

Nacton Decoy and its catches

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On 1st August 1968 the Wildfowl Trust acquired Nacton Decoy in Suffolk, on a 21-year lease from the Orwell Park Estate. Thanks to the interest and generosity of the Trustees of the Estate, and to the efforts of the late Major-General C. B. Wainwright, the last of the great commercial decoys in Britain is now engaged in ringing ducks instead of killing them for the market.

Payne-Gallwey (1886) described the decoy in the following terms. 'About fifty or sixty years ago a Decoy was constructed at Levington Heath, near Orwell Park, by Sir Robert Harland. It is four acres in extent, and when in full working order had five pipes. The present owner of the estate, Colonel George Tomline, worked it for many years, and then gave up doing so for a time. He states that the largest number of fowl he ever captured in one year was 3,000. In 1853 2,380 were taken; in 1854, 2,279; in 1855, 1,803; the total number of Ducks secured in eighteen years being 27,991, of which 5,711 were Wigeon. At the present time only one pipe is worked, in which during the season of 1884-85 more than 700 Ducks were taken by the end of November, but Colonel Tomline is now constructing a second pipe with the assistance of one of the Skeltons. There are some pinioned Wigeon here which breed freely, and the young birds are quite tame. A curious circumstance is, that although the Decoy is within 300 to 400 yards of the Felixstowe Railway, the wildfowl appear to take no notice of it. In sharp weather there are great numbers of fowl in this Decoy, and Colonel Tomline has seen thousands assembled on the ice, and informs me he has lately met with such success that he intends fitting up the disused pipes again.'

Payne-Gallwey used the name 'Orwell Park Decoy' and also described two 'Nacton Decoys' on Nacton Heath. However, they lay in the parish of Foxhall, not in that of Nacton, and were 'sometimes spoken of as the Bixley or Purdis Hall Decoys.' These were operational in 1885 but have been defunct now for many years and 'Nacton Decoy' has long been used as the name for the decoy in Orwell Park. Payne-Gallwey does not mention all the curious circumstances of the Decoy's situation and construction. Most decoys near the coast are on low-lying marshland. Nacton Decoy is on

sandy land more than fifty feet above the River Orwell's estuary, which lies a mile to the south. It appears that the ponds were originally constructed not for a decoy but to store water from springs to provide power for a small water-mill. It was then observed how attractive the ponds were to duck, particularly when the marshes below were disturbed. Modifications were therefore made so that they would serve as a decoy. This is probably why Payne-Gallwey's dates for the construction of the Decoy are rather vague, 1825-1835 (rather earlier than the Trust's decoy at Slimbridge, completed in 1843). It is also the explanation of the unusual arrangement shown in Figure 1, whereby the Decoy pool (2.2 acres) has adjacent to it another pond of similar size. This pond is little used by the duck and would indeed be a handicap to catching if it were. It is therefore not kept undisturbed and the catches at SE. and SW. pipes are ringed and released on its margins.

The fifth pipe is situated not on the main ponds, but on a small pool to the north, of just over half an acre. This was designed to catch Teal but is now little used for the purpose. The wooded slopes climb quite sharply from the ponds (Plate IXa, facing p. 136) and use was made of this configuration to place little gazebos, charming hexagonal wooden structures, above the end of each pipe. These give the observer unrivalled views of the whole catching operation, looking down on the decoyman and his dog. Also included in the 28 acres leased to the Trust are two large rectangular tanks, at present used for rearing domestic ducks, and the storage hut where the catch was sorted and laid out (Plate IXb). There is also a delightful high-gabled cottage for the decoyman, something straight out of Hansel and Gretchel.

