

Dormice and Conifers in Wyre Forest 2022 Update

PHIL RUDLIN



Dormouse on Cadburys Dead End Road - Aug 2019

Phil Rudlin

Another extraordinary year goes by with record summer temperatures and long dry spells, such a contrast to the cold wet spring of 2021 which may have affected Dormice numbers across the country during this crucial time after hibernation. In 2021 we had one of the worst seasons in Ribbesford Wood, finding only 25 individual Dormice in our research area which has been active in a 17ha conifer plantation for the last 22 years. However, the final part of the research project took place during the winter of 2020/21. This involved felling all the remaining conifers on the site and planting native broadleaves in their place. This may also have had an effect on Dormice numbers by removing areas of habitat and food source. How much of an impact this had, we will never know but it is likely that this, and the adverse spring weather, did little to help their survival. With some trepidation, therefore, we carried out our first monthly inspection of the 380 Dormice boxes in May 2022. It was a relief to find 14 animals safely tucked up in the boxes, five of which were unchipped and therefore would have been alive in 2021, just not found in the boxes. The following months were remarkably consistent (Table 1) until September when numbers increased as would normally be expected when most

young are active and dispersing, and second litters can sometimes be found. Over the six inspections 99 animals were found which is equal 6th over the past 19 years compared to 4th lowest in 2021. This is also, well above the average of 74.9.

During the season 38 young were found, which is the 5th highest recorded (Table 2). It is worth noting that these were the total numbers of juveniles found in boxes and not just individuals. Of those found, 18 juveniles were micro-chipped, although some were too small to chip so may, or may not, have been found again. (16 young were found which were 7g or less and therefore could not be chipped. Three were found again after chipping). Ten fresh nests were found in boxes that were not occupied during the survey season. It is not unusual to find empty nests as Dormice have up to 5 different nests within their home range and we only check them six times year. However, it is always interesting to know they are present. Interestingly, Table 1 shows this is the 2nd worst number of unoccupied nests found over 19 years of comparable data, which is a little odd but it could be that the remaining habitat has improved creating better natural nesting sites which they can uti-



Wyre Forest Study Group

Table 1. Numbers of Dormice and Fresh Nests recorded in Ribbesford 2004 - 2022.

	2004		2005		2006		2007		2008		2009		2010	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
April							3	0						
May	6	2	12	2	15	3	20	3	5	2	10	1	7	2
June	11	0	14	2	11	8	16	0	9	11	9	1	11	6
July	19	0	17	5	6	4	8	2	11	1	4	5	9	8
August	13	1	8	0	4	1	7	4	16	8	8	0	28	7
September	19	0	8	4	10	3	8	0	8	6	8	3	20	8
October	28	9	4	16	18	8	2	0	18	2	1	1	30	6
November	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Totals	96	12	63	29	64	27	64	9	67	30	40	11	105	37

	2011		2012		2013		2014		2015		2016		2017	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
April														
May	16	0	4	2	5	4	5	1	17	1	12	11	9	10
June	4	0	6	0	7	1	10	5	21	3	13	3	16	2
July	5	9	5	3	2	3	12	2	17	6	34	0	24	3
August	5	1	4	3	5	7	14	2	8	0	19	2	35	9
September	8	2	9	2	*	*	26	2	26	7	14	2	26	5
October	4	7	4	2	19	3	18	4	26	5	7	3	23	9
November	*	*	*	*	1	0	*	*	*	*	*	*	*	*
Totals	42	19	32	12	39	18	85	16	115	22	99	21	133	38

	2018		2019		2020		2021		2022	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
April										
May	12	4	11	3	19	10	2	1	14	3
June	9	5	18	6	14	8	9	0	14	2
July	12	9	22	8	16	7	8	6	15	4
August	17	1	28	8	35	3	19	3	14	0
September	18	1	21	8	25	4	13	4	18	1
October	6	11	19	0	16	5	2	0	24	0
November	*	*	*	*	*	*	*	*	*	*
Totals	74	31	119	33	125	37	53	14	99	10

Table 2. Number of juvenile Dormice recorded in Ribbesford 2004 - 2022.

