

Breeding Raptors and Raven of Poole Harbour

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This survey was commissioned by Birds of Poole Harbour

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Introduction

Raptors have a magic about them that appeals to many people. They are photographed, studied, counted, painted, or just enjoyed. Although it hasn't always been that way.

For many bird species in Britain, changes in their status over the centuries have been chiefly the result of human activities. For many raptors however, the impacts have been particularly devastating with some suffering relentless persecution, often to the point of extinction as a breeding species.

Thankfully, that is now largely in the past and much work has since been and continues to be done to redress the balance. And as we will see from this report, in line with numerous other parts of the country, many raptors are now thriving in Poole Harbour.

This survey also includes Raven as an 'honorary raptor' due to the many similarities between it and true raptor species in aspects of foraging, breeding and population ecology.

Having said that, recent research has revealed that the idea of raptors itself as a distinct genetic group is no longer valid. In fact, Accipiters are not even closely related to Falcons. Ring-necked Parakeets are more closely related!

Not really wanting to include parakeets in the survey, we have decided to continue with the term raptor as defined by their common traits resulting from evolutionary convergence.

This is the first dedicated breeding 'raptor' survey for Poole Harbour. Marsh Harrier and Peregrine have been keenly monitored in recent years, but for all other species this survey should be regarded as a baseline survey.

Objectives

To determine for each species, the number of territory holding pairs within the Poole Harbour recording area. Confirmation of breeding or attempted breeding formed no part of the survey. Aside from being prohibitively time consuming, raptors are Schedule 1 species.

Further, assessing the number of territory holding pairs has been proven to provide a more robust typical figure of the actual breeding population. Historically, monitoring of raptor populations has focused on nests, which given the secretive nature of some of the species, invariably results in some non-detection and underestimation. Limiting pairs to those only confirmed to breed will also result in the non-recording of failed early breeders and active breeding pairs, who for whatever reason did not breed in that season.

Methods

Being apex predators, raptor populations generally exist at low densities, with individuals occupying large home ranges. For many species casual sightings can be few and far between.

Fortunately, raptors are most conspicuous during the breeding season with many displaying and soaring above their territories. Observing and monitoring these birds formed the basis of the survey.

A series of vantage points were identified that allowed complete coverage of the entire Poole Harbour recording area. Observable areas from each vantage point were mapped to ensure full coverage was achieved. Some areas required more points than others, depending on the topography.

Where viewing coverage was partially obscured, transect like walks were undertaken. These were not formal transects but designed to provide maximum coverage.

All survey species were recorded during each visit. Multiple visits were required to each vantage point to ensure sufficient coverage and to coincide with peak activity for all species, from Raven and Goshawk in February to Hobby and Honey Buzzard in May.

All observations of behaviour were recorded and flightlines mapped. For each visit, maximum numbers of each species from simultaneous observations were also recorded. Later in the season, possible nest sites were also mapped. In addition, any distinguishing features that marked out an individual bird were recorded.

Any other additional encounters outside of the dedicated survey periods that were useful were also recorded, including from leisure time spent by the author within the recording area. Some additional field data from reliable observers known to the author were also made use of.

Standard methodology suggests that 'Observations should ideally be carried out in good soaring conditions, ie dry, cloud cover less than 50%, with wind speed less than 30mph. However, as such conditions are uncommon in March, simply try to avoid counting in wet, misty or windy conditions'. To that one can add February and April!

Further methodologies specific to specific species were also employed, which are specified within the specific species accounts.

Raven

Introduction

An early Harbour record from the diaries of Dennis Bond of Luton concerns a pair of Raven nesting on Corfe Castle in 1638, whose young met with an all too familiar fate.

'Raven bred in Corfe Castell at Christ id, & did kill yonge lambs to feed 5 yonge ones w'h he had; W. Brown, ye keper did kill yose 5 yonge Ravens'.

In the Middle Ages, the Raven was a common inhabitant of our towns and villages, living off refuse and discarded food. It was actively encouraged and protected to keep towns free from filth.

It was probably always less welcomed in rural areas. Livestock management could be primitive and high mortality of animals provided a reliable source of food. But as mortality slowed, the Raven acquired the reputation of a killer of lambs, chickens, rabbits and game. And as towns and villages became cleaner there was no longer a need for its services.

By the mid-17th Century the persecution of Ravens had begun and by the 18th Century, in many places it had a bounty on its head. Despite relentless persecution it was still a common bird during this time, but by the late 19th Century, persistent shooting, egg collecting and the taking of young from nests brought them to near extinction. The Ravens at Corfe Castle however were still nesting on the Ivy Tower in 1857, having survived the persecution and even the slighting of the castle by Cromwell.

Mansel-Pleydell (1888) mentions only a handful of coastal breeding sites where Raven still bred in the 1830's, which included the perpendicular cliffs of Ballard Down.

However, Raven enthusiast Bosworth Smith (1905) who spent many years observing Ravens from the mid-1800's, knew of others, including many inland sites. Of interest to Poole Harbour were Rempstone Heath, Agglestone Rock on Godlingston Heath as well as the ruins of Corfe Castle. He goes on to also say that 'Studland would hardly be Studland without its pair of Ravens, and without also, I am glad to add, the hereditary friends or foes of the ravens, a pair of peregrine falcons', and also goes on to champion the enlightened Ralph Bankes for his protection. Sadly however, by the time of his writing in 1905 they had all disappeared. Although a few pairs at coastal sites did hang on. On 7th April 1929 a clutch of Raven's eggs was taken from Ballard cliffs.

Two adults and two young were observed 'about Furzebrook House, Wareham', during October 1944 and in 1949 a pair 'on an East Dorset Heath 6-7 miles from the coast' would seem to be referencing a Poole Harbour site.

In 1951 there were still eight or nine pairs in Dorset, including the cliffs at Ballard, but were regularly robbed. Some relentlessly, at St Aldhelm's Head a pair raised young in 1964, after having been robbed

for at least the previous seven years, as they were again in 1965, 1967 and finally in 1968, the year in which the Ballard pair raised their last brood.

Despite this, the Raven managed to maintain a small breeding population, with at least seven pairs still breeding in 1972. The following years however, saw a catastrophic decline and by 1976 all breeding pairs had disappeared. On Purbeck, increased disturbance following the opening of the coastal footpath and instances of poisoning were thought to have been the cause.

In 1983 a pair returned to the Purbeck cliffs, marking the start of an impressive recovery for the species. Three pairs in 1990 jumped to seven in 1991, with no fewer than 11 territorial pairs by 1996. During that time a pair returned to Ballard Down and in 1997 two pairs were recorded there, with a pair also seen displaying over Hamworthy that year.

In 1998 a pair nested at Middlebere. In 2000, displaying pairs were noted at Rempstone Forest and Brownsea Island, where they took over an old Heron's nest, but did not breed. A further pair successfully bred at Arne. By 2003 the breeding population of Poole Harbour was four pairs with the Brownsea pair eventually successfully nesting, a pair taking up residence again at Corfe Castle and the regular pairs at Arne and Ballard.

Further breeding sites later added were Upton Heath in 2010, Hartland Moor in 2014 and Hamworthy in 2017. In 2020, following two years without any Raven breeding records, a raft of records from the north of the Harbour with apparent territorial birds or pairs at Poole, Upton Country Park and Upton Heath, also Wareham. In 2021, pairs nested at Holton Lee and Hartland Moor.

Specific methodology

Ravens are extremely hardy and think nothing of laying eggs whilst snow is still on the ground. No such hardships here but being a very early nester, Raven was a priority species during the first vantage point watches in February.

As well as displaying pairs, individual birds were often conspicuous in their general behaviour once the breeding season was underway.

