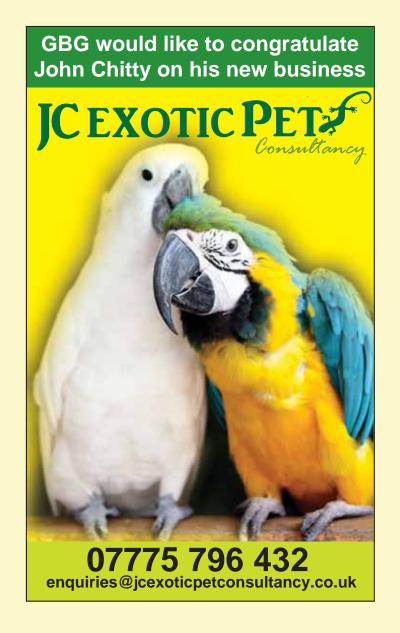


## **International Conservation Issue**

From the UK to Mongolia we look at the work being done to protect Great Bustards







The Great Bustard Group is the UK registered charity and membership organisation formed in 1998 to re-introduce the Great Bustard (Otis tarda) to the UK. The GBG is actively involved in Great Bustard conservation and is working with other organisations, both nationally and internationally to save the world's heaviest flying bird.

President

The Rt. Hon. The Lord Tryon Vice Presidents

Dr Charles Goodson-Wickes DL and John Chitty CertZooMed. CBiol. MIBiol. MRCVS.

**Trustees** 

David Bond (Chairman) John Browning Dina De Angelo Kevin Duncan Simon Gudgeon Estlin Waters Corporate Members

The Bell Inn, Lacock SN15 2PJ Gaiger Bros, Devizes SN10 1JL **Director**David Waters

Contact

1, Down Barn Close, Winterbourne Gunner, Salisbury, Wiltshire, SP4 6JP. UK

01980 671 466

enquiries@greatbustard.org www.greatbustard.org

## The Great Bustard Group - www.greatbustard.org

Join for only £20
Complete the form in this magazine or join online at www.greatbustard.org

Friends of the Bustard

Open to all, free of charge

We meet at 8pm on the first Thursday of every month at the Bustard Inn, Shrewton, SP3 4DU

## Editor's note



#### **The GBG Team**

David Waters - Director davidwaters@greatbustard.org

Karen Waters - Members karenwaters@greatbustard.org

Al Dawes - Release Site Manager aldawes@greatbustard.org

Lynne Derry - Visits/Friends of the Bustard

lynnederry@greatbustard.org

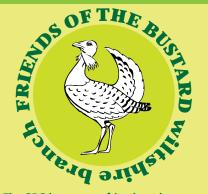
Hannah Rose - Hawk Conservancy hannahrose@greatbustard.org

Suzy Elkins - Marketing suzyelkins@greatbustard.org

Alex Stott - IT & Web alexstott@greatbustard.org

Peregrine Rawlins - Press Officer peregrinerawlins@greatbustard.org

#### **Introducing Friends of the Bustard**



The GBG have many friends and supporters who play a vital part in the charity's local success. We are now proud to introduce 'Friends of the Bustard', an affiliate group to the GBG that organises local fundraising events, represents the GBG at shows throughout the year and provides a network of essential support. We would also like to thank all our volunteers without whom we could not manage.



In the Editor's note I wrote for Issue 31 of *Otis*I said that our feature article was a

comprehensive look at the history of the GBG and the return of the magnificent Great Bustard to the UK, explaining that as a new editor (and relatively new member of the GBG) I felt the article was a much-needed recap. Judging by the feedback I received I'm pleased to say that many readers felt the same way. I also said that in future magazines we intended to look at

'conservation issues facing bustards across the globe'. I'm delighted therefore, to be able to say that in this latest issue we've cast our net far and wide, and are highlighting the work being done to survey and protect populations of Great Bustards from our own birds here on Salisbury Plain right the way across to Mongolia via Spain, Germany and the Ukraine! Articles include details of a very chilly trip to the Ukraine (made by our own Al Dawes last January), to survey wintering populations of Great Bustards, a report from the Villafafila Wildlife Reserve in Spain looking at variations in breeding success, a highly current account of the 2009 breeding

season in Germany from Dr Torsten

Langgemach, and an overview of the

remarkable work being done by Mimi Kessler protecting the very rare eastern subspecies of Great Bustard in Mongolia. 2010 is the 'International Year of Biodiversity'. To celebrate we've also a short article on the biodiversity of Salisbury Plain, and details of two unique 'Biodiversity Safaris' on the Plain which we're offering first to GBG members places are limited so if you'd like to come along please contact us soon. On top of all that, in our News section we're reporting on events that the GBG has been involved in since the last issue of Otis, a look at our new and improved website, and we have our regular interview with a GBG supporter: this time with Master Brewer Stig Andersen, founder of Stonehenge Ales and the man we should thank for giving the world Bustard Beer. I trust members will find all of the above as useful as they found the recap in Issue 31. I certainly did. As always I welcome your feedback (good or bad) so let me know what you think. Have a great summer and see you again in three months!

Chuli Mures

Charlie Moores - Otis Editor charliemoores@greatbustard.org

Otis is designed by AA1 Media Ltd www.aa1media.com



And printed by Bath Midway Litho
Limited

## **GBG** News



Dame Elizabeth Neville DBE QPM & 'Hercule'

## The GBG & the new Wiltshire High Sheriff

GBG Director David Waters reports from Wiltshire Constabulary Headquarters.

The GBG has enjoyed support from the historical office of the High Sheriff for many years. The post is to represent the sovereign on matters relating to the judiciary, the armed forces and other uniformed services such as the police, fire and ambulance service. Originally the duties were primarily to do with tax collection, but this is no longer the case, and today the role is largely ceremonial. The High Sheriff holds the office for one year, and has a formal state of dress when attending functions. In 2007 Madeline Wilkes decided to add Great Bustard feathers to her ceremonial hat, in place of the usual ostrich plume, and feathers moulted from the bustards we keep at the Hawk

Conservancy Trust now make a splendid and distinguished addition to the Shreeval hat.

In March Dame Elizabeth Neville DBE QPM was declared High Sheriff of Wiltshire in a ceremony at the Wiltshire Constabulary Headquarters in Devizes, taking over from Robert Floyd, a landowner and

conservationist whose father founded the Wiltshire Wildlife Trust. In recent times the High Sheriffs have become closely involved in supporting the voluntary sector, and the GBG is one of the charities Dame Elizabeth has chosen to support. I was delighted to represent the GBG at the ceremony with my wife Karen. It seemed fitting to be there as Dame Elizabeth, Karen and I all served in the Wiltshire Constabulary at the same time. Our roles were rather different; I was a "beat bobby" for a few villages on Salisbury Plain, Karen was the divisional duties clerk, and Dame Elizabeth was the Chief Constable!