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Juveniles	34	11	22	10	34	6	35	5	7	17
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Juveniles	26	32	47	65	31	53	51	21	38	

lise. Twenty-six animals were large enough to micro-chip - eight adults and 18 juveniles (Table 3). The adults were either yearlings, born the year before, or possibly older. It is impossible to age without permanent marking, such as micro-chipping.

Although 99 animals were found we know from micro-chipping that some of these were found on multiple occasions. By identifying individuals, we know there were at least 40 different dormice in the area. This figure is worked out from the individuals chipped during the year or recaptured from previous years. It includes juveniles which were big enough to chip, but not those which were too small to chip, as they may have been found again later in the year and chipped, therefore duplicating results. This is the 10th highest since 2004 and just above the average of 38.9 (Table 4).

Fourteen animals were recaptured from previous years (Table 5). It has been interesting to see the trend over the last 19 years. Figure 1 shows the number of captures each year, and shows some significant variations, whereas the number of actual individuals confirmed is more constant. This is far more accurate and therefore useful information, showing the importance of micro-chipping, which is the only way of following animals with any degree of certainty over a long period of time.

We have now been micro-chipping for 21 years (first animal chipped in July 2002) and have therefore followed some individuals for a number of years. Of the 14 recaptures this year, 11 were over a year old, four of which were three years old, all likely to be born in 2019 (Table 6). One of these individuals was found on all six visits, one on five visits, three on four visits, four on three visits, one on two

Table 3. Number of Dormice micro-chipped in Ribbesford 2004 - 2022.

Treatment No	No of Dormice chipped in 2004	No of Dormice chipped in 2005	No of Dormice chipped in 2006	No of Dormice chipped in 2007	No of Dormice chipped in 2008	No of Dormice chipped in 2009	No of Dormice chipped in 2010	No of Dormice chipped in 2011	No of Dormice chipped in 2012	No of Dormice chipped in 2013
1	4	0	3	1	0	2	8	0	1	1
2	7	4	12	5	11	2	2	4	0	5
3	13	3	9	4	2	3	4	2	2	1
4	8	3	0	0	2	2	4	3	7	5
Sausage	3	0	0	1	2	0	1	1	2	6
New plantation	Not surveyed	3	1	0	4	1	19	3	4	4
Unthinned area	0	0	0	0	3	1	1	0	0	0
Total	35	13	25	11	24	11	39	13	16	22
Treatment No	No of Dormice chipped in 2014	No of Dormice chipped in 2015	No of Dormice chipped in 2016	No of Dormice chipped in 2017	No of Dormice chipped in 2018	No of Dormice chipped in 2019	No of Dormice chipped in 2020	No of Dormice chipped in 2021	No of Dormice chipped in 2022	
1	5	0	1	6	1	3	5	7	2	
2	3	6	12	11	7	3	7	0	9	
3	1	0	1	0	1	2	1	0	0	
4	3	9	1	12	2	15	9	2	7	
Sausage	3	5	3	4	0	3	0	1	3	
New plantation	15	4	12	15	13	13	12	4	5	
Unthinned area	0	0	0	0	0	0	0	0	0	
Total	30	24	30	48	24	39	34	14	26	

Table 4. Number of individual Dormice recorded in Ribbesford by treatment area 2004 - 2022.

Treatment No	No of individual Dormice found 2004	No of individual Dormice found 2005	No of individual Dormice found 2006	No of individual Dormice found 2007	No of individual Dormice found 2008	No of individual Dormice found 2009	No of individual Dormice found 2010	No of individual Dormice found 2011	No of individual Dormice found 2012	No of individual Dormice found 2013
1	4	1	3	4	3	3	9	4	1	1
2	9	9	14	11	13	3	5	9	1	7
3	16	10	13	9	4	11	5	0	3	1
4	9	4	3	1	4	2	6	3	11	11
Sausage	3	0	2	1	2	0	2	2	1	6
New plantation	Not surveyed	3	1	0	4	1	26	7	4	6
Unthinned area	0	0	1	2	3	2	2	1	1	0
Total	41	27	37	28	33	22	55	26	22	32