Results

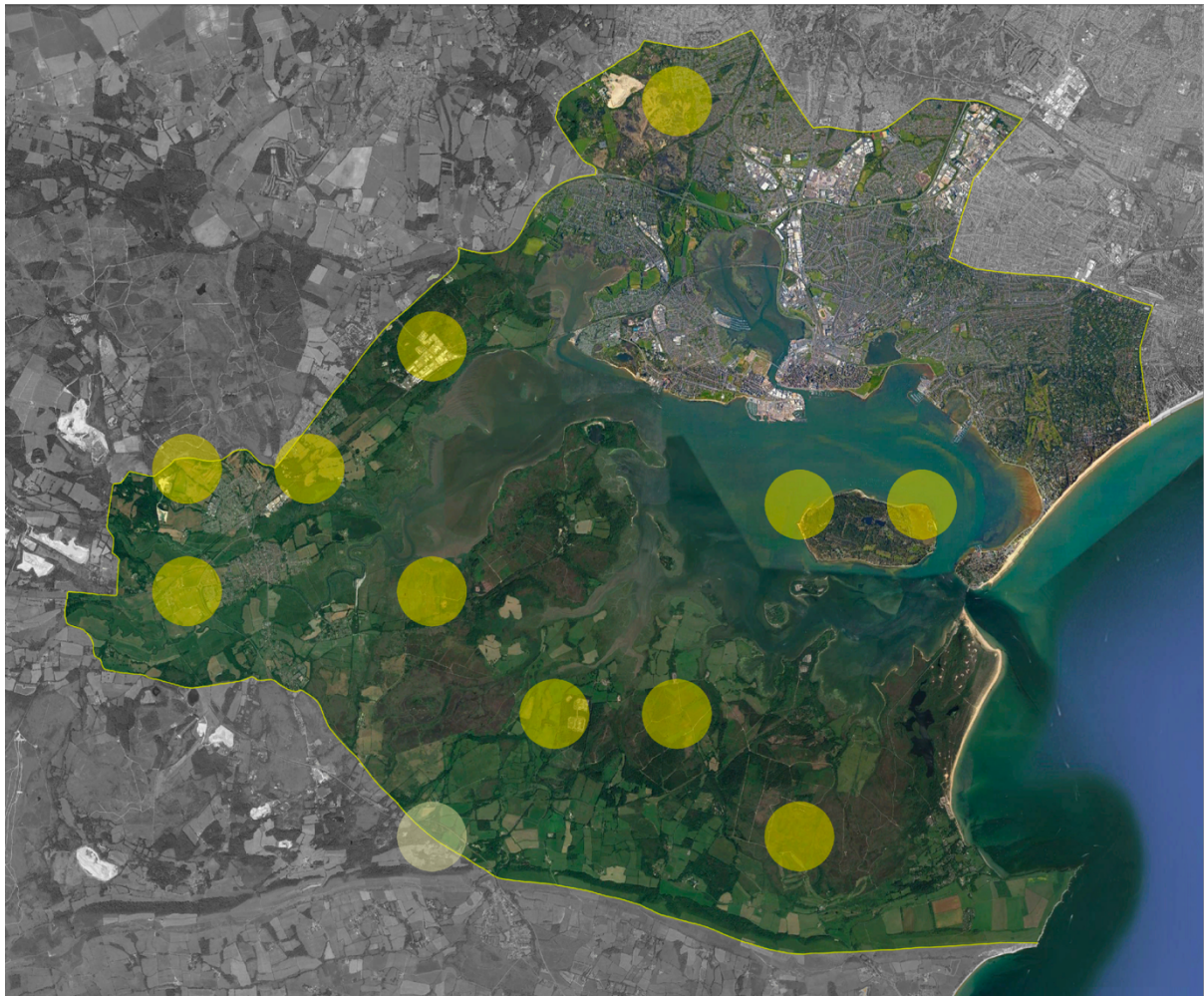
A total of eleven territorial pairs were identified.

Although as discussed, evidence of breeding was not a requirement of the survey, with minimal extra effort and without particularly close approach, evidence of breeding was able to be confirmed for 10 out of the 11 pairs. For the remaining pair, displaying birds were seen and subsequent flightlines suggested a nest site, but further investigation was not possible.

No territorial pairs were found at the traditional sites of Ballard Down or Corfe Castle. A single bird was seen in February and March at Ballard Down, but with no sign of a partner.

There were also occasional sightings of Raven in the Hamworthy and Poole Town area, on one occasion involving two birds, but no evidence of any other activities was observed.

For reasons of discretion and comparability, the results map below (along with all subsequent results maps) follows the example of the Tetrad Survey (1987-1994) with circles representing centres of occupied 2km x 2km tetrad OS squares.



*Fig 1. Breeding Raven pairs within the Poole Harbour recording area.
(Pale yellow circles: pairs that regularly used the recording area but nested outside)*

Discussion

Eleven pairs is indeed a healthy breeding population. Perhaps rivalling times of old.

Given the impressive resurgence of this species in these more benign times, it was perhaps an irony that they failed to nest in what were effectively the last two bastions of hope for the species, Ballard Cliffs and Corfe Castle.

At Corfe Castle, the reason is presumably the appearance of a pair of Peregrine Falcons that have recently taken up residence there. Raven will readily nest alongside Peregrine, albeit at a respectful distance, as demonstrated at many cliff sites. However, although the old Raven nest at Corfe Castle was not occupied, the site chosen by the Peregrines was presumably just too close for comfort for both parties. Despite the Raven being a formidable opponent, literature suggests that in a face-off between the two, Peregrines invariably win out. Something not contradicted here.

For Ballard, it may have been just a gap year, perhaps poor condition, or death of a pair bird, as prior to this survey they have been a regular breeder here. Hopefully there will be a pair back next season. Raven however can be a shy species and sensitive to disturbance. We know that the pair at Gad Cliff deserted the same year the coastal footpath was open (Haysom 1983). Obviously, birds have subsequently returned there to breed, presumably following eventual habituation, but the numbers of people walking to Old Harry and Ballard Down have significantly increased in the past couple of years (pers obs), with many of these people for whatever reason, feeling the urge to walk right up to the edge. Perhaps disturbance is once more an issue.

Common Buzzard

Historical introduction

In the early 1800's Buzzards were common throughout most of mainland Britain, but by the second half of the century persistent persecution had significantly reduced the population, rendering much of lowland England devoid of Buzzards. The First World War reduced the number of gamekeepers and the effect was immediate, with Buzzard quickly returning to areas where they had not occupied for many years. This, along with a subsequent more enlightened attitude, helped the population to recover.

Blathwayt (1945) mentioned that around 1935 the Buzzard was a frequent visitor to Dorset and occasionally nested. By 1945 it was a widely scattered breeding species in many parts of Dorset although 'still seriously molested by keepers'. WRG Bond considered that they had bred in Purbeck since 1944. A specific record for the Harbour refers to a pair in 1949 that reared at least one young on a heath south of Poole Harbour. In the 1950's a pair of Buzzards nested on the southern side of Brownsea Island, but left when myxomatosis decimated the island's rabbit population. The Buzzard population suffered a further set back in the early 1960's following the introduction of organochlorine pesticides.

In 1967 a pair was seen in the breeding season in the Rempstone area near Corfe Castle and thought to be possibly nesting, with frequent sightings also at nearby Bushey. The 1968 Bird Report mentions 'pair sightings from Rempstone, Studland village and Arne' with sightings of pairs in Dorset by 1969 too numerous to mention. One such site was a pair at Arne on 4th April. A bird eating a Rabbit on Brenscombe Heath was one of 100 records received for Dorset in 1973. Expansion continued and by the mid-1980's Buzzards were widely but thinly scattered about the whole of the Harbour.

Green (2000) commented that the spread into the south-east corner of the county was particularly obvious since the mid-1980's and continued through the 1990's including an increasing number of sightings from the margins of Poole. The population continued its increase into the 2000's and today the Buzzard is now by far the commonest raptor in the Harbour.

Specific methodology

Buzzards begin their territorial behaviour from February, but March is the time of maximum activity.

