB 5	FIB 8	FIB 13	FIB 21	FIB 34	FIB 55	FIB 89	FIB 144	FIB 233
20110224	1330	LOP	23	24	25	26	28	31	36	44	57	78	112	167	256
20110301	930	HIP	40	41	42	43	45	48	53	61	74	95	129	184	273
20110301	1515	LOP	46	47	48	49	51	54	59	67	80	101	135	190	279
20110316	1330	LOP	121	122	123	124	126	129	134	142	155	176	210	265	354
20110418	1030	LOP	279	280	281	282	284	287	292	300	313	334	368	423	512
20110502	1030	HIP	342	343	344	345	347	350	355	363	376	397	431	486	575
20110505	1430	LOP	367	368	369	370	372	375	380	388	401	422	456	511	600
20110505	1515	LOP	368	369	370	371	373	376	381	389	402	423	457	512	601
20110510	1430	HIP	388	389	390	391	393	396	401	409	422	443	477	532	621
20110517	1130	LOP	420	421	422	423	425	428	433	441	454	475	509	564	653
20110519	930	HIP	432	433	434	435	437	440	445	453	466	487	521	576	665
20110525	930	LOP	460	461	462	463	465	468	473	481	494	515	549	604	693

20110906	930	LOP	957	958	959	960	962	965	970	978	991	1012	1046	1101	1190
20110908	1030	HIP	972	973	974	975	977	980	985	993	1006	1027	1061	1116	1205
20110912	1330	LOP	989	990	991	992	994	997	1002	1010	1023	1044	1078	1133	1222
20110922	1430	LOP	1046	1047	1048	1049	1051	1054	1059	1067	1080	1101	1135	1190	1279
20110927	1330	HIP	1066	1067	1068	1069	1071	1074	1079	1087	1100	1121	1155	1210	1299
20111004	930	LOP	1097	1098	1099	1100	1102	1105	1110	1118	1131	1152	1186	1241	1330
20111026	1030	LOP	1210	1211	1212	1213	1215	1218	1223	1231	1244	1265	1299	1354	1443
20111027	1430	HIP	1221	1222	1223	1224	1226	1229	1234	1242	1255	1276	1310	1365	1454
20111101	930	LOP	1237	1238	1239	1240	1242	1245	1250	1258	1271	1292	1326	1381	1470
20111108	1515	HIP	1278	1279	1280	1281	1283	1286	1291	1299	1312	1333	1367	1422	1511
20111109	1330	LOP	1283	1284	1285	1286	1288	1291	1296	1304	1317	1338	1372	1427	1516
20111123	1515	LOP	1355	1356	1357	1358	1360	1363	1368	1376	1389	1410	1444	1499	1588
20111207	1515	HIP	1411	1412	1413	1414	1416	1419	1424	1432	1445	1466	1500	1555	1644

Table G

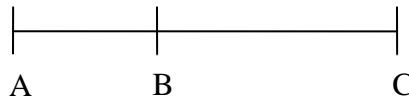
Mini S&P

**60 min 21 Bar Strength
Projected Time Clusters with Date & Time
29 Clusters Found**

DATE	PROJECTED TRADING TIME	PROJECTED TRADING BAR	CLUSTERS FOUND	DATE	PROJ. TRADING TIME	PROJ. TRADING BAR	CLUSTERS FOUND
20110302	1530	53	3	20110824	930	901	3
20110506	1530	375	3	20110901	1430	948	3
20110509	930	376	3	20110909	930	978	3
20110512	1330	401	3	20110913	930	992	3
20110517	1430	423	4	20110915	1430	1011	3
20110520	1430	444	3	20110919	1430	1025	3
20110524	1230	456	3	20110929	1330	1080	4
20110525	1530	466	3	20111004	1330	1101	4
20110601	1530	494	3	20111011	1030	1133	3
20110606	1230	512	3	20111102	930	1244	4
20110617	1330	576	3	20111110	1530	1292	3
20110623	1030	601	4	20111111	1530	1299	3
20110623	1330	604	3	20111129	1130	1365	3
20110624	930	607	3	20111214	1330	1444	3
20110719	1130	721	3				

Table H

**Projection Time Points Using 1.618 and 1.382 Between
Swing High and Swing Low Points**



Lets say that point A is a swing point (high or low) and point B is a swing point (high or low). We then take the difference between the two points as measured in trading bars and then arrive at point C somewhere in the future by multiplying the difference by either 1.618 or 1.382 and adding that to point B. $C = (B - A) \times 1.618 + B$.

