BATS AT PASTON GREAT BARN

Some interactions between wildlife, humans and building preservation

Were you to travel south-east along the narrow, rural, Norfolk coast road from the small seaside town of Mundesley towards the Bacton Gas Terminal you could be forgiven, as you negotiate the twists and turns, for not giving a second glance to the old barn whose tall, end flint wall abuts the road at Paston. As you continue your journey only a glance in your rear view mirror hints at the vast expanse of Paston Great Barn - the historic building you have just passed.

The barn was constructed in 1581 on the instructions of Sir William Paston III as a grain store and threshing barn. It is built of brick, flint and stone (re-used from other buildings) and stands approximately 70 metres long, 9 metres wide and 16 metres high at the apex, with a wonderful hammer beam and thatched roof. Its historical importance is confirmed by its status as a Grade II* Listed Building. Three open-fronted 30 metre long "wings" on the eastern side of the barn are 'Victorian' additions as cattle sheds. Various other flint and brick constructions have been added over the years, which are not listed by English Heritage. Together these contribute to a very considerable and imposing barn complex.

The Paston family played an important part in the history of Norfolk and the famous 'Paston Letters' of the 15th century give a unique insight into the lives of a husband and wife whose personal correspondence is internationally known. However, these date mainly to a period of time almost a century before the barn was built.

In the last six years the barn has become the focus of attention for naturalists and scientists from around the world for quite a different reason. Actions taken and decisions made are of interest and importance to this international audience. Indeed, the barn has seemingly become a testing ground where legislation to conserve buildings and wildlife have come into conflict. It is now necessary for all the implementing bodies and interested parties to work together in order to prove that man and animal can successfully co-exist without detriment to the other and that the ability of humans, above all other creatures, to compromise intelligently is used to the full.

There has been a previous paper in Transactions of the Norfolk & Norwich Naturalists' Society (Vol. 34 part 2 pages 307-317) by Sue Parsons describing the radio tracking research on the Barbastelles using the barn. This article seeks to provide a more in-depth background and history of the barn and some of the events that occurred towards - or against - its conservation during the years 1996-2002.

The farming-based use by man of the barn complex has evolved over the centuries, hence the range of buildings on the site. It takes a leap of imagination to appreciate the differences between the harvesting methods of our ancestors and those used today. Harvesting manually or by horse-power with late maturing corns and meagre yields may not in some years have begun until September and finished as late as November - with threshing to be carried out over the winter. This gave bats ample time to breed and disperse before the barn was put to serious use. The grain harvest today may start in early July with yields of up to 5 tonnes of wheat per acre and use massive machines which engulf 20 tonnes per hour. The resulting produce is often with the grain merchant later the same day and the field ploughed within 24 hours so barns have become virtually obsolete for their original agricultural purposes.

There is also some history of the barn being used for purposes other than agricultural. For instance, a celebratory dinner was held there to honour a man from Paston who had ridden in the Charge of the Light Brigade at Balaclava. Later, in 1976, to commemorate 50 years of the East Anglia Real Estate Company (owners of the barn at the time) all its workers were invited to a banquet there and was flood-lit and decorated. Whilst preparations for this prestigious dinner were under way, droppings were found on the white table cloths - lots of them - and John Goldsmith, then of the Natural History Department at Norwich Castle Museum, confirmed that these were bat droppings and not, as feared, mouse, so, as it was prior to the 1981 Wildlife and Countryside Act, the dinner proceeded!

For the next 20 years the barn was of little obvious interest to naturalists. North Walsham-based instrument makers Chell Instruments bought it in 1988 to relocate its business, but recession halted these plans and in 1995 concern was growing about the condition of the building. English Heritage (E.H.) had offered £347,000 in grant monies but this was insufficient for its conservation and conversion to house the 17 members of the workforce, planning permission having been granted for "light engineering" use by North Norfolk District Council (N.N.D.C.).

In the summer of 1996, as part of an ongoing programme of identifying summer and winter bat sites in the county, and in response to a request from N.N.D.C. three members of the Norfolk Bat Group (N.B.G.) investigated the site. A maternity colony of Barbastelle bats (Barbastellus barbastella) was discovered in the main barn together with ample evidence that other bat species also used the building. Peter Spencer, species protection officer for English Nature (E.N.) was notified immediately by mobile phone as it was at that time the only breeding colony of Barbastelle bats in the whole of Britain. Despite the subsequent identification of at least four other such breeding colonies in Southern England, it remains the only one in a building, others being in trees.