Treatment No	No of individual Dormice found 2014	No of individual Dormice found 2015	No of individual Dormice found 2016	No of individual Dormice found 2017	No of individual Dormice found 2018	No of individual Dormice found 2019	No of individual Dormice found 2020	No of individual Dormice found 2021	No of individual Dormice found 2022
1	6	2	1	7	1	4	5	2	4
2	4	9	15	14	8	6	10	6	11
3	1	4	2	1	2	3	2	0	0
4	6	13	3	14	9	22	16	4	7
Sausage	6	6	8	4	4	4	2	3	7
New plantation	19	14	19	21	18	17	19	10	11
Unthinned area	0	0	0	0	0	0	0	0	0
Total	42	48	48	61	42	56	54	25	40



Dormice in box - Button Oak - June 2019

Phil Rudlin

Table 5. Number of Dormice recorded and re-captured 2005 - 2022.

Treatment No	Dormice found 2005	Re captures from previous years	Dormice found 2006	Re captures from previous years	Dormice found 2007	Re captures from previous years	Dormice found 2008	Re captures from previous years	Dormice found 2009	Re captures from previous years	Dormice found 2010	Re captures from previous years
1	4	1	4	1	9	2	1	1	3	0	19	1
2	23	4	28	9	20	7	36	6	12	3	13	3
3	26	5	28	10	21	12	11	3	17	7	8	1
4	6	1	2	2	2	1	4	2	5	1	11	2
Sausage	0	0	0	0	5	0	10	0	0	0	2	1
New Plantation	4	*	2	1	7	0	5	1	1	0	50	7
Unthinned area	0	0	1	0	2	0	3	0	2	1	2	1
Total	63	11	65	23	66	22	70	13	40	12	105	16

Treatment No	Dormice found 2011	Re captures from previous years	Dormice found 2012	Re captures from previous years	Dormice found 2013	Re captures from previous years	Dormice found 2014	Re captures from previous years	Dormice found 2015	Re captures from previous years	Dormice found 2016	Re captures from previous years
1	7	3	1	0	1	0	15	1	4	2	1	0
2	14	2	2	0	8	3	4	1	26	3	38	3
3	0	0	3	2	1	0	1	0	6	4	2	1
4	3	0	18	3	14	5	19	1	35	4	14	3
Sausage	6	2	3	0	7	0	15	4	1	1	13	4
New Plantation	10	5	4	0	8	1	31	3	43	9	31	7
Unthinned area	2	1	1	1	0	0	0	0	0	0	0	0
Total	42	13	32	6	39	9	85	10	115	23	99	18

Treatment No	Dormice found 2017	Re captures from previous years	Dormice found 2018	Re captures from previous years	Dormice found 2019	Re captures from previous years	Dormice found 2020	Re captures from previous years	Dormice found 2021	Re captures from previous years	Dormice found 2022	Re captures from previous years
1	14	1	1	0	14	1	7	1	3	0	7	2
2	25	3	12	1	9	3	17	3	8	1	24	2
3	2	1	2	1	11	0	5	1	0	0	0	0
4	41	2	15	8	32	4	33	5	11	1	13	0
Sausage	13	0	5	2	10	2	18	2	7	3	10	4
New Plantation	38	6	39	4	43	5	45	8	24	6	45	6
Unthinned area	0	0	0	0	0	0	0	0	0	0	0	0
Total	133	13	74	16	119	15	125	20	53	11	99	14

Table 6. Dormice recaptured over one year old 2005 - 2022.

Micro-Chip number	Date micro-chipped	Age when micro-chipped	Sex	Number of boxes used after being chipped	Number of recaptures after being chipped	Number of captures in 2022	Approx age in 2022
747180	Aug-19	Juv	Male	10	17	6	3
747261	Oct-19	Juv	Female	7	11	3	3
747038	Jun-20	Mat	Female	5	12	5	3
715234	Jul-20	Mat	Male	5	6	4	3
741629	Aug-20	Juv	Male	4	9	3	2
747257	Aug-20	Juv	Male	3	4	1	2
715241	Sep-20	Juv	Male	3	2	1	2
715249	Sep-20	Juv	Male	3	2	1	2
715505	Sep-20	Juv	Female	3	2	2	2
715508	Sep-20	Juv	Female	4	3	3	2
715246	Aug-21	Mat	Male	4	5	4	2