In this analysis, the swing values from Table A and Table B are compared to each other using this type of Fibonacci relationship. In other words the program was instructed to take the first swing value in the 21 bar strength, Table A, and compares it to the second swing point. The difference between the dates is 29 - 17 trading bars = 12. This means that there are 12 bars between each of the swing values. That number is then multiplied by the golden ratio number of 1.618 and is extended out in time from the second swing value. So a potential change in trend could be expected at $(29 - 17) \times 1.618 + 29^{\text{th}}$ bar. That bar number is 48. The program goes to a master date file and determines the future date of that bar. If it is an intraday file, then the date and time are both calculated for the 48th

trading bar. This process is repeated and the values are displayed in Tables “I” and “J”. Figure “D” is daily chart of the mini S&P over the same time period from July 5th 2011 to December 27th 2011. I purposely have chosen to use the same time period and the same market throughout this paper so that the reader can compare the different types of Fibonacci time analysis and how one type of analysis can confirm another. This chart plots all of the 1.618 points of the swing values for both the 8 and 21 bar strength values.

Figure “E” is a repeat of the above and the projected dates are calculated using 1.382 instead of 1.618. The projected values are displayed in Tables “K” and “L”.

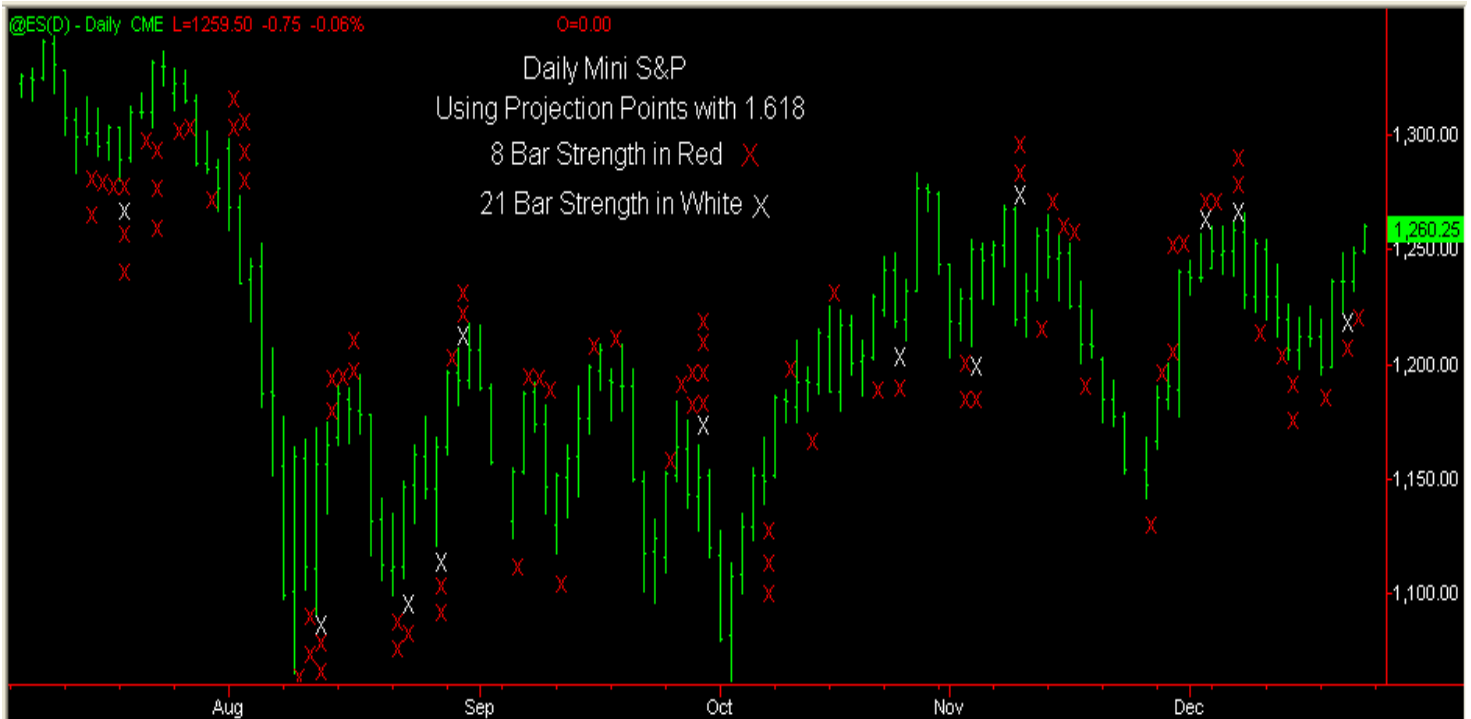


FIGURE D
Daily Mini S&P with Fibonacci Time Clusters
1.618 x Difference of Swing Values
Using 8 and 21 Bar Strength

Daily Mini S&P
8 Bar Strength
1.618 Fibonacci Time Projections

20090817	LOP	20100506	LOP	293	20110705
