

A STUDY OF BREEDING PEREGRINE FALCON IN DORSET

Granville Pictor

Introduction

The status of the breeding population of the Peregrine Falcon *Falco peregrinus* within the United Kingdom from early historic times until the recent past has been well documented, principally by Dr Derek Ratcliffe in his monograph (1980, 1993) on the species. In addition, the six national breeding censuses of the bird carried out by large numbers of birdwatchers and coordinated by the British Trust for Ornithology (BTO) in roughly ten year cycles between 1961 and 2014 has enabled the recovery of the species from the effects of the 'pesticide crash' (the effects of organochlorine pesticide residues in Peregrine's prey) of the 1950/60's to be well documented.

In respect of Dorset, Ratcliffe's book, which drew on personal contacts he had in the county, gives interesting data on historic breeding pairs, whilst the 'Birds of Dorset' (Prendergast and Boys 1983) contains a chapter written by Treleven Haysom on the breeding birds of the Purbeck to Portland coast including much fascinating detail on the exploits of egg collectors between the two world wars. 'The Birds of Dorset' (Dr George Green 2004) contains a more recent update, and both before and post that time, the annual report of the Dorset Bird Club has given fairly detailed data on the changing fortunes of the species.

This note seeks to draw together some of the published historical data within the county, and provides an update to 2014, the date of the last BTO national census. It provides information on the increasing numbers of pairs within the county since its return in the 1980's, information on breeding success since that time, and the way in which the coastal cliffs have been reoccupied. It also discusses the more recent trend of the bird to nesting on man made structures, mostly electricity pylons, but occasionally on buildings.

By way of explanation, all of the records and observations from 1986 to 2014 are as a result of fieldwork which I carried every year between those two dates. For a number of years I was greatly assisted in fieldwork by two other fellow Peregrine enthusiasts who also put in very extensive fieldwork, and two other enthusiasts also added additional information (see 'Acknowledgements'). The numbers of breeding pairs and juveniles raised each year departs slightly on occasion from the figures published in the Dorset Bird Report as there may be years when we missed a pair or miscounted juveniles, and an unknown (to us) observer(s) submitted that extra record(s) to the county recorder. That said the differences are mostly slight and are not considered to be of great significance; not least as I suspect as much of the data for the annual report came from myself and the above-mentioned sources.

Historical Situation

A brief consideration of the historical situation pre the 'pesticide crash' in the 1950/60's is important as it puts into perspective the current numbers. There are no detailed pre WW1 records as far as I am aware, and the first detailed assessment of the breeding population is given by Ratcliffe who concluded that there were 15 regularly and three irregularly occupied territories on the sea cliffs in the years 1920 to 1939. These pairs were evidently plundered with great regularity by egg collectors, and The Birds of Dorset (1983) includes a famous, or should it be infamous photograph of two of the culprits, Levi Green and Arthur Binn, said to

be taken in about 1940, posing with a collection of sixty-two Peregrine eggs they collected from fourteen nests in that year. That must have been the last of the prolific years in terms of nests, as in 1940 (presumably later in the year), the Air Ministry employed marksmen to shoot Peregrines in order to protect homing pigeons carrying messages in connection with essential wartime activities. It would seem that perhaps only one Dorset pair survived this cull, but following the cessation of hostilities, numbers of breeding pairs quickly recovered until there were eight known pairs in 1951. After a short period of stabilisation, the effects of the 'pesticide crash' were felt, and numbers fell quickly from about 1957, and by 1961 all breeding pairs in the county had vanished.

The Recovery

Full details of the post pesticide recovery from the first known nesting attempt in 1984 through to 2014, the date of the latest BTO Peregrine Survey, are contained at table 1, together with some analysis of breeding success over this 30 year period. In this period the monitored breeding population has increased from a single pair in 1984 through to no fewer than 31 pairs in 2014. The coastal population is now, and has been for a number of years, considerably higher than any known before 1960. In addition, the county has seen a completely new population established on electricity pylons, and to a lesser extent on buildings, both structures not utilised, to the best of my knowledge in the past.

The following three sections discuss details of the recovery on the three types of nesting habitat, ie sea cliffs, pylons and buildings, together with various observations in respect of nest sites, breeding success etc on each type of nesting habitat.