In November 1996 the barn was purchased by the North Norfolk Historic Buildings Trust (N.N.H.B.T.), a body formed specifically to buy and conserve the barn, which remains its only holding to date. This body is both a registered company and charity and it has been documented that it paid £15,000 for the barn and outbuildings with grant monies from N.N.D.C. Although it has been frequently claimed that the important bat colonies were unknown at the time of purchase, letters exist to demonstrate that the Barbastelle maternity colony had been found by this time and information circulated to the effect that this would undoubtedly affect any proposed plans for future usage.

The Barbastelle is currently listed as endangered in most European countries and has a long list of statutes protecting it. These include:

? The Bonn Convention, Appendix II (Conservation of bats in Europe, 1991)
? The Bern Convention, Appendix II
? The EC Habitats and Species Directive, Annex II
? 1996 IUCN Red List of threatened animals
? Protection under the Wildlife and Countryside Act 1981
? Protection under the Conservation (Natural Habitats &c.) Regulations 1994
? It is a UK Biodiversity Action Plan species with its own special Action Plan placing obligations upon a range of government organisations including:
? To ensure the long-term protection of maternity roosts
? Encourage provision for the species within old buildings

? Raise awareness of this species in country houses and farm buildings

On 5th November 1996 a meeting was held at Paston Barn between E.N., N.N.D.C. and N.B.G. in order to discuss how to secure the future of both the barn and the bats without compromise to either. A programme of research was agreed using the expertise of the N.B.G. in order to assess the bats' usage of the barn so that certain building works could progress without disturbing the colony and to enable plans for the long-term future of the barn to be considered. At this time it was felt that, quoting from the minutes of the meeting, "the bats and the historic building could be seen as one conservation project and the various people would work as a team", though subsequent events suggest otherwise.

Site of Special Scientific Interest (SSSI) status was considered but a decision on notification of the site was deferred pending a better understanding of the status of Barbastelles at Paston. Optimism appeared high that mutually acceptable solutions could be reached to secure the future of the colony and the barn. How many of those working to save the unique natural history of the site would have predicted that it would take a further six years; a heavily contested planning application, and presentations at both Government and European level before all parties concerned would at last come together in a mood of conciliation, albeit still with their own interests and agendas?

In 1997 the N.B.G. produced a report on its research for that year involving 18 members of the group and nearly 300 voluntary man-hours at dusk, dawn and during the night. In all, four species of bat were recorded at the site: Barbastelle (Barbastellus barbastella); Natterer's (Myotis natterii); Pipistrelle (Pipistrellus pipistrellus); and Brown Long-Eared (Plecotus auritus). (Since then the Pipistrelle has been divided into two species, 45 and 55 kHz, and both have been found at the barn.) The Barbastelle is by far the rarest, while the good-sized Natterer's colony is also noteworthy. The Noctule (Noctalus noctula) has also subsequently been recorded.

Barbastelle bats are rare mammals with generally less than ten records per annum in England and Wales in the 20th century, normally from hibernation sites between October and March. Norfolk and Suffolk are the most important areas of the UK with in excess of 80 records since 1859. Until recently most books and zoological publications stated that there was no breeding colony known in the UK, although a confidential Norfolk colony was known near Cromer until 1988, thus, nationally, there was an urgent focus of research on this species.

In August 1996 the Barbastelle colony contained an estimated 40 females with young. Bearing in mind the national and international importance of the find, and the rarity of the species, the first year's study in 1997 was deliberately low key to minimise disturbance and the existence of the colony was to remain confidential. Environmental conditions within the building were studied with temperature loggers sited to record the temperature every 72 minutes (20 times per day) for a period of three months during the bat breeding season. Size and position of the colony was recorded weekly together with surveys of droppings to confirm this and also assess the utilisation of window slits for entry and exit. External surveying consisted of up to 16 people in the vicinity of the barn at dusk using bat detectors in an attempt to establish feeding and dispersal areas; visual observations including the use of an image intensifier; and observations away from the roost to identify feeding areas involving bat detector work together with visible observations.