There does exist a standard methodology for assessing Buzzard breeding season populations, but it does confess to obtain only crude estimates of populations, being designed for wide geographical areas where time is a constraint. Estimates of population are obtained from the maximum number of birds simultaneously seen in the air at any one time, during the single visit. This method was never going to be adequate, but the maximum number of each species seen was recorded during each visit.

As mentioned in the generic methodology, any distinguishing features that marked out an individual bird were also recorded. Buzzards are known for their variability and identifying individual birds proved helpful in attributing birds to territories.

All birds in the area could be described as 'intermediate' morph, but there were a few darker variants on the theme. The most productive morphological difference however proved to be the upper tail pattern. Many birds showed pale areas, often with discernible variation in shape and extent that could be easily drawn in the field. Obviously, plumage pattern variation also existed but was either not sufficiently arresting or feasible to draw. (Involving cameras was considered but decided against).

Some birds also showed missing or damaged flight feathers. Apart from obviously damaged finger feathers however, all missing feathers were either P1 or S1, which are the first to be dropped during moult. Buzzard are supposed to moult post breeding, although all birds concerned invariably showed just one affected wing, enabling further separation of individuals.

Missing tail feathers provided yet a further distinction. As with the wings, these gaps were also in the position of the first moulted feathers ie in the middle of the tail. This produced a 'notch' that could vary in size and shape and be readily drawn.

With the number of variables and combinations thereof, identification of individuals could be achieved in a fair number of birds. The differences however had to be used in the knowledge that subsequent encounters could involve birds whose wing and tail circumstances had changed since the previous visit, something that became more relevant the longer the survey progressed.

Helpful Buzzard behaviour included display flights that could end in a dive to the nest wood, alarm calling and aggression towards other raptors or corvids.

Some literature suggests following Buzzards carrying sticks can be productive, but for the entirety of this survey only one Buzzard was ever seen carrying a stick and that was from the edge of a wood to a place further in! Presumably most birds just use sticks from the wood they are nesting in, which seems reasonable.

The best time to watch for Buzzard display flights is between mid-morning and mid-afternoon when thermals become strong enough to aid display. They are also more likely when temperatures are above normal for the average.

Later in the season, recently fledged birds could be located by their constant whining. Young stay within 300m of the nest for two or three weeks after fledging and can be very vocal. This proved useful to confirm breeding or indeed confirm a territory where previous observational data was inconclusive.

Results

47 territory holding pairs were identified



Fig 2. Territory holding pairs of Common Buzzard within the Poole Harbour recording area

Common Buzzard was by far the most abundant breeding raptor species, as can be appreciated from the map, with the majority of 2km x 2km tetrads containing at least one and up to three territory holding pairs.

Although the tetrads dominated by heathland appear empty, most of these areas did form part of a Buzzard territory and were regularly used, with birds often being seen carrying a snake or lizard back to a nest site. The area of Ballard and fields to the west also appear rather empty, but this is just a product of the way the data is presented, with all areas important to the local pairs.

The most populated area was the central southern part of the Harbour centred around the Rempstone Forest. Within a Buzzard territory, habitat heterogeneity is an important factor. They are happiest where there is a mature mixed woodland, pastoral grazing with plenty of rabbits and some rough grass for voles. Additional nearby heathland for lizards and snakes makes it ideal. Similar combinations of habitat in other parts of the Harbour also attracted higher concentrations of pairs.

Breeding pairs were also found in the largely suburban and urban northern half of the Harbour. Buzzards have become increasingly habituated to the presence of people and will tolerate certain noise levels, so long as there are open areas for feeding and a place to site a nest. A territory in the urban far north east of the recording area for example was possible courtesy of a golf course.

A small note regarding the map. As a consequence of the Ordnance Survey tetrad positioning, some of the centred circles occur in rather unfortunate positions, but rest assured, no pairs nested in the water or outside of the recording area!

Discussion

The Common Buzzard is another success story. Ever since the re-expansion of their range back into the Harbour, they have gone from strength to strength, utilising nearly every available habitat Poole Harbour has to offer.

Although colonisation of the more urban areas occurred post mid-1990's, all other areas were probably filled some time ago. From that point, the continued increase in the breeding population has been facilitated by territory size reduction. For many parts of England this process can go no further and areas are now at maximum capacity. How far Poole Harbour is down that road is difficult to say. Perhaps we are already there?

We know that the Harbour is already sustaining a lot more birds than the 47 pairs that were found. During the survey, additional birds not attributed to pair birds were regularly observed. The true extent of non-breeding birds active within a population was actually uncovered by local scientists Sean Walls & Robert Kenward. Their impressive six-year study radio-tagging up to 146 Buzzards in a 100km study area (that included a small part of the Poole Harbour recording area) found the non-breeding component of the population to be higher than the number of breeding birds!

Looking around the Harbour for possible gaps, there may be one or two places where another pair might be able to be squeezed in. Little Sea is one. A pair did in fact nest here a few years ago (pers obs) and it would seem there is enough room, however this year, a rather zealous male from the edge of Newton Heath thought otherwise and regularly made a point of flying out there to see off any prospecting Buzzards.

Lytchett Bay has also hosted breeding Buzzards in the past. Although no birds nested here, the area may well have been part of a breeding pairs territory given the number of Buzzard observations there during the breeding season.

Last year, two pairs of Buzzard nested on Brownsea Island but unfortunately one of the adults perished the following winter and the surviving bird did not find a new mate.

Perhaps the magic 50 can be achieved.

Sparrowhawk

Introduction

Both Pulteney (1799) and Mansel-Pleydell (1888) regarded the Sparrowhawk as common in Dorset, despite the best efforts of Victorian landowners and their gamekeepers to eradicate it. Persecution continued into the 20th Century, the relentless nature of which was recorded by J.H. Owen who studied Sparrowhawks in Essex. In practically every nest he found, the adults were shot by gamekeepers. Although he did persuade them to leave a few for his studies!

Despite the onslaught, numbers remained stubbornly stable. The Sparrowhawk's high reproductive rate, high proportions of non-breeding birds ready to take their place and enough unkept woods enabling them to maintain numbers.

Blathwayt (1945) also described the Sparrowhawk as a common resident. Scarcer where 'game' is strictly preserved. This was still the case until the late 1950's and early 1960's when the population was decimated following the introduction of organochlorine pesticides. A survey in 1963 found only six pairs suspected of breeding in Dorset, including one pair in Poole Harbour. In 1964 a juvenile was seen on Brownsea Island.

Following restrictions on the use of pesticides, the Sparrowhawk population very quickly responded. A survey just five years later in 1968 showed a substantial recovery, with pairs seen in the breeding season in all three 10km squares that cover Poole Harbour, apart from the largely urban SZ09.

The Tetrad Survey (1987-1994) recorded 8-11 pairs in the Poole Harbour recording area.

Since then, breeding records have been limited to well watched areas such as Arne and Lytchett or from chance encounters. Clearly there have been many more sites, but for the record, the only other sites where Sparrowhawk have been reported breeding since 1986 are Broadstone, Ballard Down, Challow Hill, Hartland Moor, Holes Bay, Keyworth, Stoborough and The Moors.

A comment in one of the Dorset bird reports probably sums it up. 'Sparrowhawk are generally widely reported but with little positive evidence of breeding due mostly to its secretive nesting habits'.

Method

Soaring and displaying Sparrowhawks were a possibility from the start of the survey in February. In ideal conditions they can be seen soaring above a nesting territory as early as December.

This method took on a greater importance than for other species. When not soaring or displaying, Sparrowhawk are notoriously elusive, spending most of their time in cover waiting for prey. The male in particular can spend much of its day within a wood. The female hunts in more open country, but even here sightings invariably involve low contour hugging flights or along hedgelines before the bird disappears, making it impossible to observe for any length of time.