Sea Cliffs

The first cliff reoccupied was Gad Cliff at Tynham on the army ranges. Single birds were seen there in the 1970's, but it was not until 1981 that a pair was seen there, and not until 1984 that the birds were definitely proved to have bred when a clutch of four eggs was seen which unfortunately did not hatch. In 1985 two juveniles were fledged, the first in the county for at least 25 years. It is perhaps not surprising that Gad Cliff was the first cliff to

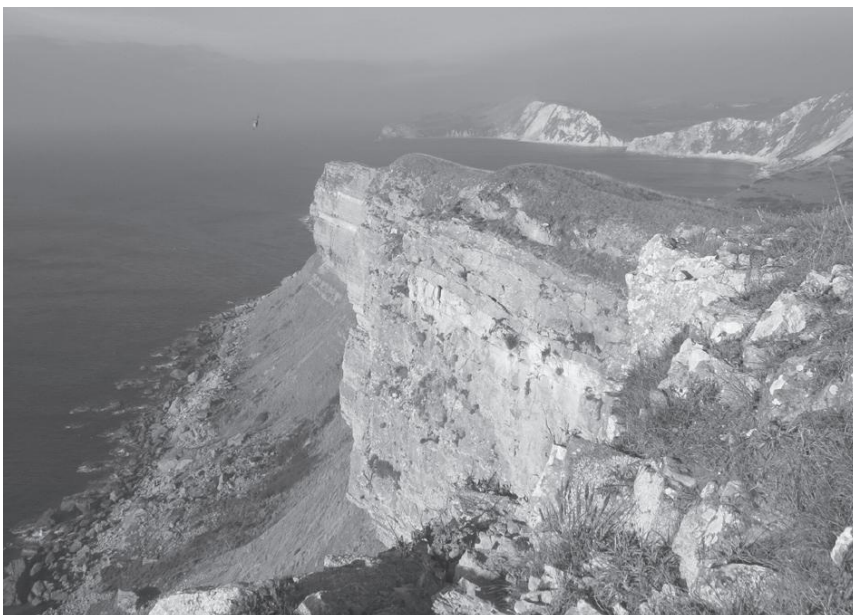


Photo 1: Gad Cliff

be reoccupied as it is perhaps the most fearsome looking cliff on the Dorset coast (see photo 1) and is hugely overhung for much of its length. It is what Ratcliffe (following Hickey) would classify as a 'first class cliff' (first class being the most desirable, usually the highest, through to 'third class' being the least desirable). Interestingly, again perhaps not surprisingly, the next two sites reoccupied by pairs at St Aldhelms Head and White Nothe, both in 1986, were on

perhaps the next two most impressive cliffs on the coast. Since then pairs have nested on most stretches of sea cliff from Charmouth in the west to Ballard Down in the east. Most are on relatively stable limestone and chalk cliffs, but some are on the more unstable clay cliffs in the west and the shale cliffs at Kimmeridge, both locations being where nest ledges frequently collapse after a few years; one nest on the clay collapsed and destroyed the clutch of eggs.

For a number of years the reoccupation took place with pairs spacing themselves well apart. As the population has increased however, pairs have increasingly nested closer together. One pair which first bred in the 1980's occupied a cliff territory of about 4km in length and bred successfully in the centre and at sites at both ends. In 2003 a new pair occupied the western end of the territory, and in 2008 another pair took over the eastern end. All three pairs have bred successfully since. The 'Birds of Dorset' (1983) mentions three clutches of eggs being taken by collectors in 1929 from St Aldhelm's Head, 'all eyries being on the cliffs within 1.5km of each other'. For three years (2005 to 2007) this headland was again occupied by three pairs with only c 1.5km between the most westerly and easterly pairs, the closest nesting I have seen in Dorset. One site has subsequently been deserted for unknown reasons. There are other examples of close nesting in the county, and it is perhaps significant that most, but not all pairs in these situations, nest on cliff faces which do not have a clear line of sight between nests.