The Skelton mentioned in Payne-Gallwey's account was George Skelton, who operated the refurbished Decoy until he died in 1919. He was a great-grandson of the first George Skelton who left Friskney, Lincolnshire, to construct and demonstrate 'proper' decoys in East Anglia, beginning with Winterton Decoy, Norfolk, in 1807. Before that, odd decoy pipes had been built in the angles of large lakes there, but Skelton and his family of decoymen spread the more efficient Dutch technique of using a small, secluded pond with several pipes. George

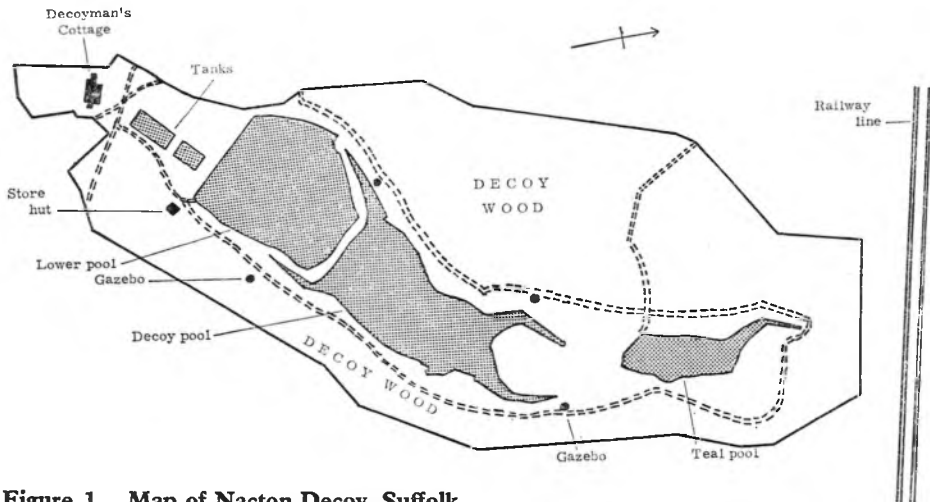


Figure 1. Map of Nacton Decoy, Suffolk.

Skelton the Second (1790-1857) was the most famous of the family and figures as the frontispiece of Payne-Gallwey's book. He ended by working Dersingham Decoy, Norfolk, now owned by Mr. J. E. A. Lambert, and also operated as a ringing station with support from the Trust (Lambert and Cook 1967).

On 23rd July 1919, Tom Baker took over as decoyman and has continued ever since, completing his half-century this year. Indeed his association with the Decoy goes back 12 years earlier, to the same date in 1907 when, as a boy, he started helping Skelton. Four years fighting in France, 1914-18, constituted his only prolonged absence from Nacton. Now an active 74, his wiry frame seemingly impervious to the elements, Tom differs from the popular concept of a decoyman — small, taciturn and secretive — in being a good six feet tall and a fascinating talker on any aspect of Suffolk folklore and the arts of decoying.

We are fortunate in having been allowed access to the detailed Estate records of the birds caught, day by day and species by species, from 1895 to the present day. Since the Decoy was being operated under the Estate Office, these figures were subjected to meticulous auditing at the end of each season and so must be one of the most reliable of such records in existence. The details of the catches provide wonderful data for detailed analysis of the effects of weather and so on, but this is outside the scope of the present paper. We will confine ourselves mainly to the seasonal totals as set out in Tables I and II.

While George Skelton operated the Decoy the kill averaged 2,200 (against the

1,555 indicated by Payne-Gallwey) and fluctuated between one and three thousand a season; this is the usual range for decoys both in this country and in the Netherlands. However, instead of declining with the decoyman's advancing years (as had been the case with the Trust's decoy near Peterborough, Borough Fen Decoy, when it was under Billy Williams)

Table I. Take of ducks at Nacton Decoy in 24 seasons with George Skelton as decoyman.