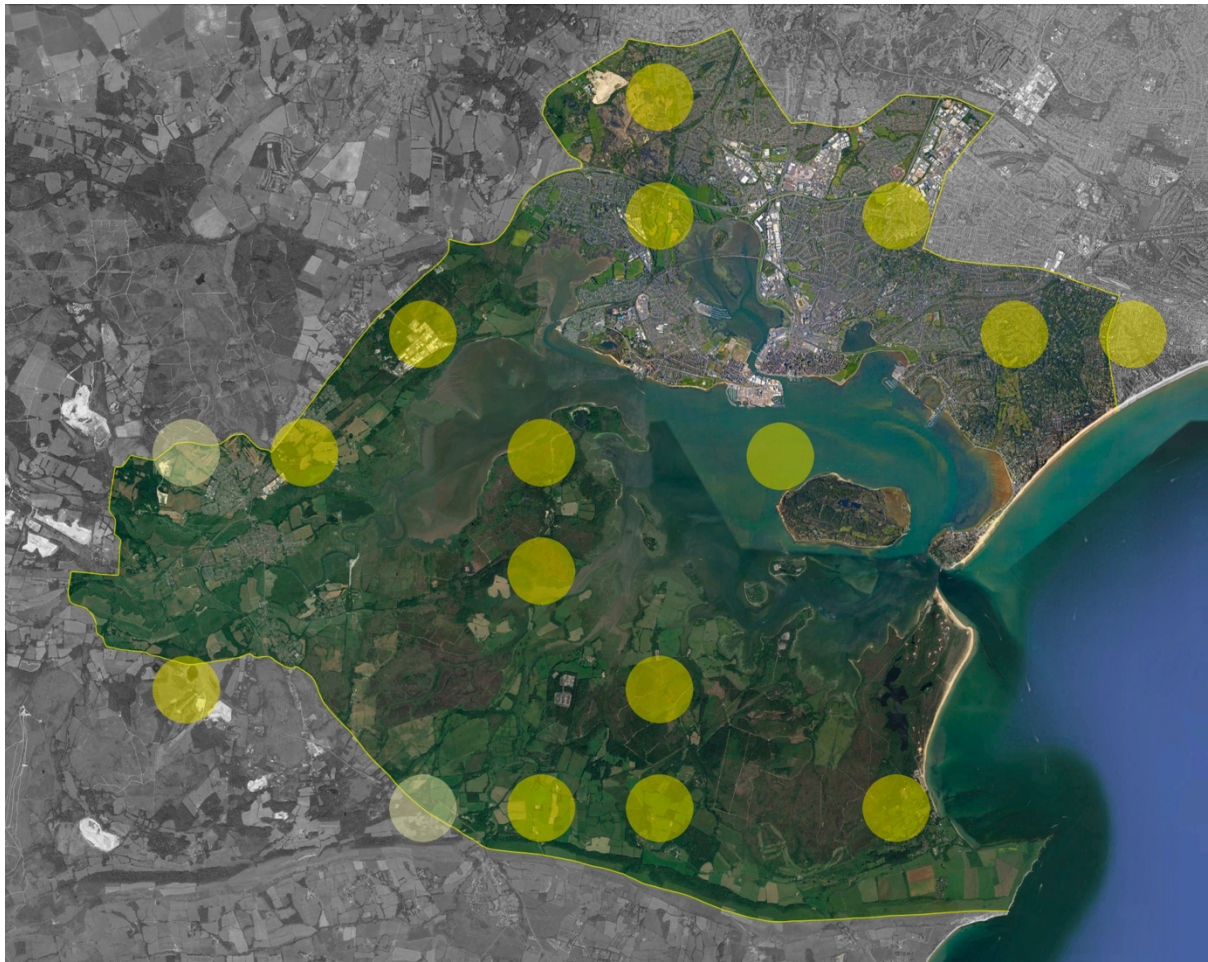
An additional method however was able to be employed that involved listening from dawn at the edge of potential nesting woods for mutual calling. During the early stages of pair formation the female will begin to roost with the male in the nesting area. They use separate trees and will call to one another at dawn. Use was made of a parabolic microphone that amplified the sound, allowing positioning at an appropriate distance and additional range coverage.

Later in the season when the young had hatched, was also a key time. Here adult birds become far more conspicuous as they busily fly to and from the nest site with prey. No dashing and contour hugging, just a straight flight at an observable height to the nest site.

Results

15 territory holding pairs were identified

In addition, two pairs were found regularly hunting within the recording area but nesting outside of it.



*Fig 3. Territory holding pairs of Sparrowhawk within the Poole Harbour recording area.
(Pale yellow circles: pairs that regularly used the recording area but nested outside)*

Breeding Sparrowhawk were found widely scattered across the Harbour, utilising both suburban and urban areas in the northern half of the Harbour along with the more traditional habitats of the southern half. In fact, anywhere where there was a sufficient number of small birds.

The tetrads that did not contain a nest site or territory centre were those dominated by heathland or the more open areas of The Moors and the Frome Valley flood plain. Birds could be encountered within these tetrads, but Sparrowhawks tend not to like open tracts of land where ambush is more difficult and prey density less. As well as relying on woodland for nesting sites, the male Sparrowhawk can also rely heavily on woodland for hunting. The larger female will also use large woods but tends to work copses and hedgerows, preferably within small fields.

Discussion

Poole Harbour has a reasonably healthy breeding Sparrowhawk population.

Historically, the only survey data we have to compare is the Tetrad Survey (1987-1994). It found 7-11 pairs. Based on that data, the results of this survey suggests that there has been a minimum 25% increase in the breeding population since that time.

The latest BBS breeding population data however, suggests that there has been a 25% decrease in the English population of Sparrowhawk during that time (1995 - 2020). Has Poole Harbour dramatically bucked the trend or were perhaps breeding pairs under-recorded during the Tetrad Survey?

The map below showing the results of the Tetrad Survey does look rather sparse, particularly in the southern half of the Harbour.



Fig 4. Breeding pairs of Sparrowhawk within the Poole Harbour recording area from the 1987-1994 Tetrad Survey. Red circles confirmed breeding. Orange circles probable breeding

For that survey, there was however another category; possible breeding pairs. These are not included on the map, but there were no fewer than 10 further tetrads that contained a 'possible' breeding pair. Perhaps further investigation may have upgraded some of these pairs, we know how secretive these birds are during the breeding season. However, taking the results at face value, it would appear that the intervening years have been good for Sparrowhawk.

As with Raven, frustratingly a previously regular breeding pair of Sparrowhawk chose not to form part of this year's survey, which was a shame for the total. The pair that had been nesting at Lytchett for the previous six years were not around this year.

Kestrel

Introduction

Pulteney (1799) described the Kestrel as 'very common'. Mansel-Pleydell (1888) considered it to be 'abundant, especially near the sea, where it finds suitable and safe nesting places amongst the cliffs. The ruins of Corfe Castle are a favourite haunt'. Blathwayt (1945) also considered it to be a common resident.

Green (2000) commented that the 1987-1994 Tetrad Survey showed little change in the species status but that since the mid 1990's a decline had been noticeable. In 1998 Kestrel was Amber listed.

BBS breeding population data from 1995-2020 showed a 26% decline in breeding numbers for England. To what extent this was mirrored in Poole Harbour is uncertain without any consistent data available. What is certain however, is that areas in the north western part of the Harbour that previously held breeding pairs no longer do so. The last published breeding records from that area are from Lytchett Bay where a pair bred in 2003 and 2004 but not subsequently.

The only other site in the Harbour that can be referenced is Arne RSPB which has hosted at least one regular breeding pair since 2005.

In spring 2019, Birds of Poole Harbour erected 11 Kestrel boxes around the Harbour to help boost the local breeding population.

Results

11 territory holding pairs were identified.

In addition, two pairs were found regularly hunting within the recording area but nesting outside of it.

No territory holding pairs were found in the northern part of the recording area.

Using no more than the methodology earlier described, 9 out of the 11 pairs were observed with fledged young.

Four pairs used nest boxes, with all pairs successfully fledging young. Independent nest box monitoring recorded two pairs with five young, one pair with four young and one pair with two young.