This initial survey showed that the bats (all species present) used every part

of the barn, roosting in beam slits and partaking of various social activities while flying inside the building. It also proved that the outbuildings on the site were used extensively by both Barbastelles and Natterer's, the bats passing through in what is considered a strong predator avoidance strategy together with social intermingling. Assessing feeding areas proved more difficult, although they were found to be feeding in the adjacent woodland of Paston Hall and Paston churchyard. Barbastelles were also recorded near to the Bacton Gas Terminal and up to a kilometre away to the west. During this survey work it became apparent that the Barbastelle colony was suffering disturbance - judging by its behaviour and movement within the barn. This happened on three occasions during the year, making the colony vacate the building for several days, confirming the bats' particular susceptibility to stress caused by human activities as previously reported in the literature.

In October 1997 a meeting was held between the N.N.H.B.T., E.H., E.N., N.B.G. and N.N.D.C. The Trust produced its business plan for offices and sales areas in the wings, the proposal being for the barn to be used for events such as banquets and craft fairs with other buildings used for toilets and warden's accommodation. It was now apparent that there were alarming conflicts between the building's "conservation" and development and acceptable bat conservation. Grants for these proposals from E.H., the Heritage Lottery Fund and the Gas Consortium were all dependent on public access to the completed project. The scale of public access required clearly conflicted with the bats' survival.

Also at this time grant aid from E.N. (£1,000) and UK-Continent Gas Interconnector (£3,000) was provided to N.B.G. for Closed Circuit Television (C.C.T.V.) and monitoring equipment to enable some remote in-depth research to take place during 1998.

Public access was, it transpired, the major stumbling block in protecting the Barbastelle Bats. There followed years of disillusioned discussion and disagreement during which the building had some repairs in the winter, typically with just some vague verbal agreement, and the bats occupied it in the summer to give birth to their young. Despite legislation to protect all bat species in both the UK and Europe, and the rarity and international importance of the Barbastelle colony, the human elements remained intransigent. There were times when the opposing attitudes of the government-funded agencies gave every impression of working against the best interests of both the building and the bats, each of which were protected by law! The invited involvement of the Bat Conservation Trust (B.C.T.) did little to promote the conservation successfully at this time as the public access issue remained paramount to E.H. and hence to N.N.H.B.T. A copy was obtained of a memorandum of intent between Sir Jocelyn Stevens of E. H. and Lord Cranbrook, then chairman of E.N. It stated that the two bodies would co-operate and come to special arrangements for any historic building that supported important wildlife, though this seemed to cut little ice with local staff. Interestingly, and importantly, both sides in the debate were keen for the barn to be repaired as, if the barn fell into disrepair, then it would be unsuitable for the needs of the bat colonies.

The monitoring study in 1998 included the same methods used the previous year but with the exciting addition of the installation of a "state of the art" 700 line infra-red CCTV system purchased with the grant monies. The monitor and long-play video recorder were installed in an outbuilding adjacent to Paston Hall with the kind help and co-operation of the then owner, Mr Graham Carter.

In late August, when the young Barbastelles were full-grown and the breeding colony about to disperse until the next year, a few bats were caught outside

the barn using a harmless harp trap. With borrowed expertise and equipment, two adult female Barbastelles had miniature radio tags fixed to their backs. The tags were set to transmit at two known, separate frequencies to allow the individuals to be distinguished. The tags' batteries had a life of up to thirteen days and were designed to fall off the bats after about two weeks. The radio tracking covered nine nights, one transmitter falling off early and the battery of the other expiring. In an effort to locate the autumn roost(s) used by the Barbastelles, two further individuals were caught and tagged. However, after two days one tag had fallen off and the other bat had not returned to the barn, nor could it be found within the expected surrounding areas. The next few days were spent radio scanning an area of over 20 square miles both at night and during the day, but to no avail. Such are the frustrations of radio-tracking!