#### International Bustard Symposium

GBG Director David Waters and Release Site Manager Al Dawes were invited to attend China's first International Bustard Symposium in Beijing. The international delegates representatives from Russia, Mongolia and Spain as well as the GBG representing the UK. A primary aim of the symposium was to assist in the creation of a five year Action Plan for the Great Bustard in China. Naturally many of the presentations were on the Chinese bustard populations, but the hosts were keen to hear about conservation and monitoring methods from other countries. Another focus was on the Great Bustard population in the Daurian region which straddles the borders of Russia, China and Mongolia, and whose best interests would be served by a tripartate conservation plan. We will have a full report in the next issue of Otis.

#### **GBG** and Plain Action

In April the GBG was pleased to be represented at a meeting of many of the beneficiaries of 'Plain Action', a development programme operating across the Salisbury Plain area and into part of Hampshire. The meeting was held in Ludgershall and we took the opportunity to network and spread our message to a wide range of interested businesses and stakeholders whom - we soon realised - may not have properly understood what a release-scheme really entails! Such meetings are obviously an important part of letting local businesses talk to members of the GBG and for us in turn to build relationships with them. A good number of Otis magazines were taken away and a number of people expressed interest in coming to the release-site to see what we're doing for themselves: hopefully we'll be able to convert some of those 'maybes' into new members!



GBG staff talk to interested visitors



#### Hide....

The GBG would like to thank the BBC Wildlife Fund for a grant to replace our old hide. The original structure was put in place six years ago and since then has hosted over 10,000 visitors and been exposed to the wildest weather of Salisbury Plain. Little did we realise when we first set up the release project, just how many people would want to visit us to see the birds. Our old hide had always been something of a tight squeeze, but the new one is twice the size but sits within the old footprint as it doesn't need the screening either side.

#### ....and Seek

We would like to thank everyone who visited us at the Great Bustard Group bothy at the Hawk Conservancy Trust on Easter Sunday. Plenty of 'young farmers' came forward to offer their services in finding the Great Bustard nests and rescuing the eggs - in exchange for a lucky dip or two of course!



'Young farmer' & GBG member Courtney Lodge

#### Springwatch team visits the GBG



GBG Director David Waters & Fergus with Springwatch cameraman Gordon Buchanan

Crew from the BBC's ground-breaking 'Springwatch' series visited the release-site last month to film our birds and discuss regularly returning throughout the run of the programme to report on the progress of the breeding-season. We'll update the GBG website as and when we have more information, but we're hopeful our birds will be seen in millions of homes over the next few months.

#### Would you like GBG to visit your school?

As part of our promotional work, GBG staff make many visits to schools and groups. We're not always greeted with tables groaning under the weight of hundreds of cakes though! Many thanks to the children at Potterne's Mill School who raised a wonderful £118 for the GBG with a cake sale - and sent Otis Editor Charlie Moores home with a selection of home-made deliciousness. If you'd like the GBG to visit you or your school please contact us at schools@greatbustard.org



Pupils with the cakes they baked for the sale

## A GREAT Bustard season!

Sometimes good practise and lucky circumstance come together, and in 2009 the German Great Bustard staff could celebrate the very best breeding season for ages.

Report by Dr Torsten Langgemach; Head of Brandenburg State Bird Conservation Centre. In each of the last few years there have been problems impacting breeding success technical issues with an incubator, an unexpected predator's attack during the hand-rearing period, a fox getting into one of the wild bird breeding enclosures - but in 2009 things went much more smoothly. Firstly though, some background information for those unfamiliar with the details of the German Great Bustard project. Changes in land use and intensification of agriculture meant that the German populations of Great Bustard declined sharply from the nineteenth century, and by the 1970s and 1980s

breeding performance in the remaining wild Great Bustard nesting areas was nearly zero. Conservation measures were put in place and after years of 'bustard-friendly' landscape management and farming practices in designated conservation areas, the habitat for breeding bustards and other bird species improved markedly. Despite this,

reproduction rates remained low because of a parallel increase in predation pressure. Predatory mammals - predominantly foxes - have been the primary culprits: the widespread implementation of a rabies vaccination policy in the 1980s has now virtually eradicated the disease in the fox





Images of the birds & their habitat © Brandenburg State Bird Conservation Centre

population with the result that their numbers have risen sharply. In spite of comprehensive bustard—targeted land management there is still hardly any breeding success in the wild due to the high predation pressure.

Nevertheless the German Great Bustard population is now on the increase, and there are two main sources of offspring leading to this rise: 1) released birds from eggs collected in the wild because of predation risk or other threats; 2) offspring from free-ranging hens that are breeding in fenced-off areas sized between 10 and 20 ha that are free of foxes and other larger predatory mammals. The 2009 breeding-season actually started off with an increase in the known population number - the spring count revealed no less than 114 individuals! That's exactly twice the number counted during the population's worst days in 1997. Our strategy for this breeding season was to focus more on achieving breeding success of the free-living population, and less on efforts to rescue threatened clutches for artificial incubating and hand-rearing. Primarily the approach of fox-free enclosures was intended to be optimised. This strategy has worked quite well in the SPA " Havellaendisches Luch" with about ten juveniles fledging annually for several years, but has not been as successful in the other two Great Bustard areas so far, even though there are also fenced-off areas provided. Therefore a cocktail of conservation measures were prepared in the "Belziger Landschaftswiesen" planned in the SPA "Fiener Bruch" including slight changes in the management of the enclosures and intensified monitoring. Among these measures the removal of a row of some 120 tall poplar trees in the core zone of the Belzig area has proved the most successful. The area has become more open and habitat structures that supported predator species such as foxes, corvids and White-tailed Eagles have disappeared. A traditional bustard display site (lek) was reactivated immediately, and there were not less than 21 breeding attempts from at least 12 different females inside the adjacent enclosure. Bad weather conditions in late May and early June meant that many clutches and small chicks were Inst Fortunately replacement clutches were laid and a total of twenty juveniles finally fledged in the three Great Bustard areas. Sadly, not one of the breeding attempts outside the enclosures was successful. Nevertheless, we still enjoyed the highest number of fledged