Season	Mallard	Teal	Wigeon	Pintail	Others	Total
1895-96	697	208	381	15	—	1301
1896-97	1379	110	497	16	—	2002
1897-98	715	294	306	20	—	1335
1898-99	482	502	176	31	—	1191
1899-00	2576	429	239	51	—	3295
1900-01	1267	120	223	29	2	1641
1901-02	1040	255	101	27	3	1426
1902-03	1711	166	168	40	—	2085
1903-04	1387	219	194	45	—	1845
1904-05	2070	558	168	54	—	2850
1905-06	1549	471	222	40	—	2282
1906-07	2299	462	161	57	—	2979
1907-08	2195	868	130	57	—	3250
1908-09	1715	426	229	46	—	2416
1909-10	1003	228	104	24	—	1359
1910-11	677	327	76	30	—	1110
1911-12	921	547	180	29	—	1677
1912-13	406	210	178	26	—	820
1913-14	1056	1202	432	29	—	2719
1914-15	790	1155	315	14	4	2278
1915-16	966	808	1176	42	3	2995
1916-17	1614	481	1151	39	—	3285
1917-18	1366	970	1537	16	5	3894
1918-19	909	577	1772	20	3	3281
Totals	30790	11593	10116	797	20	53316
Average	1283	483	422	33	1	2222

the kill climbed to new heights and nearly reached 4,000 during the war years. Possibly ducks became more abundant when sportsmen were busy shooting each other.

When Tom Baker took over after the

Table II. Take of ducks at Nacton Decoy in 50 seasons with Tom Baker as decoyman.

Season	Mallard	Teal	Wigeon	Pintail	Others	Total
1919-20	1551	2049	2116	22	3	5741
1920-21	2540	3483	1727	33	—	7783
1921-22	2781	2127	1288	48	11	6255
1922-23	1195	975	2315	19	5	4509
1923-24	2875	1564	1218	37	9	5703
1924-25	1111	1060	1975	47	23	4216
1925-26	4799	3358	1020	97	29	9303
1926-27	1188	1441	2216	67	8	4920
1927-28	3163	1247	780	34	4	5228
1928-29	3203	2492	2600	46	10	8351
1929-30	1664	1374	3572	48	8	6666
1930-31	1380	1400	2854	68	3	5705
1931-32	1508	2185	3608	88	8	7397
1932-33	975	1854	999	27	10	3865
1933-34	2376	2843	805	92	3	6119
1934-35	1116	1821	660	23	—	3620
1935-36	826	1224	160	—	—	2210
1936-37	1082	1118	125	8	1	2334
1937-38	1784	1519	379	39	—	3721
1938-39	1787	1004	165	53	—	3009
1939-40	1296	1134	415	42	6	2893
1940-41	1902	1279	307	45	9	3542
1941-42	862	356	325	23	9	1575
1942-43	631	830	186	285	2	1934
1943-44	1132	336	49	113	4	1634
1944-45	923	291	15	56	1	1286
1945-46	1225	964	824	57	14	3084
1946-47	929	413	608	283	8	2241
1947-48	1380	460	795	319	21	2975
1948-49	636	166	539	138	1	1480
1949-50	637	299	1566	234	2	2738
1950-51	624	466	754	71	3	1918
1951-52	640	1578	2585	113	—	4916
1952-53	939	1939	1317	221	—	4416
1953-54	559	1975	1495	252	—	4281
1954-55	465	1248	2060	111	—	3884
1955-56	790	1473	2891	216	13	5383
1956-57	449	805	1651	162	5	3072
1957-58	1123	332	1425	83	—	2963
1958-59	786	598	113	67	—	1564
1959-60	1747	2580	1213	244	—	5784
1960-61	607	1396	158	202	—	2363
1961-62	1519	2209	714	575	—	5017
1962-63	868	811	328	275	—	2282
1963-64	860	455	820	682	—	2817
1964-65	1052	1454	1633	784	—	4923
1965-66	618	470	1161	532	5	2786
1966-67	862	98	32	272	—	1264
1967-68*	844	248	121	426	—	1639
1968-69*	876	449	207	358	—	1890
Total	66685	63250	56889	8137	238	195199
Average	1334	1265	1138	163	—	3903

* Birds ringed, not killed.