The radio-tracking study began to give an exciting new window into the shadowy world of bat behaviour. It also showed changes in the bats' behaviour in relation to entering and exiting the barn as a result of a northerly outhouse wing being considerably altered by building work during the previous winter. The importance of the two large south-east facing twin doors of the barn was also demonstrated. The two main alternative breeding cluster sites are in the lintel crevices of these doors and adjacent gaps are also the main entrance and exit for the bats, especially after the northern buildings were sealed with perspex sheet and chicken wire. When the replacement of these decrepit doors takes place, very similar entrance/exit holes must be carefully planned and the work carried out in the winter, allowing any treatment chemicals, paints and glues to weather.

The radio tracking, though limited, demonstrated that the bats hunted in the adjacent woodland areas and along the coast and that, potentially, during five hours they could cover 70 linear miles in repetitive quartering, and an area of approximately 18 square kilometres of the Norfolk countryside. It was further discovered for the first time anywhere that hunting occurred over the cliffs and along the shore and tide-line.

Further monitoring was recommended to include complete video coverage of movements in the barn together with weather/environmental monitoring to correlate events and provide a better understanding of reasons for movements away from preferred roost sites and the bats' intolerance of disturbance. Also suggested was further radio tracking to allow for more detailed recording of feeding areas and, again, at the end of the breeding season in order to locate roost sites used in the autumn. Insect trapping and droppings analysis were also required to identify prey species.

1998 was fraught with problems. The barn and CCTV equipment were vandalised; disturbance to the colony was caused when agreements over timing of building works/materials delivery were not adhered to; and the police were involved on one occasion when the contractor clearly contravened the Wildlife and Countryside Act 1981. More importantly, the insistence by some of the bodies involved in courses of action detrimental to the bat colony was causing concern. Articles appeared in both the local and national press highlighting some of the opposing views. Those promoting the historic building were still publicly stating their understanding of the legal constraints due to the bat colony and accepting that the animals were sensitive to disturbance, and yet still insisting on public access to the barn on completion of the works. Clearly, these aims were totally at variance with the needs of the bats.

In late 1998 a dendrochronologist (a tree ring analyst) from the University of Sheffield visited the barn to take sample cores from the beams. This has confirmed the build date and shown that the oak timbers were obtained over a two year period.

Re-thatching and other building works at the barn commenced in late September 1998 with grant monies of £375,000 from E.H. At this point N.N.H.B.T. announced to the Press its intention of converting the barn to a visitor centre with exhibition space and possibly a concert hall, but without mention of the important bat colony or how it would be incorporated!

From early in 1999 it was apparent that the gap between all the bodies involved was widening. There was a feeling amongst those working for the cause of the bats that little attention was being paid to this internationally important site and that the status of the man-made structure was being given precedence. Accusations were made that the national environmental bodies were not proactive enough and that protective legislation - or those responsible for enforcing it - were ineffective.

There was a complete debacle over the re-thatching and roof repairs from a bat conservation standpoint. The works had been started in 1998 but not completed, as promised, for the 1999 breeding season. The roof was covered for the 1999 summer period with a temporary blue damp-proof membrane of polythene and polystyrene insulation. Being of ultra-violet unstabilised quality it began to break into small pieces in the June sunshine, allowing ingress of quantities of rainwater to the bat roosts and the barn generally, unsettling the colony that summer. At a meeting in March 1999 various reasons for this inaction were given and other assurances offered. In October of that year the thatchers assured the N.N.H.B.T. architect that the roof would be completed by April 20th 2000 - in practise, though, the work continued into May. Although bat roost sites inside the huge beams were identified and marked, many were lost during the repairs, while the timber treatment chemicals used were never formally approved. On the positive side, the finished thatch looks really splendid externally and internally, and the carpentry repairs to the huge oak timbers bear testimony to the immense skill of the craftsmen involved.

The CCTV was again successfully utilised for monitoring bat activity in the barn in 1999, being installed in early July. Again, there were problems with unauthorised entry to the site; on one occasion two youths with an air rifle were seen late in the evening when they removed security fencing and used a ladder to climb on scaffolding. Fencing and ladders were moved on other occasions and Norfolk Constabulary was again called to the site with parents of the offending youths subsequently located and warned.