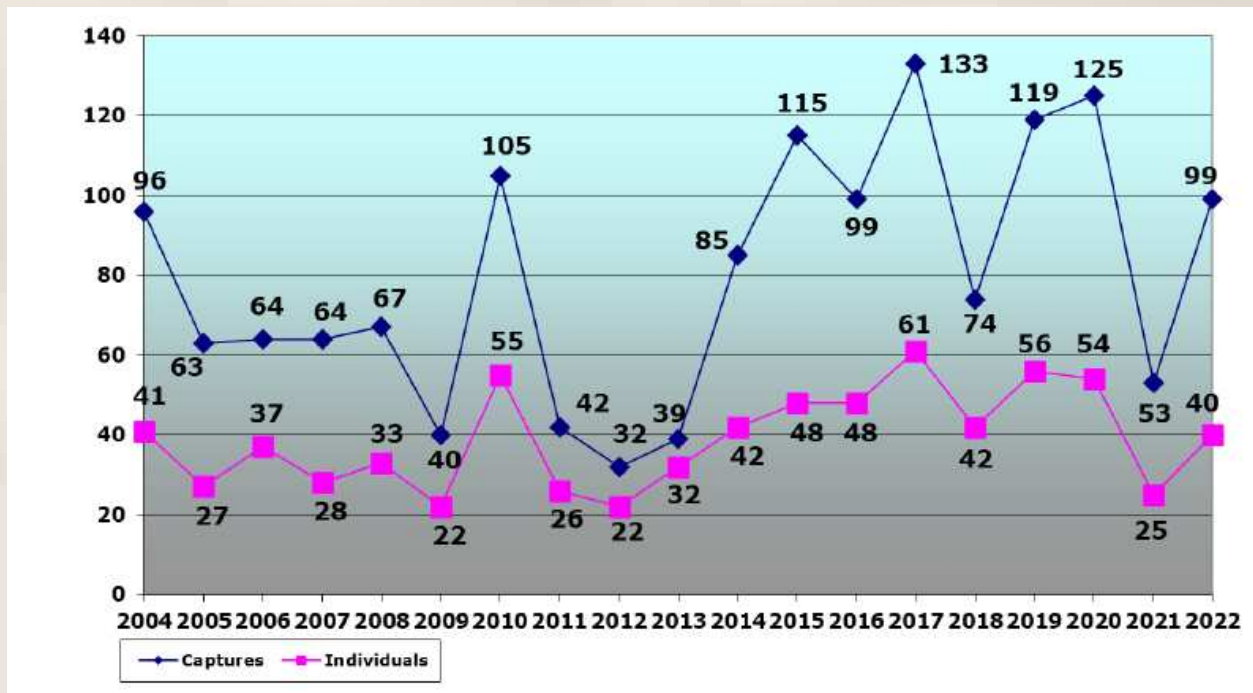


Figure 1. Graph showing number of Dormice found in Ribbesford research area 2004 - 2022.

visits and four found just once. These 14 re-captured animals were therefore seen on 41 occasions and could have been recorded as individuals were it not for micro-chipping. Three animals chipped in September 2020 as juveniles in different boxes were not recorded at all in 2021 and may have dispersed into different areas of the plantation.

Research aim, methods and areas:

The aim of the research project, which began in 2000 in a 17ha area of Ribbesford (Figure 2), was to find the best method of reverting coniferous plantations back to native broadleaves, while maintaining Dormice populations. Four treatment types were used and compared:

Treatment 1: Hand cut with chainsaws and forwarder extraction in autumn / winter. Small areas of conifers (approx 20mx20m) were felled to create small glades within the crop. The idea being that these would regenerate naturally in years to come and would provide viable habitat for Dormice by the time of the next operations in 5 years. Work was carried out during autumn / winter of 2003/04

(This area was combined with treatment 2 in 2009/10 as finding chainsaw operators to fell trees proved impossible.) Half of this area was clear-felled in 2015/16 with the remaining conifers removed in October 2020.

Treatment 2: Harvester operation with forwarder extraction – autumn / winter method as Treatment 1. Work was carried out during autumn winter of 2003/04, 2009/10 and half of this area clear-felled in 2015/16 with the remaining conifers removed in October 2020.