20100111	HIP	20100805	HIP	231	20110706
20091002	LOP	20100608	LOP	275	20110711
20091116	HIP	20100706	LOP	256	20110711

20110317	LOP	20110502	HIP	50	20110713
20110601	HIP	20110616	LOP	18	20110713
20110224	LOP	20110418	LOP	60	20110714
20091020	HIP	20100621	HIP	270	20110715
20091204	HIP	20100720	LOP	251	20110718

20101109	HIP	20110718	LOP	278	20120821
20110317	LOP	20111004	LOP	225	20120823
20101116	LOP	20110722	HIP	277	20120824
20101109	HIP	20110722	HIP	285	20120906
20110418	LOP	20111027	HIP	217	20120906
20110601	HIP	20111125	LOP	201	20120912
20110616	LOP	20111208	HIP	197	20120919
20110406	HIP	20111027	HIP	230	20120925
20110224	LOP	20111004	LOP	249	20120927
20110218	HIP	20111004	LOP	254	20121004
20101116	LOP	20110809	LOP	296	20121009
20110601	HIP	20111208	HIP	215	20121015
20110317	LOP	20111027	HIP	252	20121025
20110502	HIP	20111125	LOP	235	20121030
20110131	LOP	20111004	LOP	277	20121106
20110418	LOP	20111125	LOP	249	20121119
20110224	LOP	20111027	HIP	277	20121130
20110502	HIP	20111208	HIP	249	20121203
20110218	HIP	20111027	HIP	282	20121207
20110406	HIP	20111125	LOP	262	20121207
20110418	LOP	20111208	HIP	264	20121224
20110317	LOP	20111125	LOP	285	20130110
20110406	HIP	20111208	HIP	277	20130111

Table I

**Daily Mini S&P
21 Bar Strength
1.618 Fibonacci Time Projections**

DATE 1	TYPE	DATE 2	TYPE	TRADING BARS	FUTURE DATE
20060505	HIP	20060614	LOP	44	20060816
20060614	LOP	20060718	LOP	37	20060908
20060505	HIP	20060718	LOP	81	20061109
20061215	HIP	20070110	LOP	26	20070216
20070222	HIP	20070314	LOP	23	20070417
20070110	LOP	20070222	HIP	47	20070501
20061215	HIP	20070222	HIP	73	20070607
20070110	LOP	20070314	LOP	70	20070622
20061215	HIP	20070314	LOP	95	20070730
20060718	LOP	20061215	HIP	172	20070823
20070601	HIP	20070716	HIP	49	20070924
20070314	LOP	20070601	HIP	89	20071008