In 2005, numbers of pairs reached the twenties for the first time (21 in 2005). Since that time numbers have in essence stabilised with numbers from then until 2014 being between 20 and 22 pairs. Two sites occupied for a number of years appear to have been deserted whilst two new pairs have 'squeezed' into what were previously single pair territories. With known spacing of existing nests, deserted sites, and what appear to be suitable sites, there does seem in theory to be scope for perhaps another six or so pairs on the coast. That said, there is no evidence in practice of an increase into these ostensibly suitable sites, and it does seem that, despite no seeming shortage of adult birds, we have reached saturation levels of nesting pairs on the coast. It is tempting to think that the increasing pylon nesting population in the county has arisen due to all coastal sites being occupied. Whilst there may be some truth in this, as table 1 shows, pylon nesting first started and was well established a good ten years before numbers of pairs peaked on the coast. Whilst it is pure conjecture on my behalf, it is a fact that the vast bulk of prey I have seen taken by Peregrines during the breeding season are pigeons, either feral or racing pigeons and captured out to sea. It is known that some racing pigeon routes have been changed nationally to try and minimise predation by Peregrines, and also that numbers of racing pigeon enthusiasts have declined in recent decades. The Royal Pigeon Racing Association for example states in their literature that from a membership of 60,000 in 1989, numbers have declined steadily since that time. It may, and I stress may, thus be the case that, on the coast at least, the amount of prey now available is responsible for the levelling off of pair numbers.

With regard to nest sites themselves, almost all in Dorset are on open cliff ledges, often in hollows in the cliff face, and almost always impossible to view from above. Even when viewed from the side so to speak, across a bay, nests are mostly at least semi-hidden behind rocky outcrops and it is seldom possible to view the nest scrape itself. It is interesting to note that in Dorset, despite there being a good population of Ravens *Corvus corax* nesting on cliffs shared with Peregrines, that unlike in many coastal counties, Peregrines only very infrequently use old Ravens nests. This is puzzling as most Raven territories contain several

old nest and these are usually very substantial and well tucked away under overhangs to avoid the worst of the weather. I can only knowingly recall three instances where old Ravens nests were used and two were successful. That said, other instances may of course have occurred with hidden Raven nests which I have been unable to record, but I believe they are probably quite small in number.

Table 1 gives data on the breeding success of Peregrines in the county over the years.

With regard to successful breeding on sea cliffs, from 1984 there have been 256 successful nests from 424 attempts which is a success rate of 60.4% over that time period. This has varied from 28.6% in 2014 (sadly the year of the last BTO census), to 91.6% in 1997. The three years from 1995 to 1997 were particularly successful with success rates not matched since. Quite why the success rates should vary so much from year to year is open to conjecture. I suspect, as has been noted elsewhere in the UK, cold and wet weather, especially shortly after hatching, has an impact, especially on some of the most exposed cliff faces. It is interesting to note that the most successful nest site in the county (occupied from 1992 to date) by some margin, both in terms of percentage of success and chicks raised (including seven broods of four) faces due east, has lots of very large vegetated ledges and is thus well sheltered from the weather. Despite a few isolated incidents, I have no reason to suspect any significant human interference at sites. I should perhaps add here that when I speak of 424 'attempts' I have assumed that each territorial pair in occupation has attempted to breed in every year of occupation. It is always of course possible that some pairs were in occupation in a given year but did not attempt to breed for some reason. That said, once pairs are settled it does seem likely that the vast majority do make a breeding attempt and that is the assumption I have used for the analysis. Table 1 also gives the number of juveniles raised every year together with an analysis of the number of juveniles raised per successful pair and the number per territorial pair. The long-term average of juveniles per successful pair is 2.11 whilst the number per territorial pair (assuming again that the pairs did in fact attempt to breed) is 1.28. Ratcliffe suggests that historically, both in the UK and worldwide, the average is in the region of 2.5 juveniles per successful pair. Whilst the Dorset figure is a little below that, see 'Methodology' for possible reasons for this. It is interesting to note that whilst the average number of juveniles fledged per successful pair over the years has gone up and down, when looked at in the round so to speak, numbers do not seem to show any long term trend. Equally of interest is that broods per successful pair even in years when many pairs fail, do not seem to vary too much. Even in the poor BTO census year of 2014, the average was 2.5 even when only six pairs out of 21 were recorded as being successful. Broods of two juveniles are most often found at successful sites, with ones and threes being quite common and fours a bonus. Quite exceptionally in both 1999 and 2000, at the same site, a pair fledged five juveniles, which although not unknown, is nonetheless quite unusual in the UK.