First War the total kill jumped to a new level and did not once fall below 3,000 a season until the end of the 1930's. The all-time record was the fabulous total of 9,303 in 1925-26, followed by 8,356 in 1928-29. These are most remarkable figures to judge from those assembled by Payne-Gallwey. To find bigger kills it is necessary to go back to the 18th Century. Thus Lakenheath Decoy, Norfolk, was credited with as many as 15,000 in one season; Dowsby Decoy, Lincolnshire, with 13,180 in 1765-66; Great Oakley Decoy, Essex, with perhaps 12,000; Glebe-land Decoy, Essex, with 10,000. But these were clearly exceptional and of doubtful accuracy in view of the lack of information on how many full ducks (Mallard) and half ducks (Wigeon, Teal, etc.) were included in the duck-dozens then recorded. The only total approaching Nacton's and recorded with apparent accuracy was 7,345 duck (comprising 6,286 Wigeon, 675 Mallard, 338 Teal and 46 Pintail) at Steeple Decoy, Essex, in 1714-15. Thereafter Payne-Gallwey could only uncover 6,357 in 1834-35 at Ashby Decoy, Lincolnshire, and 6,059 at the same place in 1852-53. It is clear that Nacton Decoy and Tom Baker were a combination of efficiency the like of which had seldom been seen in the history of English decoys.

In the 1940's the catch declined, thereby countering the suggestion made earlier that war years would be times of duck abundance. However, many seasons in the 1950's totalled more than 4,000 birds, a peak being reached in 1959-60 with 5,784. Even as late as 1964-65 the season's total was 4,933, only surpassed three times in the previous thirty years. So the drop in the recent seasons may be only temporary. The average for the fifty years was 3,903. Tom says that if he could get one more season like 1925-26 he would die content. It could be argued that when the ducks are not killed, but ringed and released, as they have been in the last two seasons, their wariness of the 'pipes' communicates itself to uncaught birds and so depresses the catching total. However, Slimbridge Decoy ringed 1,933 ducks in 1962-63, far more than the maximum killed in any one season in the old days, 1,410 in 1853-54. Similarly, the total duck ringed at Borough Fen Decoy in 1964-65, 2,773, had seldom been equalled in the kill of past seasons.

However, the surpassing of records is not now of importance where ringing is concerned. The general movements and mortality patterns of Mallard and Teal wintering in England are pretty well

known thanks to massive ringing since the Second War. The future requirement for these species will be sufficient ringing to provide enough recoveries to indicate whether there are changes in migration and mortality. On an annual basis this would require about 2,000 birds to be ringed in each known sub-population, for example, 2,000 Mallard for Nacton and Abberton Reservoir combined. For the other species we are still in the position of needing to ring as many as possible. It was Nacton's reputation for catching Wigeon and Pintail that made its conversion to ringing particularly attractive.

Before leaving the heady realm of records, we can take a look at some of those achieved in periods shorter than a year in the times when the weight of duck killed was the measure of success for a decoy and Mallard were twice as valuable as Teal. The greatest catch made on one day was on 3rd December 1925 when 331 duck, all Mallard except six Teal and four Wigeon, were secured. This was also the biggest day's catch of Mallard. Such a day was almost matched as recently as 12th October 1965 when 330 duck were secured. In this case there were only 14 Mallard amongst 255 Wigeon and 61 Pintail. This was also the best day for Pintail, but 307 Wigeon were killed on 12th October 1954 along with 5 Mallard,

2 Teal, and 6 Pintail making a day's total of 320. Teal were never caught in such masses, but 181 were secured on 18th October 1920. There were remarkable runs of catches and some of them not so long ago. Thus it took ten days of December 1899 to net 1,325 duck (1,191 of them Mallard), but only five days of October 1954 to kill 1,083 (925 Wigeon). Perhaps the most destructive period was the first fortnight of December 1925. Only on one day did the catch fall below a hundred and at the end of that period 2,114 Mallard, 410 Teal, 81 Wigeon and 3 Pintail, 2,608 duck in all, had been secured.