20070716	HIP	20070816	LOP	37	20071009
20060614	LOP	20061215	HIP	209	20071016
20060718	LOP	20070110	LOP	197	20071022
20070222	HIP	20070601	HIP	112	20071108

20110809	LOP	20111027	HIP	91	20120308
20100805	HIP	20110317	LOP	251	20120314
20100621	HIP	20110218	HIP	273	20120320
20110317	LOP	20110809	LOP	162	20120329
20110616	LOP	20111004	LOP	123	20120329
20110708	HIP	20111027	HIP	126	20120427
20100706	LOP	20110317	LOP	286	20120503
20110218	HIP	20110809	LOP	191	20120510
20110616	LOP	20111027	HIP	150	20120601
20100825	LOP	20110502	HIP	278	20120606
20110502	HIP	20111004	LOP	175	20120613
20110502	HIP	20111027	HIP	202	20120815
20110317	LOP	20111004	LOP	225	20120823
20110218	HIP	20111004	LOP	254	20121004
20110317	LOP	20111027	HIP	252	20121025
20110218	HIP	20111027	HIP	282	20121207

Table J



FIGURE E

**Daily Mini S&P with Fibonacci Time Clusters
1.382 x Difference of Swing Values
Using 8 and 21 Bar Strength**

**Daily Mini S&P
8 Bar Strength
1.382 Fibonacci Time Projections**

FIRST DATE	TYPE	SECOND DATE	TYPE	TRADING BARS	FUTURE DATE
20091204	HIP	20100805	HIP	231	20110706
20100111	HIP	20100825	LOP	217	20110706
20110218	HIP	20110418	LOP	55	20110707
20110131	LOP	20110406	HIP	64	20110708
20110601	HIP	20110616	LOP	15	20110708
20091102	LOP	20100720	LOP	246	20110711
20101109	HIP	20110218	HIP	97	20110711
20101116	LOP	20110224	LOP	94	20110711
20110502	HIP	20110601	HIP	29	20110713
20091127	LOP	20100805	HIP	238	20110715

20110502	HIP	20111125	LOP	200	20120911
20110418	LOP	20111125	LOP	213	20120928
20101116	LOP	20110831	HIP	275	20121002
20110224	LOP	20111027	HIP	236	20121003
20110218	HIP	20111027	HIP	240	20121009
20101109	HIP	20110831	HIP	282	20121011
20110502	HIP	20111208	HIP	213	20121011
20110406	HIP	20111125	LOP	224	20121015
20110418	LOP	20111208	HIP	225	20121029
20110131	LOP	20111027	HIP	260	20121106
20110317	LOP	20111125	LOP	243	20121109
20110406	HIP	20111208	HIP	236	20121113
20110224	LOP	20111125	LOP	264	20121211
20110317	LOP	20111208	HIP	256	20121212
20110218	HIP	20111125	LOP	268	20121217
20110224	LOP	20111208	HIP	276	20130110

**Table K
Daily Mini S&P
21 Bar Strength
1.382 Fibonacci Time Projections**

DATE 1	TYPE	DATE 2	TYPE	TRADING BARS	FUTURE DATE
20100111	HIP	20100825	LOP	217	20110706
20110218	HIP	20110502	HIP	68	20110808
20110616	LOP	20110708	HIP	21	20110808
20110502	HIP	20110616	LOP	44	20110818
20110708	HIP	20110809	LOP	30	20110921

20110502	HIP	20110708	HIP	65	20111010
20110317	LOP	20110616	LOP	87	20111019
20110616	LOP	20110809	LOP	51	20111020
20100825	LOP	20110218	HIP	170	20111021
20100805	HIP	20110218	HIP	189	20111117
20110218	HIP	20110616	LOP	112	20111123
20111004	LOP	20111027	HIP	23	20111130
20110317	LOP	20110708	HIP	108	20111209
20110809	LOP	20111004	LOP	54	20111220