bustards for decades! The 2009 artificial breeding program was also successful. Altogether 44 eggs from early breeding attempts were rescued and 90.0 % of these collected eggs were fertile. (Experience shows that nearly 100 % of early clutches are predated so removing them creates no additional risk for the population: on the plus side replacement clutches are laid until July.) Over the last thirty years the insemination rate has increased decade on decade and surprisingly is still rising. This reflects a low level of disturbance in the conservation areas and a healthy population structure. 85.0 % of the fertile eggs hatched, one of the best ever totals. Inevitably not all of the hatched birds survived, and some injured birds had to remain in captivity. Additionally, two males were sent to Wiltshire to support the English project. Finally 19 birds were released in the Belzig area. This is not as much as in other years when up to 70 eggs were collected, but taking an optimistic view, it is much more important that there were more offspring born in the wild than born from the artificial breeding program. Our target is to - step by step - further bias this balance towards the naturally bred juveniles. Last but not least, it is worth mentioning that the release period was more successful than in previous years due to changes in the methodology we used. In principle we want to reduce the birds' contact with people as much as possible, but White-tailed Eagles have taken many young and still-naïve released bustards in the past and we decided that we had to take action to prevent this happening again. An old "guiding

method" was re-activated with staff leading the young birds on walks around the release area, and then gradually giving the birds independence from human care instead of leaving them immediately after release. The shelter provided by the staff, combined with better development of flight muscles and predator awareness did indeed lead to reduced mortality. Slight methodological changes compared with the 1980s should reduce the risk of the bustards approaching humans in later life. Whilst the breeding season was very successful, it is a well-known phenomenon in Great Bustard conservation that every success is followed by a setback! So, the very best breeding season for decades was followed by the hardest winter for many years. Central European bustards are essentially non-migratory, and before 1986 'winter flights' (where birds leave the breeding grounds in hard weather) regularly led to high mortality. Additionally, the birds that remained suffered losses due to harsh winter conditions. Since the late 1980s there has been increasing evidence that winterflights are no longer occurring, possibly one of the very few advantages of climate change. Our biggest fear was that as it became colder and colder from late December with increasing snow-cover (which lasted till March) birds would be forced to move into sub-optimal sites. Surprisingly, the Havelland population consisting of 62 individuals stayed in its traditional winter range without any winter mortality.

Unfortunately though, on February 21st one of the old males died after a collision with a

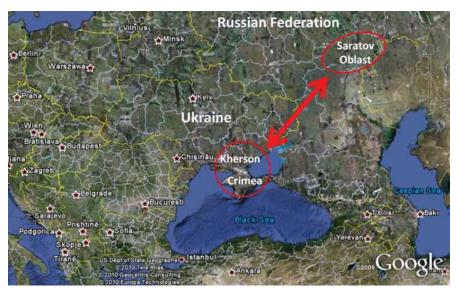
power line. However, a number of birds of the Belzig / Fiener Bruch population did indeed disappear. Some were subsequently observed up to 400 km away and as of writing (April 2010) not all of these birds have arrived back on the breeding grounds. At the moment a total of 105 individuals of this population has been accounted for, and there is little hope that more birds have survived. This is nine birds less than the previous year, and substantially less than the 120 which might have been expected after the successful 2009 season. Nevertheless, we probably have to be happy – it could have been much worse!

For more details of the German project see www.mugv.brandenburg.de/cms/detail.ph p/bb2.c.552671.de



© Brandenburg State Bird Conservation Centre

## Winter in the Ukraine



Saratov's Great Bustards: suspected breeding and non-breeding areas

Where do the Saratov Great Bustards (the population from which our release birds are sourced) spend the winter? Al Dawes, GBG's Release-site Manager, travelled to the Ukraine to find out...

It is widely thought that the entire Saratov bustard population winter 1,000 km southwest in southern Ukraine, mainly in the Kherson Oblast and Crimea peninsula, where the resident 700 or so Great Bustards are joined in winter by a further 6,000-7,000 birds. Having been out to Saratov several times during spring, summer and autumn for surveys, egg rescuing and chick rearing tasks, winter is the last part of the annual cycle of the Saratov Great Bustard population which I have not witnessed. So when the opportunity came up to assist with the 2010 winter census of Great Bustards in Ukraine, I jumped at the chance! I was joined by GBG volunteer and former editor of Otis, John Mackenzie-Grieve and by bustard expert Paul Goriup, the Chairman of the Great Bustard

Consultative Committee and a regular tour

leader for Ukraine-based Salix Nature Tours. With Sergei Prokopenko, a local ornithologist and provider of our 4x4, we formed one of nine teams of Bustard specialists from Ukraine, Germany and the UK, meeting up in Askania Nova, a 2,300 hectare biosphere reserve and Europe's largest area of natural steppe, in southern Ukraine. Very exciting however, winter blizzards and January temperatures below -25C probably aren't the best conditions to try and glimpse rare Saiga Antelope and Przewalski's Horses roaming the Reserve! From Askania Nova we headed off to survey as much of the Kherson and Crimea territories as possible within a week. Saratov's Great Bustards fly southwest to Ukraine to escape harsh winter temperatures of -30C and deep snow cover which would otherwise prevent them from feeding. It can still be cold (-15C) in Ukraine, but generally temperatures are above freezing in Crimea and most importantly even if temperatures

are very low there is usually only a light dusting of snow so the birds can still find food. Our team had been tasked with surveying the very southeast tip of Ukraine, around Kerch, on the Crimea Peninsula. As luck would have it (!) we had chosen to visit during the hardest winter in living memory, which had resulted in the entire peninsula being covered in a layer of inch-thick ice and a substantial covering of snow on top. Everything, including the tiniest frond of exposed vegetation, was encased in thick ice. While this was an incredibly beautiful sight, we felt of course that it must have had strong repercussions for wildlife dependent on grazing vegetation, such as Great Bustards. Eager to get out and see whether there were any Great Bustards surviving in these unusually harsh conditions we were just 10 minutes into our first survey before we got dramatically stuck in mud. Just hours after first meeting Sergei we were left in mild panic watching him walk off into the blizzard to get help from somewhere... To our disbelief he returned within an hour with just the vehicle for the job – a crane which was out repairing powerlines broken by the weight of ice hanging off them. Once rescued we turned around and set off back to the hotel, our tails between our legs. Thankfully over the following few days the weather settled and we were able to complete a couple of surveys of the southern tip of Kerch. However, pushing, pulling and digging the 4x4 out of the deep snow became something of a theme for the rest of the week. We had been asked to record and count all the species of