On 24th July 1999 N.B.G. together with the Norfolk Moth Survey Group, and with the permission of Mundesley Holiday Centre, held a moth catching night on Mundesley cliffs. Moth traps were placed along and down the cliffs and both quantities and species of insects trapped were recorded, since the radio tracking had shown that the Barbastelles hunted along these cliffs. This established which species, and perhaps quantities, were available for bats to eat.

The colony of Barbastelles was studied through the summer as it moved around the barn using various sites. This research work was mainly carried out by Susan Parsons on contract to the B.C.T. funded by E.N. The impetus for movement of the colony within the building at this time was the leaking of the temporary roof structure, while several pieces of electronic monitoring equipment permanently failed after being deluged. Due to delays in obtaining radio tags it was not feasible to conduct any radio tracking in that year.

In October 1999 B.C.T., under contract to E.N., produced a report on the behaviour of the Barbastelle bats at Paston Barn during 1999, authored by Susan Parsons and Tony Hutson. It was reported that the colony was slightly smaller than the previous year and the number of young reared to the flying

stage was also lower. The importance of cracks above the window slits, gaps behind roof supports and holes in door lintels as roost sites were confirmed. The open-fronted wings were used both at evening emergence and morning return and were again identified as a vital feature for bats at the site, while the temporary experimental closing of one wing with polythene sheeting for a week was adjudged to have been highly disturbing to the colony.

Eventually, on 23rd December 1999, the whole site, extending to 0.95 acres, was at last notified as an S.S.S.I. by English Nature. Almost at the same time, the Bacton Terminals Community Affairs Group stated that, as their donation policies were geared specifically towards benefits to the community, and that the future of the barn as a visitor centre and Bacton Gas Site publicity venture was now less than certain, they had decided to suspend any financial contributions.

In 2000 pressure continued to be brought to bear on E.N., by B.C.T. and other environmental bodies, for the situation to be resolved in the best interests of the Barbastelles. E.H. at last confirmed in writing that their grant-aid was not now dependent on future public access but that this was now a preference not a condition. Various options were put forward which would offer the colony the necessary protection and yet allow limited public access at certain times of the year. During the year it also became apparent that E.H. staff lacked any correct information regarding the situation at Paston Barn and bats generally and inaccurate rumours began circulating amongst owners of listed buildings in East Anglia. This fact was taken up with their area director.

2001 proved to be the climax of distrust in the recent history of the barn. In May, to the horror of members of the N.B.G. and other conservation bodies, E.N. permitted, and indeed funded, the boarding up of the northern and southern wings to the east of the barn, structures which were known to be important flying areas for the bats. A witness reported that the barn doors were wide open and there was building work all day, this taking place during May, long after when it was agreed that all work on the site would cease.

An art exhibition of pictures was permitted inside the barn in the late autumn (while bats were hibernating there) when gas heaters and lights were used without any kind of discussion or formal agreement. Obviously these damaging developments did nothing to bring the various bodies of opinion together and prosecution under the Wildlife and Countryside Act 1981 was seriously contemplated by bat conservation organisations, but considered to be unlikely to succeed, since these actions did have the verbal agreement of E.N.

Following notification of the whole site as an SSSI in 1999, and it therefore being subject to Section 28 of the Wildlife and Countryside Act 1981, the Countryside Rights of Way Act (2000) came into effect in early 2002. Due to the presence of the Barbastelles, this site (along with several others in Norfolk) was declared a candidate Special Area of Conservation (cSAC) under the 1994 regulations. Its legal protection was, thus, much enhanced on a UK and European basis.

In spite of all the parties involved with development of the barn being aware of the legal situation regarding species protection, on May 4th 2001 the N.N.H.B.T. submitted a planning application for conversion of the barn complex to an exhibition/visitor centre, coffee shop, caretaker's dwelling together with creation of a new site access. In a letter from the N.N.H.B.T. accompanying the planning application, architect, Anthony Rossi, stated that a written environmental assessment of the effect of the proposals was being prepared by his clients (as required for a cSAC) although this was never produced.

It may be that the N.N.D.C. planning authority and developers underestimated the environmental lobby because the pressure now increased greatly to preserve this rare bat colony. In excess of 100 letters and e-mails of objection were lodged with N.N.D.C. from all over the world. Articles also appeared in the national press questioning the necessity of putting a Barbastelle colony in peril.