As far as seasons were concerned, the best for Mallard was 1925-26 with 4,799; for Teal 1920-21 with 3,483; for Wigeon 1931-32 with 3,608; for Pintail 1964-65 with 784. Clearly different species trap better in different years, in part due to fortunate combinations of catching conditions. Thus Tom Baker reckons that for large numbers of Wigeon to be caught the need is for cold northerly winds in October; these, he maintains, bring the birds quickly from their arctic breeding areas while the young are still without experience of the wiles of Man.

Bumper years aside, there are clear indications of longer term changes in the composition of the catch. Figure 1 shows

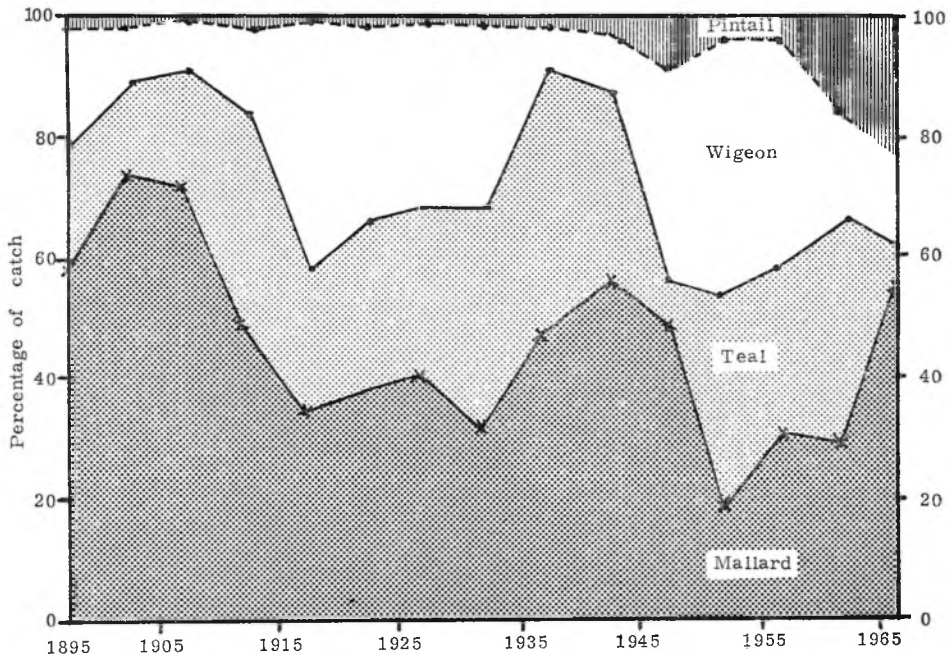


Figure 2. Relative proportions of four main species of duck in the catch at Nacton Decoy. (Points are five-year averages.)

the relative proportions of the four main species. In the early years, Mallard made up three-quarters or more of the take. They fell to a half just before the First War and only in nine years have exceeded this proportion since. For much of the time, indeed, they have constituted less than a quarter of the total. From the point of view of international conservation this made Nacton even more destructive, for it was mainly killing birds reared where conservation measures could not be taken to improve their breeding to match the toll taken. Teal began to make up an important part of the catch at about the time of the Mallard's decline. They sometimes have exceeded half the take, but usually constitute a third or less. Wigeon are the most erratic and there are relatively few periods when they consistently made up over a quarter of the catch; 1915-16 to 1919-20, 1928-29 to 1932-33, 1945-46 to 1957-58 (the longest such run) and 1963-64 to 1965-66. Pintail have had a curious history. For the first forty-eight seasons they never exceeded 3% and often much less. This was so despite their earlier totals being slightly inflated by a probable failure of the records to split off 'other' species. Then in 1942-43 they jumped to 15% and although the proportion fell back it remained consistently above the previous maximum of 3%. In recent years it has gone up again and in several seasons has made up around a quarter of the catch.