census an even more pleasurable task for four birdwatchers! With 'better' weather it wasn't long before we managed to actually find some birds. Despite the conditions the number of larks was simply astonishing with counts of flocks having to be estimated in the hundreds. There were huge numbers of Skylarks, large flocks of Calandra and even the odd Lesser Short-toed and Crested Lark, all concentrated next to the roads and tracks where they picked at the tiniest morsels of seeds and grit disturbed by passing vehicles. With a total list of 82 species, including specialities such as Red-breasted Goose, White-fronted Goose, Pallas' Gull and Pygmy Cormorant, it was perhaps the sheer number and diversity of the raptors and owls that impressed the most: fifteen species in all, including Imperial Eagle, over fifty Hen Harriers, thirty Rough-legged Buzzards, Long-legged Buzzards, Saker Falcons and nearly 150 Long-eared Owls! It seems raptors were one group of birds that did well this winter, no doubt taking advantage of all the weakened birds dependent on food covered by the ice and snow. Eventually we managed to find some Great Bustards and over the week we saw a total of nearly 700! We found several flocks of around 150 individuals but also some smaller flocks of around 50 birds. Interestingly several of these flocks were found on areas of steppe grassland and often near to roads and tracks rather than on the vast 400 hectare fields of winter wheat or oil seed rape which, according to the text books, is where one should expect to see them.

birds we found, which just made the whole

All our sightings of Great Bustards, and in terms of numbers most bird species in general, were concentrated in the southern, less exposed part of the peninsula. Perhaps they had flown as far south as possible without wanting, quite understandably, to make the 300 km crossing over the stormy Black Sea to Turkey. One potentially significant observation was the number of swans and geese flying high overhead in a southwest direction. Were these birds that would normally stay the winter in Crimea moving on because of the hard weather? We even saw a flock of Great Bustards amongst them, flying high over a frozen Black Sea resort, eerily deserted for the winter. It will be interesting to learn how many Great Bustards were counted in the entire Ukrainian survey and how this compares with numbers counted in milder winters. Hopefully they all managed to cope with this season's unusual conditions and returned safely to Saratov in the spring, especially those birds that decided to fly the extra mile in the hope of finding a milder winter. If you have enjoyed reading about the census, why not get involved next year? The Ukrainian team are always looking for people to help with the winter census so if you fancy getting cold but seeing a fabulous number of wintering birds in a truly magnificent part of the world in the process then get in touch with us using the email addresses at the front of this magazine. Or, if it all sounds too chilly for you, why not join Paul Goriup on a spring trip to Ukraine and see displaying Great Bustards with a stellar supporting cast of summer birds.



Surveying in the Ukraine © GBG library

#### Take a trip with Salix

The Ukraine offers fantastic birdwatching, stunning scenery, and culture going back thousands of years. If you'd like to visit we recommend Salix Nature Tours, an Anglo-Ukrainian company specialising in high quality birdwatching, nature, heritage and fishing tours in southern Ukraine. For details please see http://www.salix.od.ua/

## Central Asian Great Bustard Project



Great Bustard habitat - Wheat fields in Northern Mongolia. Photo A. Kessler

Mimi Kessler is a doctoral student in biology at Arizona State University, USA. She first travelled to Russia in 1993 as a high school exchange student and has since spent about 6 years in Central Asia, including Kazakhstan, Southern Russia, Uzbekistan and Mongolia. She now speaks Russian and Khalkha Mongolian fluently. Sain baits-

#### gaana uu! Greetings from Mongolia!

I am writing from northern Mongolia, where our small team has been researching Great Bustards since 2006. This field season we are engaged in the capture of Asian Great Bustards *Otis tarda dybowskii* for the attachment of satellite transmitters. We use these transmitters to monitor habitat use, migration patterns, and mortality rates of this endangered subspecies. There have been few surveys undertaken on the Asian subspecies of Great Bustard, but BirdLife International estimates that just 4000 individuals remain in

southeast Siberia (Russia), Mongolia, and China. It is estimated that of this total just 1500 Great Bustards remain in Mongolia, a vast country the size of Western Europe composed almost entirely of steppe habitat. The Great Bustard is included on the Mongolian Red List, and is protected by law. Though the two subspecies of Great Bustard have much in common, there are some important differences in appearance and behavior. Asian Great Bustards differ from the European subspecies most notably in the coloration of the median and lesser wing coverts. In Asian Great Bustards these are grey to white, resulting in a broad white bar across the folded wing (especially in males). Great Bustards in Western Europe typically make only small seasonal

movements, and populations on the Volga River in Russia complete a one-week

migration to Ukraine. In comparison the Asian Great Bustards we are monitoring in Mongolia carry out an incredible, two month-long, 2000km trip to overwinter in

China. It appears that this lengthy migration also puts these populations at substantial risk. Four of nine birds tagged so far have died on their migratory route. By travelling to the site of last transmission, investigating any physical remains and the state of the transmitter, and interviewing local people, our team is able to determine the cause of death. One appears to have died of natural causes, but in three of four cases (over thirty percent of our total sample of nine bustards) the bird was poached while at a migratory stopover. Hunting for wild game is a popular activity. According to our extensive interviews with local people, bustard hunting today is carried out at all economic levels, from local herders, to wheat farmers, to middle and upper class urban residents, to foreign sport hunters. There are only a handful of paved long-distance roads in Mongolia, slowing travel greatly, but bustard populations have been exterminated or are becoming rare in those areas most accessible to urban populations. The areas in which we

work now are quite remote - requiring a two to three-day overland trip from the capital. . The bustard populations here are the healthiest we have found in Mongolia with leks containing about 40 birds. However, the current extension of the road network under the Millenium Road Plan will allow quicker access to these and many other sites. Outside of the capital city, Mongolia remains a primarily nomadic culture. People live in traditional gers, better known in English as 'yurts', and herd their livestock - horses, cows, goats, sheep and camels -through four seasonal pastures. The traditional diet is that of a nomadic herding culture, based on meat and milk products. Though Mongolians prefer red meat an exception is sometimes made for bustard meat: thus the traditional saying, "toodognii mah togoo duurene!" or "bustard meat will fill the kettle!" The nomadic lifestyle is typically compatible with the habits of Great Bustards. These birds are incredibly wary - preferring to keep a 500 m to 1 km distance from humans. The absence of humans from one-half to three-quarters of the landscape at any time (for example, on winter pastures during summer), means that Great Bustards have extensive areas to roam without much interference from humans. Agriculture is carried out at a low intensity and without pesticides for now. As in Europe, there appears to be a problem with loss of eggs and chicks due to the activity of farm machinery as well as to foxes and crows. Trampling of nests by livestock may also be a problem. Overhead cabling is currently minimal, but as Mongolia develops there are