Pylons

Dorset has extensive lengths of electricity pylons owned and operated by National Grid. With only one exception of which I am aware, Peregrines have only nested on the largest type of pylon. These large pylons comprise the 4YA line from the Devon border to Chickerell at Weymouth, the 4VN line from Chickerell to Mannington near Verwood, and the 4YB line from Mannington to the county boundary with Hampshire. Again with just one exception of which I am aware, (but see below during refurbishment work), Peregrines have only nested

on what are termed deviation pylons. These are easily recognised as they have horizontal insulators. They comprise perhaps about 10% of all pylons, the rest being ordinary line pylons where the insulators are attached vertically. Photograph 2 shows a typical nesting deviation pylon. The reason the deviation pylons are used by falcons is that on the end of the six 'arms' on each pylon is steel plating provided for strengthening purposes. This steel plating forms in essence a box structure, and it is within these steel boxes that the falcons nest. These boxes are thus an integral part of the structure of the pylon itself and are not retro fitted nest boxes to attract nesting falcons as it were. On the 4YA and 4VN lines the steel boxes are oblong in shape being about 21 inches long by about 13 inches wide and about 12 inches deep. Photo 3 shows such a box. They are open topped and the falcons lay eggs in the bottom of the box. To avoid the eggs rolling apart, they use boxes where the base has a covering of debris of some kind. Sometimes this is a layer of old bones of prey caught by the falcons, mostly pigeon, or sometimes it is the old nest of a corvid or similar. On the 4YB line, the box structure at the end of the six pylon arms is different as it has a sloping 'roof' so to speak (see photo 4), and the falcons can only access the box from the inner side of the pylon arms. These side access boxes rely on a corvid or similar bird building a nest in the box which the falcons subsequently use. As they have a roof and no lip to the inside bottom of the box, it seems they do not naturally accumulate debris to use as a substrate as do the open topped boxes. When the pylons on the 4YB line were repainted some 15 or so years ago, old stick nests were removed, and until new nests were built by corvids or similar, the Peregrines were unable to breed on the pylons. Of interest, in 2004 and 2005 when a total refurbishment was carried out by National Grid on the 4VN line, bespoke plastic caps were fitted over the open topped nesting boxes to prevent Peregrines laying eggs and then being disturbed and probably deserting when climbers started working on the pylons. The works were staggered to minimise disturbance and some temporary wooden nest boxes were erected on adjacent line pylons to hopefully retain the falcons and enable breeding whilst the work was carried out. This was at least partially successful, and following completion of the works, some of the plastic caps on all of the deviation towers were removed and nesting substrate for the falcons placed in the open topped boxes which had been cleaned out during the works. The falcons returned to their original nesting pylons shortly after the works were completed and happily used the 'refurbished' boxes for breeding in subsequent years. It is interesting to note that Ravens using the same pylon lines also nest, as far as I am aware, only on deviation pylons. These birds build bulky stick nests towards the centre of the pylon where presumably the steel structure is sufficient to support the nests. Both species sometimes nest very close to one another, at one site always on two adjacent deviation pylons with no intervening line pylon. That said, I have never known an instance in Dorset of a Peregrine breeding in an old Ravens pylon nest. Ravens normally use the same pylon every year for breeding, and presumably the Peregrines either prefer to use the pylon arm boxes or are unable to oust the Ravens from their stick nests even if they wished to do so. Whilst Ravens and some Peregrines use the same pylon every year for nesting, other pairs of Peregrines often use one of two or three deviation pylons, a mile or more apart, within their territory in alternate years.

As Table 1 shows, the first pylon pair of which I am aware nested in the county in 1995. A steady increase then followed, and by 2014, the year of the national BTO census, I located no fewer than ten breeding pairs. It can also be seen from the table that by 1999 and 2000 there were six territorial pairs, but in some years beyond that numbers were less. In my experience, once established, Peregrine pairs only very rarely desert a territory. I thus suspect that in fact I failed to record some pairs in those years when in fact they were present. The reason



Photo 2: Deviation nest pylon with top entry boxes



Photo 3: Top-entry box



Photo 4: Side-entry box

for this is probably that they were failed breeders and on a single visit in late June or early July it is sometimes difficult to find failed pylon breeding birds whereas failed breeders on coastal cliffs are normally very obvious. Preliminary analysis of the results of the 2014 BTO breeding census reveals that in that year Dorset had more known pylon breeding pairs than any other English county (per correspondence with BTO). My own home county of Wiltshire has only two known pairs but we have very few big pylons. Quite why Dorset should have so many pairs compared with other counties is open to conjecture. It may be that we have many more suitable nesting pylons. On the other hand it may to some extent be down to observer effort. Locating pylon nesting birds is much more difficult, at least in my experience, than locating coastal pairs. In most cases it means fairly long range observation from the nearest road or footpath, and despite their size, falcons can often be extremely difficult to see on pylons.