A further five young successfully fledged from a nest box at Carey.

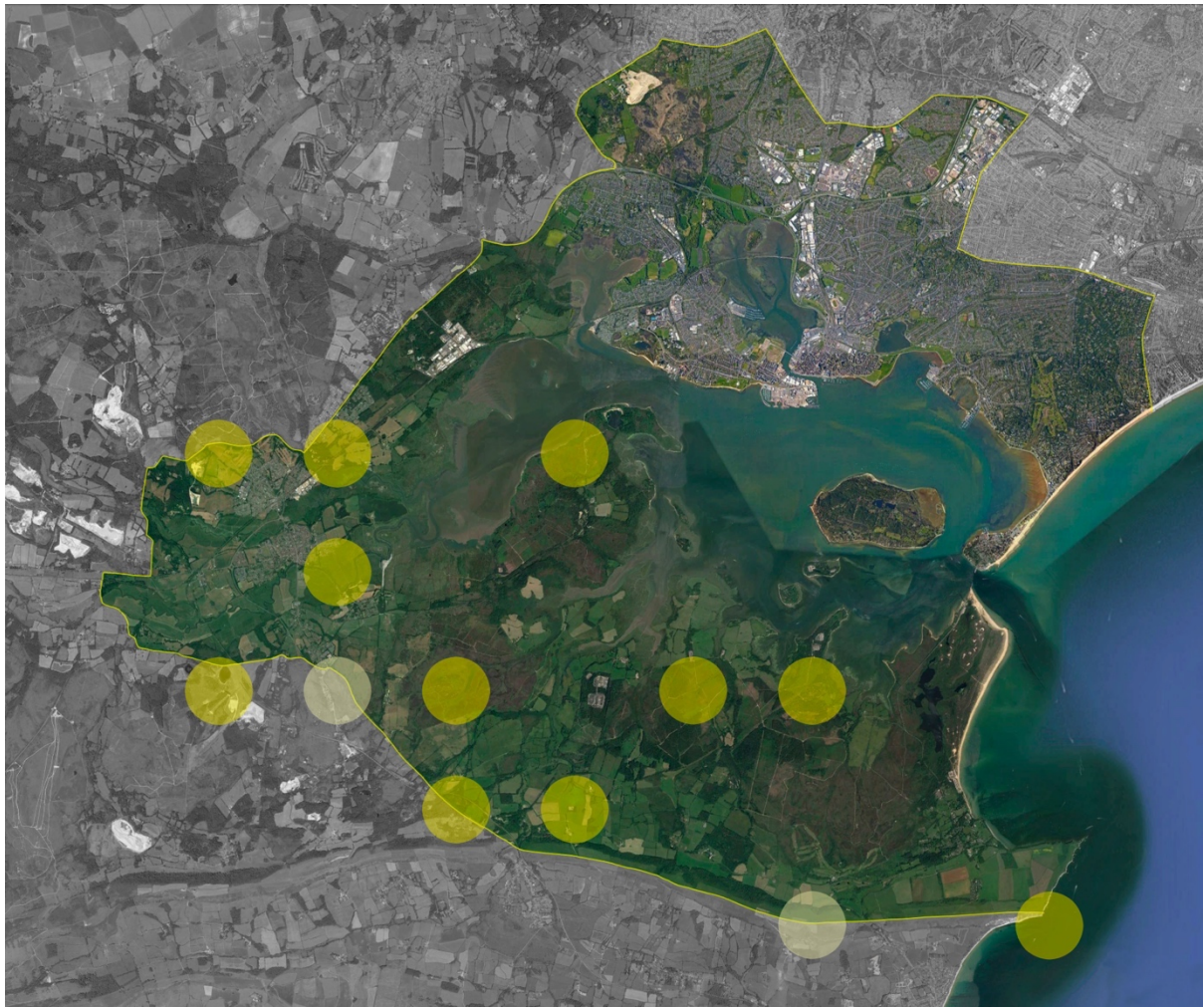


Fig 5. Territory holding pairs of Kestrel within the Poole Harbour recording area.
 (Pale yellow circles: pairs that regularly used the recording area but nested outside)

The map above certainly brings into sharp focus the north south divide, with a reasonably healthy looking breeding population in the southern part of the Harbour contrasting with a complete absence of pairs in the north.

Discussion

The continued absence of breeding Kestrel in the northern part of the Harbour is a concern and has been for a while, reflecting the national trend. The exact causes of the national decline are not fully understood and could be complex. Habitat loss is one cause but is not relevant here and recent nest boxes are providing available nesting sites.

Other suggested possibilities are the impacts of second-generation rodenticides, damping of the vole cycles and increased competition from other raptors. Common Buzzards have certainly increased a lot in Poole Harbour since the mid 1990's as we have seen. Perhaps there are elements of all of these factors, although they do not seem to be affecting the southern half of the Harbour.

Does human disturbance have to be considered? Kestrel is regarded as a human-tolerant species but there has been a significant increase in the numbers of people visiting local natural areas recently, something magnified in the largely urban and suburban areas of the north western part of the Harbour. Kestrels are able to habituate to at least some degree of human presence, but some studies have shown that breeding birds are not immune to human disturbance and can be impacted, resulting in stress hormones that promote nest abandonment (Goodship *et al* 2022).



Fig 6. Breeding pairs of Kestrel within the Poole Harbour recording area from the 1987-1994 Tetrads Survey. Red circles confirmed breeding. Orange circles probable breeding

The map above shows the distribution of confirmed and probable breeding Kestrel pairs for the 1987-1994 Tetrads Survey. Attention is immediately drawn to the northern western part of the Harbour where there were no fewer than five occupied tetrads. However, before declaring four or five lost pairs it must be considered that this survey was over an eight season period. Specific data relating to sites and years is not available but over this amount of time one has to acknowledge the possibility of a single pair of Kestrel being recorded in one tetrad one year and a neighbouring tetrad the next. In particular, the limited habitat north of Holes Bay would seem to suggest a single territory straddling two tetrads. Whatever the situation, pairs have obviously been lost.

In complete contrast however, it would appear that breeding pairs have been gained in the southern half of the Harbour since the 1987-1994 Tetrads Survey, which recorded just four tetrads containing confirmed breeding pairs and a further six with probable breeding pairs, compared to 13 territorial pairs in 13 tetrads during this survey.

The apparent increase in pairs is however, as with Sparrowhawk, in complete contrast to the national trend, with BBS Kestrel breeding population data for England showing a 26% decline in breeding numbers from 1995-2020. Has Poole Harbour again bucked the national trend during this time? Or were there more than just four nesting Kestrel pairs in the southern half of the Harbour? One does have to wonder how a further six pairs of such a conspicuous bird could have been recorded as just probable. However, rather than questioning previous survey results, perhaps we should just celebrate the now. What is clear is that the main part of Poole Harbour does now hold a healthy sized breeding population of Kestrel.

Peregrine

Introduction

Mansel-Pleydell (1888) described this species as the 'commonest of our larger birds of prey, and well established in the county, owing to the protection extended to it by many of the landed proprietors. Purbeck is its headquarters, where precipitous cliffs afford an additional protection'.

Specific mention to birds within the Poole Harbour recording area refers to a nesting pair observed at Ballard Down in 1886 and a pair near Wareham in 1880.

From 1920-1939 around 15 territories were regularly occupied in Dorset, including a pair at Ballard Down. During this period, nests were robbed relentlessly and yet remarkably the species managed to maintain a population average of 12 pairs per year until 1939.

The military use of the homing pigeon during the Second World War brought the Peregrine into conflict with the national interest, with a great many birds shot and nests destroyed. The action officially extended over the whole of the UK but was most concentrated on the south coast. In 1944 it was thought that there were still about six coastal breeding pairs, with a pair or two also breeding annually inland in trees, but by 1945 just one Dorset cliff nesting pair remained.