likely to be more mortalities due to collisions with power lines. Given the large role human activities appear to play in the decline of these populations, our team places an emphasis on interaction with the community and carries out programs encouraging pride in this charismatic species. We organise educational games and fieldtrips for local schoolchildren, give presentations to adults, have written and distributed curricula for schoolteachers, and participate in radio programs. Our team (with the exception of myself!) is composed entirely of local people. We encourage local residents to join us in research activities, and there is rarely a day when there isn't someone from the community alongside us in our research cabin or van. We engage in a two-way exchange of information with local people, who share information about these difficult-to-locate birds with the team. To reach an audience beyond our immediate research area, our team is fundraising for a short documentary on these populations of Great Bustard to be aired on Mongolian television. We believe that educating people about this species' vulnerable status and low population replacement rate will change people's attitude towards this magnificent

Learn more about our work at our website, www.public.asu.edu/~aekessle.

bird.



'Dybowski's Great Bustard takes flight, Mongolia © Byung-Sun Chun/WSCC of Mongolia

Mimi spearheaded the Central Asian Great Bustard Project as a dissertation project. This ambitious work has been supported with funding from a number of conservation organizations, including the Disney Worldwide Conservation Fund, **Rufford Small Grants for Nature** Conservation, Cleveland Metroparks Zoo, and American Museum of Natural History Chapman Memorial Fund. Industry sponsors Celestron, Inc. and Microwave Telemetry have provided in-kind donations. She has also received a US National Science Foundation Graduate Research Fellowship, an US NSEP Boren Graduate Fellowship, Wildlife Conservation Society Graduate Research Fellowship, and IREX IARO Fellowship to support this work. The project still requires funding though, and anyone willing to contribute will find details on the Project's website. www.public.asu.edu/~aekessle

## Stig of the Pump



Otis Editor Charlie Moores talks to the genial Dane behind 'Great Bustard' beer

I'll be honest from the outset and admit that what I know about beer could easily be squeezed onto a page far smaller than this one, but Stig Andersen, a Danish Master Brewer who owns Stonehenge Ales, could - as I discovered on a very pleasant visit to his brewery in Netheravon - write an

encyclopaedia (and this may well be pushing the many 'danish+beer' references I'm trying hard to resist making, but 'it would probably be the best beer encyclopaedia in the world'...) . Stig, as he readily admits, knows very little about my particular passion - birds - so our conversation could have been rather short and a little awkward, but fortunately, like so many genuinely enthusiastic people, Stig has the knack of bringing his subject alive and (despite being an evidently busy brewer, and despite the brow-furrowingly 'good news' that his teenage daughter Amalie has phoned - moments before I arrived - to say

than happy to take the time to explain about hops, malts, and micro-brewing to his increasingly rapt audience of one! What, I want to know first though, is the origin of Stonehenge Ales? Gaining a BHons in chemical engineering, Stig sat his Masters at the renowned Scandinavian School of Brewing in Copenhagen, close to the equally well-known Carlsberg Brewery. Within a few years he found himself the Director of a Danish brewery which pumped out nondescript lagers 24 hours a day in a factory-style facility that was far removed from the hands-on specialist business he'd wanted to run. Producing three different labels to put on three beers that were essentially the same except for the amount of water in each 'brand' was the final straw, and in 1993 - turning his back on frothy, tasteless drinks for ever - he bought Bunce's Brewery, set in a beautiful old mill on the River Avon, to take up the challenge "of brewing good English beer". In 1998, wanting to clearly establish a new identity for his line of beers, 'Stonehenge Ales' was born. Sitting in a warm kitchen on the top floor of the mill, decorated with his artist wife's pictures and with stunning views over the river and the water meadows below, it all sounds very straightforward. Stig though, quickly puts me straight. "When we first came here", he says, "Anna, my wife, sat down on the steps outside and cried. It was like going back in time 50 years after our life in Denmark. We lived above the brewery in two small rooms, cooked on an ancient Rayburn, and it was

she'd just passed her driving-test!) is more

very, very hard." And now, I ask him a little tentatively? Stig smiles a huge smile and points proudly to the framed awards ('Danish Dynamite' seems to have picked up the most accolades from the UK's notoriously picky beer aficionados), the new house they've built by the mill, talks about the team he works with, and the retailers he supplies. He is, he adds with a wink, selling 'overseas' now: he is taking his 'Pigswill' beer and the green-tinged 'Sign of Spring' to the 2010 CAMRA AGM on the Isle of Man. There's little doubt that Stig genuinely loves his personal corner of Salisbury Plain and the life he's created over the last seventeen years. I'm getting swept up in his enthusiasm and at this point decide to trundle out what little beer knowledge I have and turn the subject to 'Great Bustard', the bottled beer that Stig created and which he generously sells to the GBG at a heavily-discounted price. I'm not a huge beer-drinker I begin unwisely, but I do know what I like, and I like 'Great Bustard' a lot. It reminds me, I continue headlong into a vat of my own making, of the 'red beers' I used to occasionally drink in the US... Stig's patient smile begins to slip a little, and a look comes into his eyes that suggests he is now questioning why the GBG would send someone so ill-informed to interview him about beer. "We use the English hop 'First Gold' in 'Great Bustard', " he says softly. It's the verbal equivalent of an amber trafficlight, and I've been driving long enough to know when to stop. I feel I should apologise, but Stig's smile is back in place. "It is a particularly fruity beer," he concedes.