Treatment 3: Harvester operation with forwarder extraction in autumn / winter. Normal thinning operation removing 30-35% according to standard thinning tables. Work was carried out during autumn / winter of 2003/04, 2009/10, 2015/16 and remaining conifers removed in October 2020.

Treatment 4: Harvester operation with forwarder extraction in autumn / winter. Two larger areas of conifers were felled during each operation (approx. 0.3 ha). This replicates the normal coppice size in broadleaf habitat, which Dormice favour. Again, this

should regenerate naturally in years to come and would provide viable habitat for Dormice by the time of the next operations in 5 years. Work was carried out during autumn / winter of 2003/04, 2009/10, 2015/16 and remaining conifers removed in October 2020.

Sausage: Area of failed Corsican Pine which has good structure, with Oak, Birch and Bramble. So named as it resembles a sausage shape on the map! Twenty Dormouse boxes

were erected in 2002.

New Plantation: Area planted with Corsican Pine and European Larch in 2000. Forty Dormouse boxes erected in 2004.

Unthinned area: Area adjacent to research site, on the other side of forest track. Fifteen Dormouse boxes erected in 1993 and a further 20 in 2005.

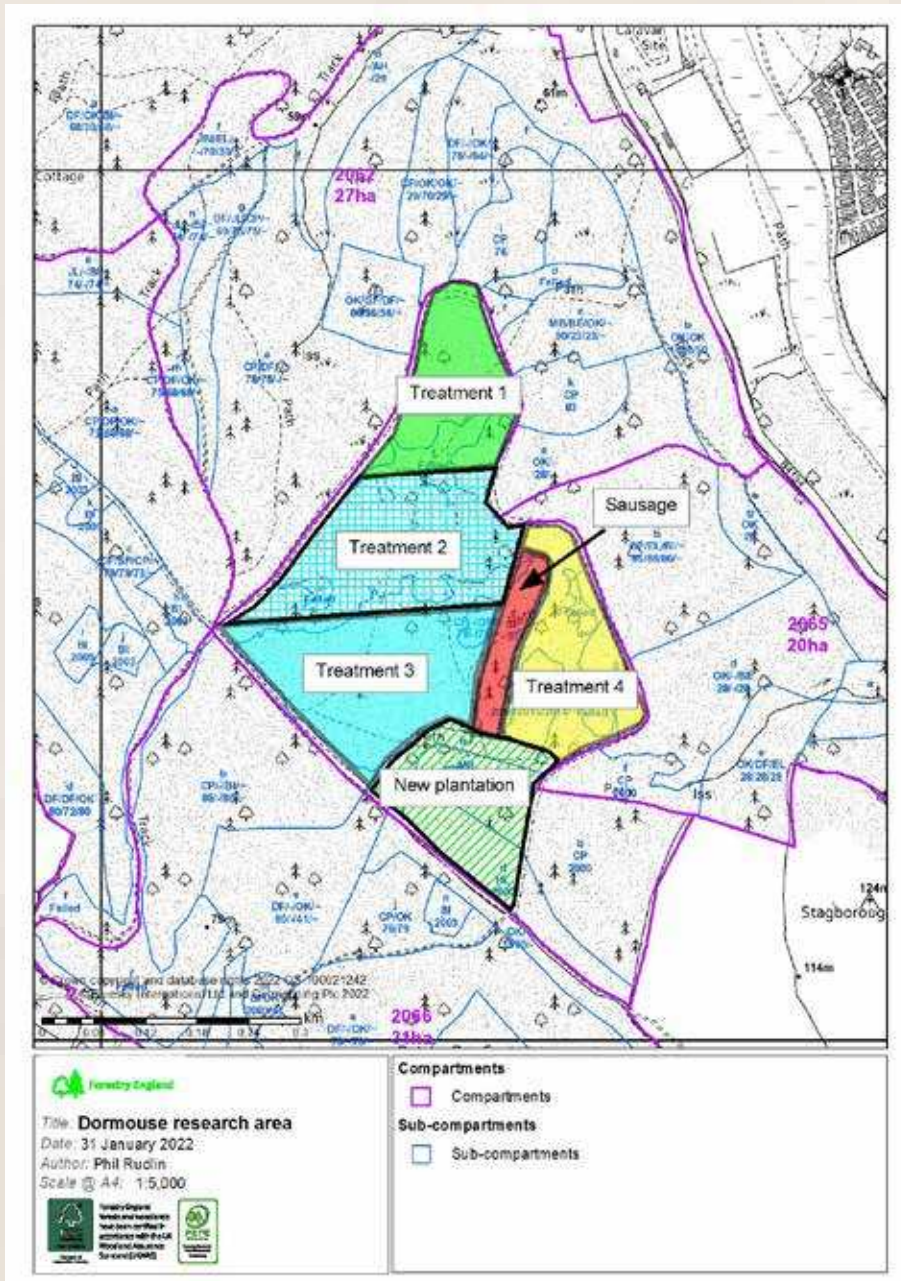


Figure 2. Map showing Treatment Areas within Ribbesford Woods research area.

Conclusion:

After such a poor season in 2021 it was a relief to have an above average season this year and finding three animals not seen, but known to be alive in 2021. This shows the importance of long-term monitoring and permanent identification. Also finding four 3-year-old animals which survived the last few years, with warm winters and forest operations, is encouraging. Good numbers of animals were found in all treatment types which suggests that Dormice are spread throughout the whole research site as they were when monitoring started back in 2000. (Note, the 65 boxes in Treatment 3 were removed prior to the final felling of the conifers. These have not yet been replaced as the habitat is unsuitable therefore no animals were recorded. These boxes will be returned in the next few years as the habitat improves and connections to the remainder of the site are created.) The “New plantation”, planted with mixed conifers in 2000, remains the most consistent with 45% of animals found here again this year. However, this