Table 1 also shows data for the breeding success of pylon birds. Whilst like coastal birds this does vary from year to year, it is very obvious that in terms of pairs successful and juveniles raised per nesting attempt and per successful pair, that pylon birds fare much less well than coastal birds. As a long-term average, the percentage of successful pylon pairs is 40.71% compared with coastal birds at 60.38%. With regard to juveniles raised per successful attempt, the figures are 1.63 for pylon pairs compared with 2.11 for coastal pairs, and figures for juveniles per territorial pair are 0.66 for pylon pairs compared with 1.28 for coastal pairs. These observed differences are probably a little greater than the situation in reality as it is usually more difficult to find fledged juveniles on a pylon line than on a cliff face. Coastal juveniles often play together in the updraft from a cliff face and are usually easy to see. Pylon juveniles on the other hand have no updraft to utilise, often sit around for long periods on a pylon, sometimes well hidden within the steel structure, and often not

on the nest pylon itself. They thus often only make themselves obvious, both vocally and visually, when a parent brings in prey. Despite the likely modest under recording of pylon juveniles as discussed, I believe the poor breeding performance of pylon pairs compared with coastal pairs is very real and conversations with other Peregrine enthusiasts in other counties seems to confirm this. Quite why this should be so is open to speculation. I suspect that once the juveniles are partially feathered and climb up onto the top of the open topped boxes, they are prone to being blown off the box by strong gusts of wind. Equally, when fully fledged, with no wind updraft, unlike a cliff face, if their initial flight is on a fairly calm day, they may have problems finding a landing place lower down on the pylon. Either way, there are evidently quite significant numbers of birds that fall from the nest to the ground below the nest pylon. I have seen a number of these 'fallers' over the years, some still alive and calling loudly (some have been rescued), whilst others have been just been chewed up carcasses presumably predated by foxes or perhaps badgers. Once on the ground, especially in tall vegetation such as an arable cereal crop, they evidently have difficulty getting airborne and back to the safety of the pylon. Whilst I have kept no detailed records, I would estimate that perhaps approaching 90% of Ravens nests I have seen on pylons are successful, a huge difference compared with Peregrine pairs. Again I can only speculate, but I suspect that the Raven chicks have a great deal more room in their large nests than Peregrines in relatively small boxes, and that they can wander out and wing flap on the pylon steelwork in the centre of the pylon whereas the Peregrine chicks are very exposed on the end of the pylon arms. Interestingly whilst I found ten breeding pairs of Peregrines on pylons for the 2014 BTO Peregrine census, in the same year on the same pylon lines, I found no fewer than 21 active Raven nests. They are clearly doing very well in the county.

Buildings

The third category of nest site, and one very much in the public eye, is the mostly recent utilisation by the birds of nest sites on buildings, often in nest boxes and often with live video feeds so that the public can view the day-to-day activities at the nest. A huge variety of structures have been used nationwide, with perhaps churches and cathedrals being



Photo 5: Portland Harbour building nest site

those most well publicised. Probably the most historic and celebrated man made building used by falcons is on the cathedral in my own home city of Salisbury, and falcons returned to breed here in 2013. In Dorset, from 2009, a pair have bred in Bournemouth on the Lansdowne tower at Bournemouth and Poole College, and the Birds of Dorset (2004) mentions breeding having successfully taken place on the now demolished Poole Power station. There are frequent sightings of birds in urban

locations, and it may well be that there are other, as yet undiscovered pairs, breeding in the county. I would not be at all surprised if a reasonable population of building nesting pairs

become established in the county in years to come.