"Maybe the mix of malts is similar," he adds (kindly leaving out the words, 'to someone who knows nothing whatsoever about hops, malt, and beer'). I smile weakly, deciding this is not a subject that I'm comfortable

discussing with a Master Brewer! Stig obviously feels a little education wouldn't go amiss. He takes me to a store-room groaning with pallets of hops, and plunges a large hand into a sack full of vacuum-packed 'Cascade' hops. He rubs them between his palms to release the oils and a citrussy odour fills my nose. Next he sweeps up a mound of 'German Hershbrucker' from another bag and crumbles these. They seem (to me anyway) to be more flowery, a little more neutral. They are strikingly different anyway. I'm beginning to understand. Use fresh, filtered water, choose your hops well, stir a carefully-selected blend of rye malts, caramelised malts, crystal malts or the allconquering barley Maris Otter Pale Ale malt into the mix and hey presto, a range of award-winning beers are created. Stig clearly feels totally at home in this large room, surrounded by sacks of ingredients, mentally running through the processes that change water into something so beautifully-coloured and distinctly-flavoured. It's little wonder that making the mass-produced, gassy liquid he was churning out before he moved to Wiltshire was so unsatisfactory. As we're heading back to the office I ask Stig how he got involved with the GBG. Times are undoubtedly tough for a brewer right now. Pubs are closing at an unprecedented rate and beer taxes rise annually. There are 700



Stig is - literally - at home in the brewery he loves

brewers in the UK all chasing fewer and fewer outlets and beer-drinkers are continually demanding new beers. It can't be easy to make a living at all, yet Stig plans to continue giving away part of his profits from 'Great Bustard' beer to support our work. He gazes into the distance. "Well," he says, "one day Dave Waters came down and explained about his project, and that he was looking for sponsors. I couldn't give him a one-off donation - I just didn't have it at that time - so I suggested I create an entirely new beer. I came up with 'Great Bustard'." Have you been up to see the bustards, I ask? Stig shakes his head. "Not for a while, no. I'm not much of a birdwatcher really". I feel compelled to ask why, given the financial difficulties the brewery industry faces and the tiny revenues he admits he makes from 'Great Bustard' he has pledged - essentially to keep making beer for us. Ah, he says with another broad smile, how can anyone say no to Dave? The irresistible 'Dave Waters' effect ('probably the most powerful force in Wiltshire... '). I nod understandingly, and just like that - Stig and I find ourselves on entirely common ground...



#### Bag a box of Bustard!

Stonehenge Ales is located in The Old Mill, Netheravon, near Salisbury in Wiltshire. The brewery is open for off-licence sales during the week, and visits can be arranged by phoning 01980 670631.

'Great Bustard' really is a greattasting beer and is perhaps the most flavoursome way that beer lovers can support the GBG. Next time you get the chance why not take a case or two home!

## Biodiversity and Salisbury Plain



The Plain is home to an incredible number of plants and animals - © GBG library

## Otis Editor Charlie Moores looks at the links that connect 2010, biodiversity, and the GBG.

At the 83rd Plenary Meeting of the United Nations in December 2006, delegates adopted Resolution 61/203 making 2010 the International Year of Biodiversity (IYB) - the year, in other words, when commitments and agreements signed in 2001 as part of the Convention on Biological Diversity should result in "halting the loss of biodiversity" on Planet Earth. A laudable aim which brings up an important question: just what is biodiversity? A current definition of biodiversity is the "variation of life at all levels of biological organisation". Simply put it's a measure of all the different forms of life on the planet, from plants to birds to insects to corals to all the unquantifiable micro-organisms that live in the soil, sea and

on other micro-organisms - and of course, us humans. It is highest in regions of the world, like tropical rainforests, that have remained relatively stable and unaffected by climatic change (biodiversity needs time to build) and tends to be lower in areas of the world, like the UK, which have been regularly swept clean of its biodiversity by advancing and retreating ice-sheets. Biodiversity as a measure can be applied to the planet as a whole, or to the variety of life in your garden. The planet's biodiversity changes with time, with the climate, catastrophic events like meteor impacts or volcanic eruptions, and uniquely in the planet's history - it's now changing because of us. Forest clearance, conversion of land for agriculture, air and water pollution, and over-consumption are all diminishing the planet's biodiversity at an astonishing rate. Biodiversity is not a

the rest of life on earth, but it matters to us hugely from the food we eat to the resources we use: without bees there is no pollination of agricultural plants (especially fruits); many pharmaceutical drugs are sourced from plants; tropical wild-caught animals (especially fish) feed many of the world's poorer people; and all of the above themselves depend on a wide range of other life-forms to exist. As the International Union for the Conservation of Nature (IUCN), the group organising the IYB, says on its website, "We are facing a serious crisis in biodiversity". The IUCN maintains the Red List of Threatened Species on which so many conservation decisions are made, and the List tells a depressing story. For instance right now a minimum of 16,928 larger animal species are threatened with extinction: 21% of all mammals, 12% of all birds, 31% of all reptiles, 30% of all amphibians and 37% of all fish. The Great Bustard is one of them. Threatened principally by changes in agriculture, suburbanisation of the countryside and hunting, the range of the magnificent Great Bustard has contracted hugely. It was lost to England - where it was once a well-known part of the country's biodiversity - around the 1840s. Its range in Europe has contracted massively and (as another article in the issue of Otis explains) the eastern populations are small, vulnerable, and in urgent need of protection too. Returning the Great Bustard to its former

haunts is not a simple matter, and one of the

reasons is the loss of biodiversity across its





range. Great Bustards need space to live and breed in (habitat), but that habitat is useless if it's lifeless. Bustards - all birds - need a food source to sustain themselves and their young: plants, invertebrates, small mammals and amphibians for example. And the plants need bees to pollinate them, the invertebrates need smaller invertebrates or plants to feed on, and so on right on down to the bacteria that fix the nitrogen that plants use to build proteins. Salisbury Plain is one of the few intact grassland areas in the UK. It is still rich in biodiversity (13 species of nationally rare and scarce plants and 67 species of rare and scarce invertebrates are found on the unimproved areas of the Plain) making it a habitat suitable for the return of one of its former residents - the Great Bustard. In the International Year of Biodiversity we're proud to be able to say that we're actively helping restore a missing element of the Plain's biodiversity. Interestingly our work is having other

positive impacts: our release-site is used by a number of scarce breeding birds as well as the bustards for example, and the unploughed bank behind our hide is dotted with orchids in the summer. As a member of the GBG you are helping us preserve the biodiversity of Salisbury Plain, and for that we're very grateful. On a larger scale though, to ensure the International Year of Biodiversity achieves anything at all we must all understand what biodiversity is, how important it is to life on Earth and to again see ourselves as part of the world's "variation of life" rather than somehow separate from it. That will make far more difference in the long run than 'commitments and agreements' agreed almost a decade ago can ever do.

For more information see;
International Year of Biodiversity:
www.countdown2010.net/

Convention on Biological Diversity: www.cbd.int/

International Union for the

Conservation of Nature: www.iucn.org

John Dowsett from Plain Action says "Salisbury Plain has a remarkable biodiversity and Plain Action is pleased to support the GBG in its efforts to bring that biodiversity - and the Great Bustard - to a wider audience".