20110616	LOP	20111027	HIP	129	20120502
20100805	HIP	20110502	HIP	257	20120507
20110502	HIP	20111004	LOP	149	20120507
20100706	LOP	20110502	HIP	287	20120619
20110502	HIP	20111027	HIP	173	20120705
20110317	LOP	20111004	LOP	192	20120709
20100825	LOP	20110616	LOP	282	20120727
20110218	HIP	20111004	LOP	217	20120813
20110317	LOP	20111027	HIP	216	20120905
20110218	HIP	20111027	HIP	240	20121009

Table L

Figure F illustrates how the Fibonacci projected dates work effectively on longer term charts. Take note that the 23 swing bar had a cluster on the week ending 20111203. This is also clustered with the 8 bar strength. Since then the market has fallen as would be expected.

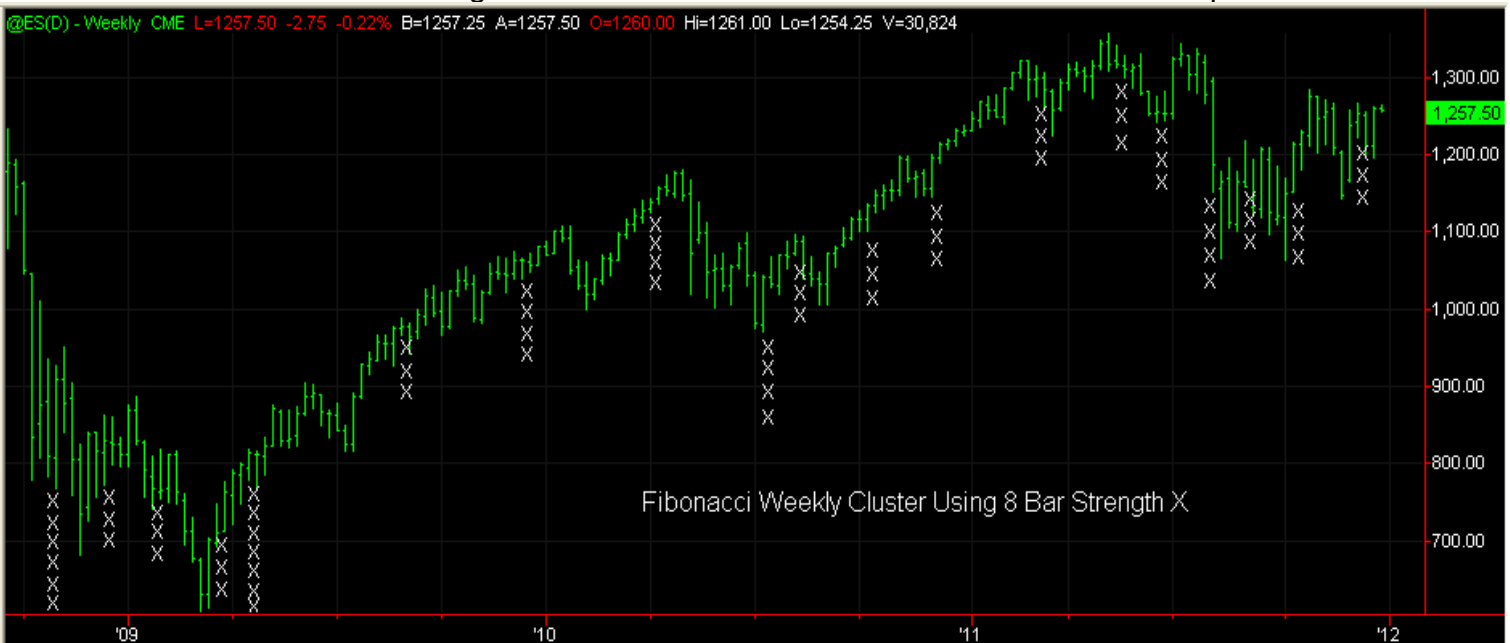


FIGURE F

**Weekly Mini S&P with Fibonacci Time Clusters
Using 8 and 21 Bar Strength**

Fibonacci Time Clusters

**Weekly Mini S&P
8 Bar Strength for Swing Points**

DATE	TYPE	START TRADE BAR	FIB 1	FIB 2	FIB 3	FIB 5	FIB 8	FIB 13	FIB 21	FIB 34	FIB 55	FIB 89	FIB 144	FIB 233
19980116	LOP	19	20	21	22	24	27	32	40	53	74	108	163	252
19980410	HIP	31	32	33	34	36	39	44	52	65	86	120	175	264
19980724	HIP	46	47	48	49	51	54	59	67	80	101	135	190	279
19981009	LOP	57	58	59	60	62	65	70	78	91	112	146	201	290
19990528	LOP	90	91	92	93	95	98	103	111	124	145	179	234	323
19990604	LOP	91	92	93	94	96	99	104	112	125	146	180	235	324
19990723	HIP	98	99	100	101	103	106	111	119	132	153	187	242	331
19991022	LOP	111	112	113	114	116	119	124	132	145	166	200	255	344
19991231	HIP	121	122	123	124	126	129	134	142	155	176	210	265	354
20000324	HIP	133	134	135	136	138	141	146	154	167	188	222	277	366
20000421	LOP	137	138	139	140	142	145	150	158	171	192	226	281	370