If variations in catching conditions cannot explain these periodic fluctuations, how far do they reflect the numbers of the different species available to be caught? Wainwright (1967) showed that there was a general correlation between the number of Teal caught at Abberton Reservoir and the numbers counted there. Since the trends in the latter show quite a close fit with those for Britain as a whole, the catches at Abberton could have given some indication of the size of the past British wintering Teal population. A major complication there is that catches are influenced by water levels; when they are low very productive traps can be placed on an island which then emerges. There is no such complication at Nacton Decoy and, with the magnificent series of catch data available, it was worth testing whether a correlation existed between catch and counts and, if this were so, to use the catches to extrapolate our knowledge of duck populations back to the beginning of the century.

No counts had been made of the Decoy pool itself, so comparison was made with

the wildfowl priority counts. The procedure by which winter population indices for several species of duck are obtained from the widespread counts by amateur observers in Britain has been described by Atkinson-Willes and Frith (1965). Briefly, the numbers present on around 200 of the most important waters in 1959-60 are indexed as 100 and compared month by month to the numbers present on the same waters in other years. A weighted compilation of the monthly indices (September to March) gives an annual index. The data from the whole country have been treated in this way from 1950-51 to the present day, for Mallard, Teal and Wigeon, but not for Pintail. They were compared with the Nacton catches for the same seasons, expressed as percentages of the 1959-60 catch.

The two sets of indices, national count and Nacton catch, failed to show any correlation in the Mallard and Wigeon. There was a degree of correlation in the Teal figures in that for both counts and catches 1959-60 and 1961-62 were the highest and second highest in the 19 years. For the other years the catch indices fell to a lower relative level than did those of the counts, and fluctuated more or less independently of the latter. Thus it would appear that when there were *unusually* large numbers of Teal in the country, catches were high; but in other circumstances other factors were more important in determining catch size.

Since there might be a better correlation if the counts referred to a smaller area, advantage was taken of the fact that since 1959-60 count indices have been calculated separately for Scotland, west England and Wales and for east England. The indices for the latter area (which comprises Yorkshire, Nottingham, Leicestershire, Northampton, Oxford, Berkshire, Hampshire and counties to their east) were compared with the Nacton catches (Table III). Again, however, Mallard and Wigeon show no correlation between the indices. Ringing has already shown that the Mallard winters in fairly circumscribed sub-populations, that around Abberton, for instance, hardly overlapping with that around Borough Fen Decoy near Peterborough (Boyd and Ogilvie 1961). Indeed the catches of Mallard at the latter decoy from 1890 to 1959, which were set out by Cook (1960), show little correlation with the Nacton catches of this species. It is probable that further ringing of Wigeon will show that this species too winters in largely discrete sub-

Table III. Comparison of the south and east England duck count indices with those of the catch at Nacton Decoy.

Season	Mallard		Teal		Wigeon	
	Count	Catch	Count	Catch	Count	Catch
1959-60	100	100	100	100	100	100
1960-61	91	35	52	54	96	13
1961-62	103	87	81	86	107	59
1962-63	94	50	48	31	100	27
1963-64	107	49	28	18	98	68
1964-65	109	60	34	56	62	135
1965-66	118	35	33	18	96	96
1966-67	124	49	38	4	127	3
1967-68	109	48	28	10	107	10
1968-69	107	49	38	17	124	17

populations and that decoy catches will only relate to abundance within a rather small surrounding area. An historical extrapolation would be possible with that restriction, but would be of equally limited interest.

Ringling has indicated that Teal are rather less prone to form small sub-populations. It was to be expected that their indices for Nacton catches and counts in east England would show the same sort of relation as they did when the counts used covered the whole country. So even for a limited area the catches do not give us any precise knowledge of past population levels. However, they would presumably have been influenced by seasons of exceptional abundance in the past, just as they have been recently. There were no such peaks in the 24 years up to 1918-19, and the catch index averaged 19. Then there was a period of 15 years in which the 1961-62 level was approached or exceeded seven times, falling between whites to an average of 53. The bumper years were 1919-20 — 79; 1920-21 — 135; 1921-22 — 82; 1925-26 — 130; 1928-29 — 97; 1931-32 — 85; 1933-34 — 110. Then followed 25 years with an average of 37, before the recent series set out in Table III, with two peaks and eight other years averaging 23.