## GBG Biodiversity Safaris 19th & 22nd May 2010

The GBG is offering a unique opportunity to experience the special biodiversity of Salisbury Plain. As the largest expanse of chalk grassland in western Europe, Salisbury Plain is recognised for its internationally important flora and fauna.

Join expert guides for a tour that will focus on the butterflies, moths, plants and birds of this special area. The tour will also focus on the conservation work being done at the Great Bustard releasesite both by the landowner and the GBG to benefit all wildlife.

The Safaris start at 10am

The cost for this fantastic and unique day out is £45 per person, payable in advance.

Booking is essential. Places are extremely limited and will be taken quickly.

Please contact us by email; visit@greatbustard.org or phone 07817 971 327 as soon as possible.

More information at www.greatbustard.org

## New GBG website

#### More user features added



The new Great Bustard Group website launched this month, with a range of new features and even more sections coming soon.

A news system lets all members of the GBG team post regular updates on the site from anywhere in the world and lets visitors sign up to the Great Bustard email newsletter.

New sections such as UK Reintroduction give an expanded history of the project and its goals, whilst the Events section and Help sections make it easy to participate in aiding the project and Bustards worldwide.

Galleries on the website give visitors an unprecedented view of activities and events run by the GBG as well as the birds themselves on Salisbury Plain and

increasingly across Britain. The site also now provides a quick way to report sightings of Great Bustards to the GBG to help track and monitor the birds as they move across the country.

#### Why not follow us on Facebook?





You can now also follow the GBG on Facebook.

Facebook is a social utility that connects

people with friends and others who work, study and live around them. It helps you connect and share with the people in your life and is a great way of following the GBG and getting updated on events as they happen.

Simply go to
www.facebook.com and
search for 'great bustard
group.'





# The Great Bustards are twittering ...!

#### What is Twitter?

to post very short updates, essentially 'blogging without the waffle'. You can choose to follow people who interest you by signing up for an account at www.twitter.com.

Get the latest GBG updates, view photos and chat with the team and other supporters by visiting:

http://twitter.com/bustardgroup

http://twitten.com/bustardgroup

## Bustardwatch

# With Release Site Manager - Al Dawes Spring at the Release Site



As UK readers at least will know, the winter of 2009/10 was the harshest for many decades. In the last issue of Otis we looked at how the weather has affected our birds and explained that, provided the snow didn't cover their food (primarily plants and their leaves) they wouldn't be too badly impacted.

Four birds, Blue 03, Yellow 18, Green 06 (all females) and Purple 05 (a male) remained around the release-site for most of the winter. The three females in particular have been seen regularly, while Purple 05 has been ranging more widely and has been seen at a site near Stonehenge where he has met up with another female, Yellow 22.

A small number of our birds are now wintering on the Somerset Levels. Of particular interest is Yellow 07, the male bird that (probably) fathered last year's chicks. He also spent time in the Wylye Valley before returning to the release-site in early April

where, with P05, he immediately began displaying to our decoy birds (focussing much of his energy on a model painted to look like another displaying male). Red 28 also wintered on the Levels, but in the first week of April was re-found in Oxfordshire. Our thanks to Lynne Newton at www.foxybiddy.com for permission to use her excellent photographs.

Orange 15 (another female) returned to the release-site in early January and left again in mid-March: her present whereabouts are unknown but our hope is that she'll return to the Plain for the breeding season. With the onset of spring all eyes are of course on the release-site where much of last year's prebreeding activity took place. As of writing (mid-April) no mating has been observed, although P05 has attempted to mate with G06 who rebuffed his advances, leaving him to quote a GBG staff member - "a little deflated". Conditions in and around the vicinity of the release-site are looking very good again this year, and we're hopeful that our birds will rear young for the second year in succession.





## See Great Bustards in the wild



Visitors play an extremely important part in the project. Every penny received from visits goes toward the re-introduction of these magnificent birds.

## Visit the UK's only release site

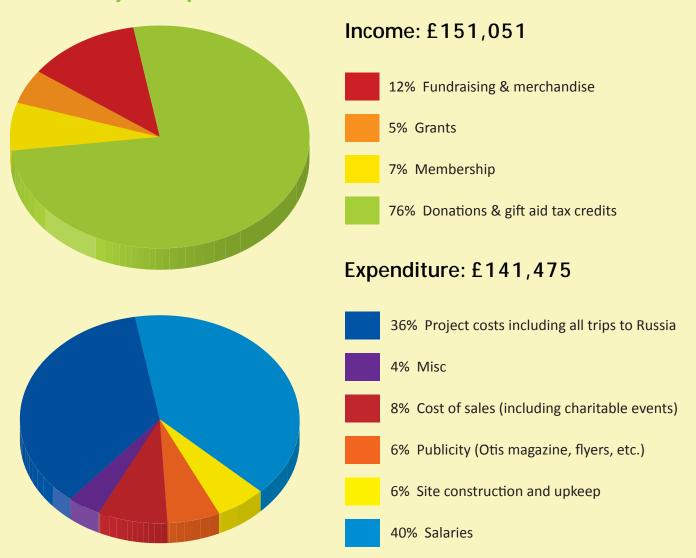
- Visits cost £10 per person
- Visits are FREE for members!
- Presentation by the Great Bustard Group is included

To book email: visit@greatbustard.org or phone: 07817 971 327

## **GBG** Accounts



#### Financial year April 2008 - March 2009



## A message from David Bond, Chairman of the Trustees, Great Bustard Group, April 2010

"The Great Bustard Group is uniquely a "single species" trust and we continue to be reliant upon the goodwill, enthusiasm and generosity of our members, volunteers and benefactors. The new look *Otis*, together with the new, proactive website format, has already generated significant interest and a boost in membership. We have, with the

successful hatching of the first eggs and fledging of two grown chicks, proven the viability of the project and now the hard work has begun to establish a self-sustaining population of Great Bustards in the United Kingdom. The GBG would like to thank all of our members, volunteers, donors and benefactors for their continued support and

efforts. Every new membership and financial contribution takes us forward in re-establishing this truly magnificent bird as a UK breeding species."

## Breeding success in Spain

### Estlin Waters looks at a report published in Ibis

Now that Great Bustards have successfully fledged young again in Britain, it is interesting to look at breeding success elsewhere.