20000901	HIP	156	157	158	159	161	164	169	177	190	211	245	300	389
20001222	LOP	172	173	174	175	177	180	185	193	206	227	261	316	405
20010323	LOP	185	186	187	188	190	193	198	206	219	240	274	329	418
20010525	HIP	194	195	196	197	199	202	207	215	228	249	283	338	427
20010921	LOP	211	212	213	214	216	219	224	232	245	266	300	355	444
20020111	HIP	227	228	229	230	232	235	240	248	261	282	316	371	460
20020222	LOP	233	234	235	236	238	241	246	254	267	288	322	377	466
20020322	HIP	237	238	239	240	242	245	250	258	271	292	326	381	470

20070817	LOP	519	520	521	522	524	527	532	540	553	574	608	663	752
20071012	HIP	527	528	529	530	532	535	540	548	561	582	616	671	760
20080321	LOP	550	551	552	553	555	558	563	571	584	605	639	694	783
20080523	HIP	559	560	561	562	564	567	572	580	593	614	648	703	792
20080718	LOP	567	568	569	570	572	575	580	588	601	622	656	711	800
20081121	LOP	585	586	587	588	590	593	598	606	619	640	674	729	818
20090306	LOP	600	601	602	603	605	608	613	621	634	655	689	744	833
20090710	LOP	618	619	620	621	623	626	631	639	652	673	707	762	851
20100205	LOP	648	649	650	651	653	656	661	669	682	703	737	792	881
20100430	HIP	660	661	662	663	665	668	673	681	694	715	749	804	893
20100709	LOP	670	671	672	673	675	678	683	691	704	725	759	814	903
20110218	HIP	702	703	704	705	707	710	715	723	736	757	791	846	935
20110318	LOP	706	707	708	709	711	714	719	727	740	761	795	850	939
20110506	HIP	713	714	715	716	718	721	726	734	747	768	802	857	946
20110708	HIP	722	723	724	725	727	730	735	743	756	777	811	866	955
20111007	LOP	735	736	737	738	740	743	748	756	769	790	824	879	968
20111028	HIP	738	739	740	741	743	746	751	759	772	793	827	882	971