As a consequence of concerns regarding the ability of N.N.D.C. to determine this application objectively, due to its close links and advice from its chief planning officer to N.N.H.B.T., the Regional Government Office for the East of England was approached to assess whether it should be 'called in', that is determined by the Secretary of State.

As part of the objection to the planning application for the barn there was a detailed study by the conservation lobby of the Regional Strategy for East Anglia, the Norfolk County Council Structure Plan and the N.N.D.C. Local Plan. This exercise demonstrated that the proposals did not fall within current development policies, indeed in some cases were seriously at variance with them. Extensive documentation is on file with detailed objections to the development proposals lodged by E. N., and the Royal Society for the Protection of Birds and the B.C.T., scientific research being provided to support these contentions.

It was disappointing that most local opinions sought (parish councillors, district councillors, Paston Heritage Society (P.H.S.), etc) seemed biased towards developing the site at the expense of the bats, and that there was no appreciation of the unique living heritage that the Barbastelle colony bestowed, having chosen Paston Barn for its summer residence, probably for hundreds of years. Indeed, some parties seemed openly hostile to the colony, seeing it as a hindrance rather than an opportunity. Suggestions that jobs might be created by this proposed tourist trap only fuelled this opinion and there appeared to be no understanding at all that the bats were unable to compromise whereas the human element in this conflict had an infinite ability to do so.

The planning application was, unfortunately, never determined (i.e. passed or turned down) by the planning committee as this would have been a useful precedent for any future similar cases. It would probably have involved a lengthy and expensive public enquiry but would have brought into the public domain all the salient facts, figures and mistakes! However, the planning application was withdrawn during the second week in April 2002 as part of a new initiative and N.N.D.C. posted a circular to all objectors to indicate that it had been withdrawn.

Due to the submission of the planning application, the consequent furore, and the failure of E. N. to initiate any research agreement in 2001, little direct observation was undertaken on the colony during that summer. However, in August 2001 a report supported by E. N. was published which detailed the observations that were made between 1st September 2000 and 1st June 2001. These observations showed that Barbastelles occurred in the barn until the end of November 2000 and reappeared in early March 2001. Both Common Pipistrelle (Pipistrellus pipistrellus) and Soprano Pipistrelle (P. pygmaeus) together with Natterer's bats (Myotis nattererii) were recorded at the barn during every month of monitoring showing that it was, as suspected but not previously proved, being used by bats for hibernation. Some of the social calls recorded suggested that the site is also being used by both common Pipistrelles, Barbastelles and Natterer's bats as a mating location.

Year

Barbastelle numbers Building work & disturbances recorded
1996 40 (estimate adult females + young) None
1997 50 (estimate of adult females + young) Northern wing repaired over-winter, engines removed with lorry and fork-lift truck during the bat breeding season.
1998 30 adult females, 30 young Some summer disturbance, major roof repairs started - spanning over two years
1999 28 adult females, 11 young Some summer disturbance -roof repairs under way, temporary plastic covering
2000 24 adult females 5 young Late finish to roof repairs and wings blocked
2001 22 adult females, 4 young None
2002 Increased colony returned None

As the above table shows, breeding numbers have declined during the past four years after major repairs were embarked upon, although counting methods have varied between visual estimates and counts on video tape. At no time has the observation of bats impinged on the welfare of the colony. Indeed, with local bat research it has always been a primary rule amongst core bat researchers in Norfolk that the welfare of colonies unquestionably comes first, observations, data and results second.

In February 2002 the visitor centre plan was dropped and E.N. obtained a 50-year lease of the building. This would be overseen by a multi-agency management group, although N.N.H.B.T. expressed publicly its "disappointment that proposals for the complex were unable to go ahead at this time". The inaugural meeting of the Paston Barn Management Group (P.B.M.G.) was held on 18th January 2002, with representatives from E.N., N.B.G., B.C.T., N.N.H.B.T., N.N.D.C., P.H.S. and Paston Parish Council. A further meeting was held in April 2002 when it was agreed that a gate and security fencing plus a small car park with interpretation boards would be provided at the eastern end of the site near the entrance to the church. However, an ongoing programme of any absolutely necessary building works, to be carried out over a series of winters remains to be agreed. The B.C.T. was contracted to monitor the Barbastelle colony and provide a report for the period March 2002 to March 2003. The management group is due to meet again in the autumn of 2002, by when a contractor will have been appointed to prepare a full management plan.