small area is due for its first thinning and may be worked in the autumn/winter of 2023. It will be interesting to see if these animals disperse back into the areas where the conifers have been removed or they prefer to stay put. The signs of recovery are encouraging and, as the planted trees grow and vegetation recovers in the felled areas they should, in the next few years, provide an improved, connected habitat for Dormice and the experiment will be complete, so watch this space!

In February 2022 a further 1000 trees were

planted in the research area by contractors, and 350 by volunteers in April. The majority of the areas were planted up with Oak. However, a mixture of Rowen, Crab Apple, Hazel, Wild Cherry, Field Maple and Hawthorn have also been planted, particularly around the edges to improve the diversity in the future.

I would like to thank Roger Trout and volunteers, Andy Bucklitch, Charline Hue and Samantha Faggetter for their continued effort and support in monitoring and micro chipping, over the last 22, 11, 8 and 3 years respectively. Without them it would be extremely difficult to maintain this level of monitoring which will continue for the foreseeable future.

Wyre Forest Records:

The five sites monitored in the Main Block of Wyre Forest continue to frustrate with only one showing any evidence of Dormice in 2022. Even this site, at Button Oak, numbers are well down on previous years and the worst numbers since recording began in 2013 (Table 7).

Densities of Dormice have always seemed to be low with few historical records and only low numbers found in recent years, even in what looks like prime habitat. Odd records in the last few years in Earnwood Copse, Longdon Orchard and the disused railway line suggests they are widespread across the forest, but extremely difficult to monitor with any certainty I suppose we just must accept they are there, manage the habitat accordingly and keep looking!

Table 7. Records of Dormice in Wyre Forest Main Block 2013 - 2022.

Year	Button Oak		Longdon Orchard		Wimperhill		Parkhouse		Betts Reserve	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
2013	10	1	3	3	0	0	1	0	0	0
2014	11	4	3	2	0	0	0	1	4	0
2015	10	2	9	3	0	0	1	1	0	1
2016	18	1	2	1	2	2	2	0	1	0
2017	11	2	10	3	1	1	2	1	2	2
2018	27	2	18	2	6	0	3	2	8	3
2019	17	1	8	5	1	1	4	2	0	3
2020	8	1	6	4	0	0	3	0	0	2
2021	10	3	2	0	0	0	0	0	0	0
2022	6	1	0	0	0	0	0	0	0	0