These figures are open to several interpretations, and too much stress should not be laid on any one of these. On the one hand it could be said that the present level of non-peak indices has returned to that prevalent at the beginning of the century. On the other hand, the non-peak years since 1919-20 have shown a successive decline, from 53 through 37 to 23. In the case of the peak years we can say that although higher peaks were recorded in the 1920's, they were not so vastly greater than the recent ones. Probably the fairest conclusion is that the Teal population wintering in Britain (or at least eastern England) has declined somewhat,

but not catastrophically, since the First War.

The earlier bumper years, apart from the first two, were isolated peaks, with much lower catch indices between, just as were the two recent peak years. The latter occurred after the final drying out of the Southern Flevoland Polder in the Dutch scheme reclaiming the former Zuiderzee. This large polder was pumped out between 1950 and 1957. For a time it was a paradise of unshot marshland and enormous numbers of Teal, over 300,000, were estimated to winter on its 119,000 acres. It is thought that these were then forced to come to England where they no longer had sanctuary, and were quickly reduced to former levels. It has been forecast that a similar influx can be expected in the next year or so as the next massive polder, Eastern Flevoland, dries out.

It is tempting to seek a similar explanation for the earlier bumper years; temporary very favourable conditions in the Netherlands, followed by a massive population shift. This cannot be so in the case of our first three peaks, because the first major polder, the Weiringer Meer, was not reclaimed until 1927-30. But its evolution might have had something to do with the last three. Unfortunately there was no Teal peak at Nacton corresponding with the reclamation of the North-eastern Polder between 1937 and 1942. So we do not reach a simple conclusion of cause and effect. It is seldom that one does in ecology.

Meanwhile Nacton Decoy's future has been secured and an important contribution made to the international conservation of wildfowl. Tom Baker has converted readily and very ably into a ringer, thanks to a trial season under the meticulous tuition of the late Major-General Wainwright before the Trust's lease began. Indeed Tom is far less worried by this radical change in the processing of

the end-product of his decoying than is his old 'piper' dog. The latter is clearly bewildered at the sight of live birds being thrown into the air, but has given up trying to retrieve them.

Already the ringing at Nacton is bearing fruit in the shape of new information, particularly on the Pintail. In two seasons 784 have been ringed, compared with 910 in the whole of Britain for the past sixty years. Already the Nacton Pintail have produced 45 recoveries; back in the Russian breeding grounds as far as 67°N, 71°E on the River Ob; in Roumania; and on down through France and Italy to Morocco. But the most spectacular journey thus far was that of the juvenile female killed in January 1969 near St.

Louis, Sénégal (16°01'N, 16°30'W). This was the first British-ringed duck of any species to be recovered south of the Sahara.

Acknowledgements

We are grateful to the Trustees of the Orwell Park Estate for entering into a leasehold agreement with the Wildfowl Trust and for allowing us access to past records of the Decoy and giving us permission to publish them. The late Major-General C. B. Wainwright greatly facilitated negotiations and the change-over to a ringing station. Tom Baker has metamorphosed cheerfully and effectively and has proved a mine of information. C. J. Beale calculated the count indices.

Note.—In the interests of the efficiency of the Decoy, and by the terms of the Trust's lease, it is necessary to restrict access to those with written permission from headquarters at Slimbridge. This cannot be given except in very special circumstances in connection with the Trust's research programme.

Summary

Nacton Decoy, Suffolk, the last commercial duck decoy in Britain, has been converted to ringing. Full details of its catches in the last 74 years are set out; the best year was 9,303 in 1925-26, but as recently as 1959-60 it caught 5,784. Mallard, Teal, Wigeon and Pintail have been caught in varying proportions, the latter two being the most important to ringing.

Attempts are made to correlate catches with wildfowl counts, without success for Mallard and Wigeon. Teal catches and counts show some correlation of peak years and give some idea of likely population levels back to 1895.

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