After the war, recovery was swift with eight territories re-occupied by 1951 including a pair on the cliffs at Ballard Down. By 1956 the breeding population was up to 10 pairs, but the introduction of organochlorine pesticides was catastrophic, wiping out all breeding pairs by 1961.

Numbers of birds remained at a low ebb for much of the 1960's and 1970's with sightings limited to occasional birds in winter. A gradual increase in numbers from 1975 accelerated during the early 1980's culminating in the re-establishment of breeding in 1984 on Gad Cliff. Not long after, a pair successfully nested on the now demolished Poole Power Station, but not subsequently.

Breeding pairs soon spread along the Purbeck coast, eventually reaching Ballard Down. By 1994 there were 12 coastal pairs. By 2014, the last year of Granville Pictor's remarkable 28 year census, no fewer than 32 Dorset territorial pairs were identified.

In 2015 a pair of Peregrine were seen hanging around Corfe Castle in April and May, but breeding was not recorded. Birds were also seen during the breeding season in 2017, 2018 and 2019, and in 2020 they were eventually confirmed to breed.

In spring 2019 a pair of Peregrine set up residence on the tall section of the Asda building at Holes Bay but didn't breed. They were again present in 2020 but again did not breed. In 2021 the pair relocated to the Barclays building where they successfully bred, hatching three young of which two were believed to have survived.

Results

Three pairs bred.

Ballard cliffs, Corfe Castle and the Barclays House, Poole.

Discussion

Peregrine, along with their colleagues the Raven, can clearly thrive if they are left in peace.

Three pairs is a goodly number for the Harbour and it would seem that Peregrine are now firmly established here, with no obvious upcoming obstacles. Peregrines do like large territories and are known to travel in excess of three miles from their nest sites to hunt, so the question is, can we be greedy, is there room for one more pair somewhere? Perhaps in the south western part of the recording area. Birds were seen using this area on a regular basis during the survey, presumably based somewhere to the north in the Wareham Forest.

Hobby

Introduction

Dorset supports an important part of the UK Hobby population, with Poole Harbour being the most important of these. Ever since records began to be regularly published there has been an understandable reluctance to refer to specific sites, and that is pretty much where we are today. One might however suppose that the Hobby has probably been breeding on Poole Harbour's heathlands since their formation.

Any breeding records from the first half of the 19th century were scarce and although the bird was noticed frequently on passage and in suitable habitat during the breeding season, nests were rarely found. As naturalists and gamekeepers became more familiar with the species, records increased, and by the 1890's the Hobby's distribution had become better understood.

Mansel-Pleydell (1888) said no more than it was known to breed in Dorset, but it was known that the Hobby was associated with heathland areas, as evidenced by egg-collectors records who persistently robbed it during the 19th century. Females will often lay again if robbed early in the season, which could explain how the species was able to withstand this constant persecution. Heathlands were also free from gamekeepers, although when using other habitats birds were often misidentified and mistakenly shot.

Blathwayt (1945) considered that Hobby were still 'nesting sparingly in wild spots in east Dorset'. Sites that presumably included the heathland areas of Poole Harbour.

The Hobby was one bird of prey that largely escaped the toxic influences of pesticides during the 1960's, by virtue of its diet, composing chiefly of insects or insect eating birds such as hirundines.

The 1987-1994 Tetrad Survey showed the breeding population to be still concentrated in the Poole Basin and adjacent areas. At present the Hobby population appears to be stable.

Results

Only three territory holding pairs were found, with a further pair using areas within the recording area but nesting outside.

Only one pair fledged young.

Discussion

A disappointing season, with no pairs or indeed single birds present at sites where they have in recent years bred. Sightings in general were also down on previous years.

Occasionally hopes were raised when a bird was seen at an unoccupied site but then dashed when it made its way back to a known territory. Hobbys are known to range widely during the breeding season and given that other areas were unoccupied, these were also made use of.

Passage numbers were also very disappointing. Sites that would normally hold numbers of birds during spring passage had barely a record. Either birds simply did not arrive or they did arrive but quickly moved through. Perhaps there was a lack of prey? A possible reason also as to why the breeding season was so disappointing.

Do we again however, have to look toward increased disturbance as a potential issue? Hobby are certainly less tolerant of humans than Kestrel. The southern half of the Harbour does require more effort to get to, so many visitors are probably more discerning, however the explosion in staycations and short-stays is hitting the area hard with legions of visitors now descending on the area during the spring and summer, eager to explore the area.

Breeding Hobby are known to be sensitive to human approach or prolonged human presence and particularly sensitive during incubation, when they can easily abandon.

During this survey people were regularly observed straying off paths. One particularly disappointing incident involved an entomologist who had decided to concentrate his efforts right under the nose of a couple of clearly very agitated Hobby, the calling of which he was oblivious to. He eventually moved on after about 15 minutes. Intervention was considered but distance to the observer was significant and it wasn't clear at what point he was going to move on. No young emerged from this pair.

There has also been an explosion in off-road bike use. You are lucky to go for a walk in any of the forest or heathland areas around the Harbour today without having to avoid multiple groups of these. And they all have to shout to hear each other, very loudly.

Goshawk

When the Domesday book scribes recorded a relatively low level of English woodland, this was not a recent development, but the way it had been for millennia. The Goshawk population was already in decline during the Bronze Age following the clearance of millions of acres of wildwood for farming. Further declines continued through persecution as the Goshawk soon came into conflict with farmers and later gamekeepers.

Pulteney (1799) thought the Goshawk 'not very uncommon' but it was considered to be 'highly destructive to game and poultry'. In the mid 1800's improved firearms took gamekeeping and persecution to a new level, eventually leading to the Goshawk's complete extermination as a breeding species.

Mansel-Pleydell (1888) considered it 'now a rare straggler'. Blathwayt (1945) described it as a rare vagrant. The only record he mentions is one shot at Canford in November 1913. He also commented 'this species is trained for hawking and escapes are sometimes taken for wild birds'.

A few naturalised pairs bred in southern England around the 1920's. From then the increase was slow but relentless throughout Britain, becoming a regular breeder by the 1960's. A resurgence of interest in falconry in the 1960's and 1970's led to the import of large numbers of birds from central Europe and Fennoscandia. Fuelled by more accidental and intentional releases the population proliferated.

For Poole Harbour, the relative proliferation of records began at Arne with a bird seen there on 3rd April 1976, with another on 13th November at Sandbanks. A bird at Studland in January 1977 was followed by a rather intriguing set of records from Brownsea, where there were six reports between April and September. A single winter record in 1978 and 1979 and two winter records at Arne in 1980. The pace picked up in 1981 with a significant increase in Dorset records, including four from Poole Harbour followed by another five Harbour records in 1982.

By the mid 1980's word had presumably reached certain other interested parties, as there then followed a decline in numbers. In 1983 there were no records in the Poole Harbour area with two birds seen in 1984. From 1985 to 1991 Harbour records averaged less than one a year with no Dorset records at all in 1990 or 1991, (although there was the first proved breeding record from somewhere in Dorset). Only five more Harbour records to 1999, followed by just three records in the entire 2000's. The next record having to wait until 2017, when a bird was seen at Middlebere in October.

During this time, murmurings of breeding pairs in Dorset had gathered pace and by 2015 it was thought that at least five pairs were breeding in Dorset. The estimate ballooning to 15 pairs in 2017. Two records for Poole Harbour in 2019 outside the breeding season, both in the Wareham Channel area, were followed by two records from Lytchett Fields in November and December 2020.

In 2021 there were an estimated 30 breeding pairs in Dorset. Surely Poole Harbour's time was near.

Method

Goshawks begin displaying on fine days in February. When not soaring or displaying, for such large birds they are remarkably elusive, using similar hunting techniques to the closely related Sparrowhawk.

Goshawks are also known to vocalise at dawn during the courtship period. Early morning listening sessions were undertaken at an appreciable distance from potential woods, enabled by use of a parabolic microphone.

Results

One pair successfully bred.