It is generally agreed that some interpretation of this site is desirable. Using existing buildings is a non-starter due to bat occupancy, so N.B.G. suggested that a mobile unit could be parked on the barn site on agreed dates which

would have live feeds from cameras inside the barn plus displays and information. This novel, but practical, solution, has yet to attract sufficient funding to be operational.

We are conscious that this management group is in its infancy, and wanting this joint approach to be successful, we must not judge too harshly at this stage. However, it should be borne in mind that membership of the management group is numerically weighted in favour of supporters of historic buildings rather than any natural history aspects, and there are those who feel that there is still a huge element of risk involved as its role is purely advisory. The landlord (N.N.H.B.T.) and tenant (E.N.) remain in control.

Should this group fail in its attempts to manage the barn for the benefit of the bats and the Barbastelle colony declines, or is lost, then the environmental bodies involved will be blamed for the demise, as they would be deemed an integral part of any mismanagement. The management group's existence may not prevent development at the site but will continue to press for a programme of monitoring and research, consider all issues relating to use, repair and maintenance of the barn within the need to maintain the integrity of the cSAC interest features paramount at all times. E.N. is also responsible for all repairs during the lease period, although an "appropriate assessment" by the Department for Environment, Farming and Rural Affairs (D.E.F.R.A.) is legally required for any building work not considered to be primarily required for the specific conservation of bats. There is a view that the "precautionary principle" relevant to all cS.A.C. sites should be applied at Paston for the next couple of years in relation to any new repair or building work, bearing in mind the recent colony decline and with the knowledge that no part of the scheduled building is in imminent danger of collapse.

Local bat workers have learned some hard lessons during this lengthy process and some have felt moved to withdraw their voluntary help as a protest against what they saw as inappropriate actions for bat conservation. When the Barbastelle colony was discovered there was much excitement and undoubtedly a naive belief that current wildlife legislation would easily ensure its future. It is now understood that, even with Paston Barn's increased wildlife status, nothing should be taken for granted. Personal and political lobbying, along with the disturbing fact that some individuals can fail to live up to expectations by not wanting to be seen to be aligned with situations characterised as "hot potatoes" can cause uncertainty and confusion.

Much of the research at Paston Barn was conducted by volunteers who gave hundreds of hours of time to study this important and exciting site. It is not, therefore, surprising that intense frustration was felt by those involved that people in positions of power were happy to utilise their expertise and yet seemed unable to grasp the importance of protecting this site, being apparently swayed by arguments that a man-made structure was of greater significance than the welfare of the bats. A lot of damage has been done to relationships, both between individuals and organisations, and it could take some time for these scars to heal and trust to return.

The uniqueness of this find ought to have been correctly appreciated at a very early stage and the site looked at as an important building and an important habitat. All man-made structures, after all, sit within the natural world and we ignore the impact of each upon the other at our peril. Contrary to repeated statements from the historic building interests, the environmental bodies wished to maintain the integrity of the building and continue a considered programme of repair works. Should the barn have deteriorated further then it may no longer have been a suitable habitat for the bat colonies it has supported for centuries.

It is to be hoped that the future of all bat species at Paston Great Barn is now more assured. There is still a gulf of understanding between the historical and natural history interests which needs to be bridged. If there is the genuine will to succeed then answers can be found. If this fails, then Paston Great Barn could be a monumental embarrassment to all involved. Success would show Norfolk to be paving the way on an international stage as an example of compromise and flexibility in conservation. There are now so few ancient barns left in East Anglia, and even fewer with bat colonies, that this experience ought to lead to greater recognition of these important landscape features as bat habitats in the future.

As a high profile bat conservation project, Paston Barn cannot afford to fail. We hope anyone reading this account will applaud the Paston Barn Management Group in its endeavours to get it right.

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Pictures and more information can be found on the Norfolk Bat Group web site: http://www.norfolk-bat-group.org.uk while any e-mail correspondence may be addressed to: <barbastelle@paston.co.uk>

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