As will be clear from Table 1, I have only monitored one such pair, and this was a nest within an old building on Portland Harbour Breakwater. This building is depicted in photo 5, the shot being taken from a boat which Penny Harwood and I hired on one occasion from the nearby marina. The nest was located on some kind of shelf within the building on the back wall so must have provided a very secure and sheltered nest site. Despite being c 2.5km from shore, on a clear day with a zoomed up telescope, it was possible to see birds perched on the building, and confirmation of breeding was made in several years by seeing chicks wing flapping and being fed on the top of the building. The site was certainly occupied for at least nine years, but was then, for reasons unknown, deserted. This desertion coincided with a new pair being established on a nearby coastal cliff on Portland. I did on one occasion see a bird from this new cliff pair fly out and land on the building nest site which may support this view. Whilst I have given some data on breeding success for this pair at table 1, being of a single site it is of no real significance. Whilst not relevant to Dorset in any great way just yet, it does seem that nationally breeding success rates on buildings, particularly where nest boxes are provided, is extremely good, and the numbers of chicks raised per breeding attempt is usually higher than on natural cliff sites.

Methodology

I first started looking for Peregrines on the Dorset coast in the summer of 1985, and in that year saw my first juvenile on Gad Cliff. I was then, and still am, Wiltshire based, but in county with no cliffs or even natural crags, it was perhaps only natural that I gravitated to nearby Dorset which offered, I hoped, scope to become familiar with what has always been my favourite bird. Not only that, but it offered the challenge, I hoped, to chart the recovery of the bird as a breeding species in a county possessing some of the finest sea cliffs in England. Since that time, with very few exceptions, I have visited every nest site known to me at least once every year, sometimes more. In addition to visiting known nest sites, in the early years especially, I also visited many stretches of suitable sea cliffs hoping to find new pairs. In more recent years this 'pioneering' searching so to speak has been more aimed at finding new pylon nests as sea cliff occupation seems close to saturation level. In the early years I almost always had time to visit all nest sites several times in the year, always including a visit in late June/early July by which time juveniles are on the wing and can be counted. Once numbers of pairs were in excess of about twenty, sheer pressure of time has often meant only one visit a year has been made to many sites, again always in late June/early July to establish presence of a pair and to count juveniles. In addition, this pressure has meant less time is spent at each site than had been in earlier years. I did put in more visits to each site in the BTO Peregrine census years of 1991, 2002 and 2014 and in 2014 visited all 31 sites known to me, mostly on two occasions. The high number of pylon pairs located in 2014 is undoubtedly as a result of inspecting all pylon lines during March and April. Visits purely in June or July would I am sure have revealed less pairs due to the difficulty of finding failed breeders. As alluded to earlier in this note, the percentage of failed attempts and juveniles raised may well be a little under recorded in later years. This is because when there were only a relatively few pairs it was possible to spend much longer at every site to check for successful breeding and to accurately count juveniles. As numbers of pairs have increased, time spent at each site has of necessity decreased, and I may well have, in a shortened visit, failed to register some successful breeding attempts and when successful, not counted all juveniles present. Such are the problems, but also pleasures of survey work!