Discussion

This pair represents a much anticipated first breeding record for Poole Harbour. Given the recent relentless expansion of the species, it wasn't totally unexpected.

A second pair were seen displaying in another area on a couple of occasions at the start of the season but then disappeared. There was one further sighting of a single bird in May.

Unfortunately, Goshawk still suffer from persistent illegal interference from gamekeepers and egg collectors which remains the primary threat to the species.

Marsh Harrier

Mansel-Pleydell (1888) comments that 'In Pulteney's time the Marsh Harrier was not unfrequently seen on the wet moors of the county; drainage has very much limited its favourite haunts since then. It still frequents the salt marshes between Wareham and Arne where I have not unfrequently seen it'

One was killed at Little Sea, Studland in 1873 and another a male at Parkstone in 1877.

Drainage of wetlands and reed-bed destruction was nationwide and this, combined with direct persecution during the Victorian era by gamekeepers, trophy hunters and egg collectors, led to the extinction of Marsh Harrier as a UK breeding bird in the closing years of the 19th century.

Blathwayt (1945) considered it a scarce vagrant. 'Frequently seen and obtained up to close of last century but now seldom observed'.

In the 1930's following the growth of the conservation movement, Marsh Harriers returned to breed in Suffolk and Norfolk. In the 1940's Kent and Anglesey also held breeding pairs and it would seem, also Poole Harbour. Whilst official records assert the first confirmed breeding in Poole Harbour to be 1950, attempts undoubtedly occurred earlier.

As early as 1943 the Bryanston School Natural History Society recorded three sightings of a female or juvenile in the Swineham area of the harbour. In 1945 the Report on Dorset Birds mentions that 'KVE on 14th May had a good view of a cock bird in the Poole Harbour district..[description]..He dropped down several times into a reed bed and once had a reed or stick in his talons. See also (B.S) who reported that the bird was seen on 6th May, and behaviour suggested nesting, though nothing established'. The following year a male was again seen carrying reeds.

In 1947 a small group of enthusiasts took an interest in the Marsh Harriers and in 33 visits to the Swineham-Keysworth-Holton Heath area saw pairs of birds on at least four occasions, suggesting that breeding may have been attempted or even taken place though no young were seen.

More summer sightings in 1948 including a juvenile in August which could not be proved to be from the area. In 1949 there was more tantalising evidence with a pair being regularly seen, including the female going missing during June, possibly incubating. There was also a report that an egg collector had found a nest with eggs earlier in the season which would fit with a re-laying bird in June. The records state...'her reappearance with a cock and later with young in the Keysworth neighbourhood all suggest that a late brood was reared'

Finally in 1950 breeding was officially confirmed at Keysworth. At the time, finding a nest was considered the only proof of breeding so an additional pair at Little Sea was recorded as 'probable'

despite the pair being seen with three young birds 'almost simultaneously with the first appearance on the wing of the young at Keyworth'

In 1951 not even the sighting of a young bird clambering around reeds at Little Sea was enough evidence of breeding! Thankfully a nest at Keyworth was located. In 1952 three pairs nested; at Keyworth (proved), Little Sea with juvs (but not proved) and Middlebere with juvs (but not proved). In 1953 a remarkable five pairs bred. Sites were Keyworth, Little Sea, Brownsea, Middlebere and a pair at The Moors. The feat was repeated in 1954 with three of the nests being found. Later in the season the Poole Harbour Marsh Harrier population was at least 20 and probably 22 birds. During this time the number of breeding pairs and number of young raised represented somewhere in the region of 35% of the total number of breeding pairs and raised young in the whole of the British Isles. (Chapman 1977).

These two years proved to be the zenith for the species, with three pairs in 1955 falling to two in 1956 and then just one pair in 1957. However in 1958 the Harbour was back up to four pairs, with two pairs certainly raising young. In 1959 at least three and possibly four pairs bred at Keyworth, Holton Heath and The Moors with a pair at Middlebere seen with juveniles later in the year. Three pairs again bred in 1960 with birds also seen at Brownsea, but with no indication of breeding. Only a single pair in 1961 at Keyworth, with a confirmed pair at the Moors and a probable pair at Holton Heath in 1962 proving to be the last records.

The decline, at least in the initial stages was put down to a series of misfortunes, with some pairs flooded, some shot and others robbed. However an increasing number of infertile eggs were being found and it was later proved that organochlorine pesticides had dealt the killer blow.

Following the withdrawal of these compounds, there was a remarkable recovery in the UK's breeding numbers, with a year-on-year national increase of 19.6% up until 1991. Unlike the expeditious return to Poole Harbour following the 1940's recovery however, this recovery was glacially slow to reach Poole Harbour.

Five sightings between May and July in 1976 gave hope, but there were no further summer records until 1991 when a male and female spent the spring and summer in the Harbour, later being joined by another male, but no breeding attempts were made.

A female summering in 1996 again gave hope, but this bird also proved to be the last summer record for some time. At least the Harbour was still attracting 2-3 individuals in the winter, but soon even these records started drying up. By 2007 records had become few and far between, with an observer at Lytchett Bay commenting on 'another dreadful year'. Poole Harbour's loss however was Radipole's gain, with wardens there reporting a good year for the species.

In 2009 breeding was confirmed at Radipole, the first pair to do so in Dorset since the pair at The Moors in 1962. Sightings in Poole Harbour did however pick up that year, with eight individual birds seen in the Wareham Channel during the autumn. In 2011 at least one bird summered and in 2012 a female was observed nest building and displaying but no male was present. Finally in 2013, a mere 40 years after the species re-establishment in Suffolk and 51 years since the last pair bred in the Harbour, a pair bred, raising three young.

The following year, two broods were raised by two females sired by the same male. Both nests were successful, raising three and four young. A third female also summered but she proved one too many for the male. In 2015 three nesting attempts were made by three females with either one or two males being involved. Only one was successful, fledging two young. In 2016 one pair raised two young. A second female was also seen regularly displaying in April but did not attract a mate.

As is the way with Marsh Harriers in Poole Harbour, for whatever reason another series of blank years then followed. In 2017 three or four birds were present from April to June but did not breed. In 2018 no birds were regularly present during the breeding season and in 2019 there were summering birds but no attempts at breeding. In 2020 there were again no summering birds.

Finally in 2021 a pair successfully bred again, fledging two young.

Method

All potential breeding habitat was investigated.

Results

Two pairs bred, raising four young.

Sadly, the two fledged young from one pair were predated at a very late stage. The other pair did manage to see their two young to independence.

All breeding bird observations courtesy of Peter Hadrill.

Discussion

This was the first time that two separate males have raised flying juveniles in the Harbour since 1960. The provisioning of two successful nests in 2014 courtesy of the single male.

Hopefully multiple breeding pairs will become a regular occurrence and a stable breeding population can be established. But as we have seen on many occasions previously, there are no guarantees. Although issues faced by past breeding birds such as persecution and egg collecting are largely in the past, there are new threats to challenge today's birds. Not from man this time but from the success of other species, although man is not without attribution.

The first is a mammal species, not new to the Harbour or readers of recent breeding birds of Poole Harbour reports but it is for our latest Marsh Harriers; Sika Deer, the classic introduced species gone rogue. Let go in good faith on the secure island of Brownsea, but nobody realised they could swim. They have been decimating bird breeding habitat for years and despite valiant attempts to keep the numbers down are still detrimentally affecting many areas. One of this year's pairs earlier attempt at nesting was considered to have been thwarted by deer.

The next species is a more celebrated success story. The Goshawk. As we now know, a very recent addition to the local breeding avifauna. But it is an apex species and as we shall also see later, even prey as large as recently fledged Marsh Harriers are not safe. The two young birds lost this year were thought to have both been predated by a Goshawk.

Time will tell whether the next species will become an ongoing issue. However the site of the initial breeding attempt from one of the pairs was abandoned due to the constant attentions of a White-tailed Eagle. Although they largely eat fish, they are also versatile and opportunistic hunters, known to take birds.