In fact until recently there has been little detailed published information. A remarkable study comes from the Villafafila Wildlife Reserve in the Province of Zamora in North-west Spain. This area holds the world's densest population of Great Bustards (Manuel B Morales, Juan C Alonso and Javier Alonso in *Ibis*, 2002, volume 144, pages 293-300). The Villafafila area has been described in earlier numbers of Otis (numbers 18 and 27) by Bill Jordan. In the Ibis paper, some 700 adult females were studied from 1987 to 1998; 32 of these were individually marked. The highest chick mortality (60 to 70%) was in the first three months when growth rates are highest. The term chick is used in this present article though the Ibis paper refers to them as yearlings. In this country, this may be confusing as the Concise Oxford Dictionary gives a definition of yearling as more than one and less than two years old. By September of the year they hatched they are, of course, in juvenile plumage. This study defined productivity as the number of chicks, in September, divided by the number of adult females (two years and over). September was an appropriate month to measure mortality as, from September and up to the time of independence from the mother (March-April of the year after hatching),

mortality was less than 10%, thus being

comparable to adult mortality rates.

Observations were also easier in September

due to a lack of vegetation cover for the birds to hide in after the harvest. Overall, productivity was low with a mean of 0.14 chicks per adult female. This average hides great variation between individual years as productivity varied from 0.04 to 0.29. Put more simply, the yearly number of chicks, in September, in this study area, ranged from 27 to 209 (with an average over the years of 99). The authors state that high annual

productivity resulted from a high proportion of females rearing two chicks but other factors must also have had an important effect. Productivity varied by the age of the females; it was significantly higher in birds aged 6 years and over compared with younger birds. Although a two year old marked female had a chick, it died. The mean age of first successful breeding (i.e. the chick surviving until September) was 4.2 years of age. Females that bred successfully in one year were less likely to breed successfully in the next, presumably because they

continued to feed their chicks up to, and sometimes even beyond, the next breeding season. The number of chicks per family (chicks in September per successful adult female) varied over the years from 1.07 to 1.33 (with a mean of 1.16). Thus, in the best year studied, as many as one-third of the successful mothers had two chicks still alive in September (this assumes that there were no families with three chicks). The major

causes of loss of eggs and chick mortality are egg loss to corvids and chick predation by foxes and dogs but starvation may also be important. Food scarcity after dry winters seemed to be a major cause of low productivity. Morales et al looked for factors that contributed to the variation in breeding success between years. They found that winter rain before the breeding season (in October to March) was associated with a higher breeding success. Rain around the time of hatching was associated with a lower breeding success. These are interesting findings, based on a large and important study, and are of great value in conservation. For example, the finding that low winter rain in the study area is important, perhaps leading to poor nutrition, suggests that the provision of drought resistant crops (eg alfala) might increase productivity in this part of Spain. But these findings may well not all apply to other areas such as Salisbury Plain because of the very different conditions including habitat, weather, food and predators. Villafafila is a dry farmland area in which some 90% of the land in the study area is cultivated wheat and barley. This study gives the best evidence that Great Bustards have a low reproductive rate but population viability depends on the fact that adults are long-lived.

We thank Juan Carlos for comments and permission to publish this note in **Otis**.

## Join the GBG & help us to bring the Bustard back

www.greatbustard.org • membership@greatbustard.org

Postal address: 1 Down Barn Close, Winterbourne Gunner, Salisbury, Wiltshire, SP4 6JP



#### MEMBERSHIP

#### Pay monthly from just £1.66 a month

| Become a memb   | per of the Great Bustard Group to help secure the future of this amazing bird.  |
|---|---|
| Simply fill out the fo                                  | rm & send to the address shown above or give to a GBG staff member. Membership includes:  |
| Quarterly magazine                                      | e OTIS ● Booklet about the Great Bustard ● Free guided visits of the release site ● Invitations   |
| to all Fundraising a                                    | and Social Events ● Membership badge ● Car sticker  |
| Annual Membersi   | hip (tick box)  |
| Ordinary £20  | Family £25 Fellow £75 Life Member (Single payment of min £500)  |
| Your details  |   |
| Organisation (if app                                    | plicable)   |
| Title   | Forename Surname  |
| Address   | Phone   |
|   | Email   |
|   |   |
|   |   |
|   |   |
| Post code   |   |
| Payment method  | (nlease tick)   |
|   |   |
| Cheque (payable to                                      | o the Great Bustard Group) Monthly Standing Order   |
| Instruction to your                                     | Bank/Building Society to pay Monthly Standing Order   |
|   |   |
| To the Manager Bank/Buildi                              |   |
|   | Account Name  |
| Branch Address  | Sort Code   |
|   | Account Number  |
| Post Code   |   |
|   |   |
|   |   |
|   | Bustard Group (Nat West, 48, Blue Boar Row, Salisbury, Wiltshire, SP1 1DF, Account Number   |
| 29562325, Sort Code                                     | 54 - 41 - 19) the sum of ( <b>minimum £1.66</b> ) £ on 1st day of each month until further notice   |
| Donation  |   |
| I would like to make                                    | e a donation to the Great Bustard Group of £  |
| Gift Aid.   |   |
|   | pover the Inland Devenue will give up on extra 25s for every never have give  |
|   | payer, the Inland Revenue will give us an extra 25p for every pound you give.   |
| Please tick the box                                     |   |
| I am a UK taxpaver and re                               | and sign. It's that simple!   |
|   | equest that my membership and all gifts of money that I have made in the past four years and all future gifts of money that I make to   |
| Great Bustard Group from                                | equest that my membership and all gifts of money that I have made in the past four years and all future gifts of money that I make to<br>the date of this declaration be Gift Aid donations. I understand that I must pay an amount of Income Tax and/or Capital Gains Tax to |
| Great Bustard Group from                                | equest that my membership and all gifts of money that I have made in the past four years and all future gifts of money that I make to   |
| Great Bustard Group from<br>each tax year (6th April on | equest that my membership and all gifts of money that I have made in the past four years and all future gifts of money that I make to<br>the date of this declaration be Gift Aid donations. I understand that I must pay an amount of Income Tax and/or Capital Gains Tax in |

Membership Secretary, The Great Bustard Group, I Down Barn Close, Winterbourne Gunner, Salisbury, SP4 6JP.

qmsts xiffA 919d

Fold here, glue or tape edges closed



WILTSHIRE

charlie@wiltshirenaturewalks.co.uk



Affordable graphic design, web design & printing



WEB DESIGN

RINTING

www.aa1media.com

Tel: 01672 515 157

Mbl: 07800 649 498

Email: design@aa1media.com

DESIGN



# Enjoy the Wiltshire Countryside IVY HOUSE HOTEL

MARLBOROUGH

Great rates and the perfect base for exploring



To enquire call 01672 515333 www.ivyhousemarlborough.co.uk