TABLE 1: DORSET PEREGRINES 1984 TO 2014

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
COASTAL:											
Territorial pairs	1	1	3	3	5	6	7	9	10	10	12
Successful pairs	0	1	2	2	2	2	6	8	5	8	5
Fledged juvs	0	2	4	5	3	4	13	21	12	20	14
% successful pairs	0	100	66.6	66.6	40	33.3	85.7	88.9	50	80	41.6
Juvs per successful pair	0	2	2	2.5	1.5	2	2.17	2.62	2.4	2.5	2.8
Juvs per territorial pairs	0	2	1.33	1.66	0.6	0.66	1.86	2.33	1.2	2	1.16
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
COASTAL:											
Territorial pairs	12	12	12	15	15	15	17	18	18	18	21
Successful pairs	10	10	11	9	10	10	9	9	11	9	11
Fledged juvs	21	21	26	15	23	27	17	22	20	18	21
% successful pairs	83.3	83.3	91.6	60	66.6	66.6	52.9	50	61.1	50	52.4
Juvs per successful pair	2.1	2.1	2.36	1.66	2.3	2.7	1.89	2.44	1.82	2	1.91
Juvs per territorial pairs	1.75	1.75	2.16	1	1.53	1.8	1	1.22	1.11	1	1
PYLONS:											
Territorial pairs	1	2	3	4	6	6	5	4	5	8	6
Successful pairs	0	1	3	2	3	1	3	3	1	4	3
Fledged juvs	0	2	6	3	7	1	6	3	1	9	6
% successful pairs	0	50	100	50	50	16.6	60	75	20	50	50
Juvs per successful pair	0	2	2	1.5	2.33	1	2	1	1	2.25	2
Juvs per territorial pairs	0	1	2	0.75	1.17	0.17	1.2	0.75	0.2	1.12	1
BUILDINGS:											
Territorial pairs				1	1	1	1	1	1	1	1
Successful pairs				0	1	0	0	1	1	1	0
Fledged juvs					1	0	0	2	2	2	0
	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total	
COASTAL:											
Territorial pairs	20	20	20	20	20	22	20	21	21	424	
Successful pairs	14	13	10	13	11	16	10	13	6	256	
Fledged juvs	32	24	22	27	21	28	19	24	15	541	
% successful pairs	70	65	50	65	55	72.7	50	61.9	28.6		
Juvs per successful pair	2.29	1.85	2.2	2.08	1.91	1.75	1.9	1.85	2.5		
Juvs per territorial pairs	1.6	1.2	1.1	1.35	1.05	1.27	0.95	1.14	0.71		
PYLONS:											
Territorial pairs	5	4	8	8	7	8	6	7	10	113	
Successful pairs	0	3	5	4	4	2	0	2	2	46	
Fledged juvs	0	3	8	6	7	2	0	3	2	75	
% successful pairs	0	75	62.5	50	57.1	25	0	28.6	20		
Juvs per successful pair	0	1	1.6	1.5	1.75	1	0	1.5	1		
Juvs per territorial pairs	0	0.75	1	0.75	1	0.25	0	0.43	0.2		
BUILDINGS:											
Territorial pairs	1										
Successful pairs	0										
Fledged juvs	0										

ANALYSIS:

COASTAL:

Average 1984 to 2014 successful breeding attempts is 256 successes out of 424 attempts equals 60.38%.

Average 1984 to 2014 juveniles raised per successful pair is 541 juveniles from 256 pairs equals 2.11.

Average 1984 to 2014 juveniles raised per territorial pair is 541 juveniles from 424 pairs equals 1.28.

PYLONS:

Average 1995 to 2014 successful breeding attempts is 46 successes out of 113 attempts equals 40.71%.

Average 1995 to 2014 juveniles raised per successful pair is 75 juveniles from 46 pairs equals 1.63.

Average 1995 to 2014 juveniles raised per territorial pair is 75 juveniles from 113 pairs equals 0.66.

Acknowledgements

I am grateful to Treleven Haysom for the information he provided me with on the pre 1986 reoccupation of Gad Cliff. I am also greatly indebted to Ed and Penny Harwood, both sadly no longer with us, for the huge amount of fieldwork they carried out on most of the sites for many years, often early in the breeding season when I did not have time to visit. This enabled me to focus my time more meaningfully, particularly in my June and July visits. I am also greatly indebted to Nick Dixon who lives in Devon. Nick is widely acknowledged to be the UK expert on Peregrines nesting on man made structures, which includes pylons. In 2004 and 2005 when National Grid were refurbishing the entire 4 VN line, Nick Dixon and Colin Shawyer (Wildlife Conservation Partnership) were employed to locate nesting falcons on pylons and suggest ways to alleviate the unavoidable disturbance to these schedule 1 nesting birds due to the works (see above). My acquaintance with Nick arose some years before these works, but because of our common interest in Peregrines and of his involvement with this project, he gave me details of several pairs unknown to me which I have followed since that time. Finally, whilst not quite an acknowledgement, as will be apparent, I have named several coastal breeding sites for Peregrines within this note. In the early days of the reoccupation, these sites were subject to some sensitivity, but they are I believe now quite well known and their public disclosure as it were, is I feel unlikely to have any detrimental effect on the birds.

Bibliography

Ratcliffe, D. 1980 (1st edn), 1993 (2nd edn). *The Peregrine Falcon*. Poyser, Calton (1st edn) and London (2nd edn).

Col E.D.V Prendergast and J.V Boys. 1983. *The Birds of Dorset*. David & Charles.

George Green. 2004. *The Birds of Dorset*. Christopher Helm, London.

Granville Pictor 3 Netheravon Road, Salisbury, Wiltshire, SP1 3BJ.