Table M

**Mini S&P
Weekly 8 Bar Strength
Projected Time Clusters with Date & Time**

95 Clusters Found

DATE	PROJECTED TRADING BAR	CLUSTERS FOUND	DATE	PROJECTED TRADING BAR	CLUSTERS FOUND
19980911	53	4	20010119	176	3
19981204	65	3	20110304	704	3
19990723	98	3	20110520	715	3
19990813	101	3	20110617	719	3
19990903	104	3	20110805	726	4
19991029	112	4	20110902	730	3
19991224	120	3	20111014	736	3
20000121	124	3	20111209	744	5
20000324	133	3	20120106	748	5
20000623	146	6	20120309	757	4
20000818	154	3	20120406	761	5
-----			20121109	792	5
20001020	163	3	20140725	881	3
20001110	166	3			

Table N

Fibonacci Time Clusters Weekly Mini S&P 21 Bar Strength for Swing Points

DATE	TYPE	START TRADE BAR	FIB 1	FIB 2	FIB 3	FIB 5	FIB 8	FIB 13	FIB 21	FIB 34	FIB 55	FIB 89	FIB 144	FIB 233
19980724	HIP	46	47	48	49	51	54	59	67	80	101	135	190	279
19981009	LOP	57	58	59	60	62	65	70	78	91	112	146	201	290
19991022	LOP	111	112	113	114	116	119	124	132	145	166	200	255	344
20000324	HIP	133	134	135	136	138	141	146	154	167	188	222	277	366
20000421	LOP	137	138	139	140	142	145	150	158	171	192	226	281	370
20010323	LOP	185	186	187	188	190	193	198	206	219	240	274	329	418
20010921	LOP	211	212	213	214	216	219	224	232	245	266	300	355	444
20021011	LOP	266	267	268	269	271	274	279	287	300	321	355	410	499
20030314	LOP	288	289	290	291	293	296	301	309	322	343	377	432	521
20040305	HIP	339	340	341	342	344	347	352	360	373	394	428	483	572
20040813	LOP	362	363	364	365	367	370	375	383	396	417	451	506	595
20050422	LOP	398	399	400	401	403	406	411	419	432	453	487	542	631
20060505	HIP	452	453	454	455	457	460	465	473	486	507	541	596	685
20060616	LOP	458	459	460	461	463	466	471	479	492	513	547	602	691
20070316	LOP	497	498	499	500	502	505	510	518	531	552	586	641	730
20071012	HIP	527	528	529	530	532	535	540	548	561	582	616	671	760
20090306	LOP	600	601	602	603	605	608	613	621	634	655	689	744	833
20100430	HIP	660	661	662	663	665	668	673	681	694	715	749	804	893
20100709	LOP	670	671	672	673	675	678	683	691	704	725	759	814	903
20110506	HIP	713	714	715	716	718	721	726	734	747	768	802	857	946

Table O
Mini S&P
Weekly 21 Bar Strength
Projected Time Clusters with Date & Time
9 Clusters Found

DATE	PROJECTED TRADING BAR	CLUSTERS FOUND
20000623	146	4
20010427	190	3
20030110	279	4
20030613	301	3
20050909	418	3
20060804	465	3
20070518	506	3
20080125	542	3
20101203	691	3

Table P

In closing here, I wanted to do a very comprehensive analysis using Fibonacci time projections since this appears to be a very subjective arena. I have spent several years studying such material, working closely with Fibonacci experts, such as Joe Dinapoli and applying what I have found in actual trading. This material may look on the surface to be traded as a system. I would only approach this as a trading tool or as an indicator. In fact I am in the process, with George Pruitt of Futures Truth, to develop such into an indicator that could be applied on either the TradeStation or Ninja Trader platforms at a very affordable price. The purpose in all of this is to give the trader another valuable tool as applied to the markets and at the very least a real effective way to filter trades. After all, timing is what really counts. I could have made this article over a 100 pages by just combining this analysis with other indicators such as the MACD and RSI to name a few. The investigation is endless and that will be left as personal exercise for the individual trader. If there is any interest with this research, then we may offer a daily alert service for the next day giving probable turning points on a 5, 15, 30 and 60 minute mini S&P chart.