A real positive however, was the determination of one of the pairs to breed. Both disturbances befell the same pair, the pair that eventually successfully fledged two young. Hopefully their drive to perpetuate their genes will be passed on to their offspring.

This isn't the first instance of recolonising species colliding in Poole Harbour. Britain's first Little Egret breeding colony formed at Brownsea Island was doing well until the successfully expanding Raven population landed a pair on Brownsea. An entire generation of young Egrets were wiped out in one season by just one pair of Raven. The Little Egrets abandoned and moved to another location. Sometime later a pair of Raven then moved in there, but for whatever reason the same thing did not happen, and both species today still happily breed alongside each other. Perhaps these Raven found an easier alternative source of food or perhaps the Egrets became better at defending their nests.

Hopefully there will be room for everybody in the future.

Osprey

The 'Mullet Hawk' was once a widespread breeding bird along the South Coast of England, including no doubt Poole Harbour. However persecution and egg collecting had exterminated it as a breeding species in England by the mid 1800's.

With pairs still hanging on in Scotland, the occasional passage bird was still encountered in the Harbour. Mansel-Pleydell (1888) described the Osprey as 'not an infrequent visitor to the estuaries of Poole, with several records in Poole and the neighbourhood between 1846 and 1881. One was killed on Rempstone Heath in 1881. By 1916 however, the last of the Scottish breeding Osprey were lost. There were just two Poole Harbour records between 1900 and 1950, one 'Poole Harbour' May 1918 and one over Broadstone in November 1927.

Following the recolonisation of Scotland in the early 1950's, migrant Osprey sightings began to increase in Poole Harbour with Boys (1972) describing it as scarce but nowadays an annual passage migrant with sightings mainly from Poole Harbour. As the fortunes of the species improved nationally, so the number of records steadily increased, rising almost exponentially from the 1980's to the mid 1990's. By the early 2000's such were the number of occurrences in Poole Harbour during the early autumn that estimating numbers had become a challenge.

In 2001 the Osprey expanded its range south of the border to Cumbria whilst at the same time a translocation project to re-establish a breeding population in England that began in 1996 at Rutland Water, had its first breeding success. By 2010 there were five pairs there. The numbers of passage birds now making use of the Harbour provided almost seamless records from March to November with lingering spring birds in June being replaced by early returning birds in July.

In 2009, an effort was made to entice Ospreys to stay and breed, with several artificial nesting platforms erected at various sites. Later even a few decoy birds were added but although there was some interest, no birds decided to stay and breed. In 2017 Birds of Poole Harbour decided to launch its own translocation project. The same year saw the Harbour's first over-summering bird, an immature female from the Rutland Project, attracted to stay by the presence of the young birds from the project. In 2018 she returned to Poole Harbour to prospect for breeding opportunities, remaining throughout the summer. In 2019 she returned again, this time bonding with a young translocated male, raising hopes for the following year, but in 2020 he did not return. In 2021, a new translocated male returned and the two were quick to pair up and establish a bond. Hopes were very high for 2022.

Results

Both birds returned in the spring and successfully bred. They produced two chicks, becoming the first breeding pair in Southern England since 1847.

Sadly one of the recently fledged young was killed by a Goshawk. Its sibling was last seen leaving the Harbour southward on the afternoon of 28th August.

Discussion

2022 was indeed a milestone year for Osprey in Poole Harbour, hopefully marking the start of the re-establishment of a breeding population after nearly two centuries absence. Two further years of the translocation project remain to be completed with more individuals expected to return in the future. The population is projected to grow in the coming years and become self-sustaining within a decade or two.

The taking of the recently fledged young bird by a Goshawk was unfortunate but not completely unforeseen. Goshawk are a natural predator of young Osprey and indeed Marsh Harrier, as we have seen, but are themselves a recovering species locally.

Honey Buzzard

At no time in written ornithological history has the Honey Buzzard been anything other than a rare summer visitor to Britain. Pulteney (1799) described it as 'very rare' but probably overlooked, being mistaken for the Common Buzzard. Mansel-Pleydell (1888) described it as a summer migrant, that bred in favoured places in Great Britain such as the New Forest. 'Its usual food is the larvae of bees and wasps...it is to be regretted that so harmless a bird should not be exempt from persecution; but the fact of its being a hawk is sufficient in the eyes of game-keepers and collectors to ensure its destruction'. The only reference to Poole Harbour is a specimen preserved in the Rempston(e) collection.

Honey Buzzards also suffered relentless egg collecting, being collected almost to extinction. For example, at least 16 nests were recorded taken in the New Forest alone during the 1860's. Between 1880 and 1900 only one definite breeding attempt was recorded in Hampshire.

The species remained scarce in Dorset into the 1900's. A bird shot on an east Dorset heath in autumn 1924 likely relates to Poole Harbour. This proved to be the last traceable Dorset record until 1967 when a bird was seen over Arne in June.

Dorset sightings increased during the mid 1970's and from then have occurred in every subsequent year. In 1980 a bird was found excavating a bees' nest at Holton Heath.

After a few years of speculation following summering birds from the mid 1980's, breeding was eventually proved in Dorset in 1992. Sightings of passage birds also increased during the 1990's with records becoming nearly annual in Poole Harbour. Since then there have been a few blank years but in the last couple of years there has been an increase in sightings.

Results

There were a number of sightings of adult birds in a part of the Harbour recording area toward the end of the season.

A passage bird flew north over Studland Heath in May.

Discussion

The most serious threat to the welfare of Honey Buzzards in the UK still comes from the attentions of egg collectors, with clutches being highly prized. However the secretive, low profile behaviour of birds whilst nesting, works in their favour. Location of nests from observation is invariably extremely time-consuming and often an ultimately unsuccessful undertaking.

White-tailed Eagle

The date of the first confirmed record of White-tailed Eagle in Poole Harbour pre-dates written history. An archaeological dig on Green Island by the BBC's Time Team, found evidence of a thriving Iron Age trading centre, and amongst the pots and amphoras was found the remains of a White-tailed Eagle. The archaeologists also discovered that pigs were slaughtered, butchered and salted there, so perhaps this is what attracted the eagle.

White-tailed Eagles probably bred widely throughout lowland Britain, but suitable habitat was gradually lost through forest clearance and marsh drainage with farmers also taking measures to protect their livestock. Being such a large raptor it was thought to be a particular threat to lambs, and a long campaign of persecution followed. A few hung on along the coast but by the 18th Century only a handful of White-tailed Eagles remained in England. One of the last English records involves an eaglet taken from a nest on the Culver Cliffs, Isle of Wight in 1780.

Pulteney (1799) mentions 'Eagles answering to the descriptions of this species have been repeatedly seen in Dorset. They prey on the smaller quadrupeds, young hares and rabbits, frequenting places

distant from waters. Mansel-Pleydell (1888) considered it 'now only a rare straggler, more frequently seen here at the beginning of the century'. In 1860 a pair frequented the Rempstone Woods, one of which was trapped by the keeper, the other was shot at Lulworth soon afterwards. One was seen at Kimmeridge in the winter of 1880 and after remaining there several weeks, 'left without suffering the usual fate of rare birds'.

A few more records at the start of the 20th Century, the most recent being one shot in east Dorset in 1935 and one, probably this species at Eggardon in November 1941. Then nothing until 2008, when a bird thought to have been the recently departed wintering individual in Hampshire appeared high over Hartland Moor on 9th May, before just as quickly disappearing in a long stoop.

In 2019 a re-introduction programme was launched on the Isle of Wight to re-establish a breeding population there. Young birds wander widely before they breed and it wasn't long before they were turning up in Poole Harbour. However a record in 2020 involving a bird over West Walls, Wareham on 7th September was not from the project. It was thought to have arrived from the continent following a small influx into the country.

Up to two birds from the Isle of Wight project were present on and off during this survey, wandering to all parts of the Harbour but preferring the Wareham Channel area.

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