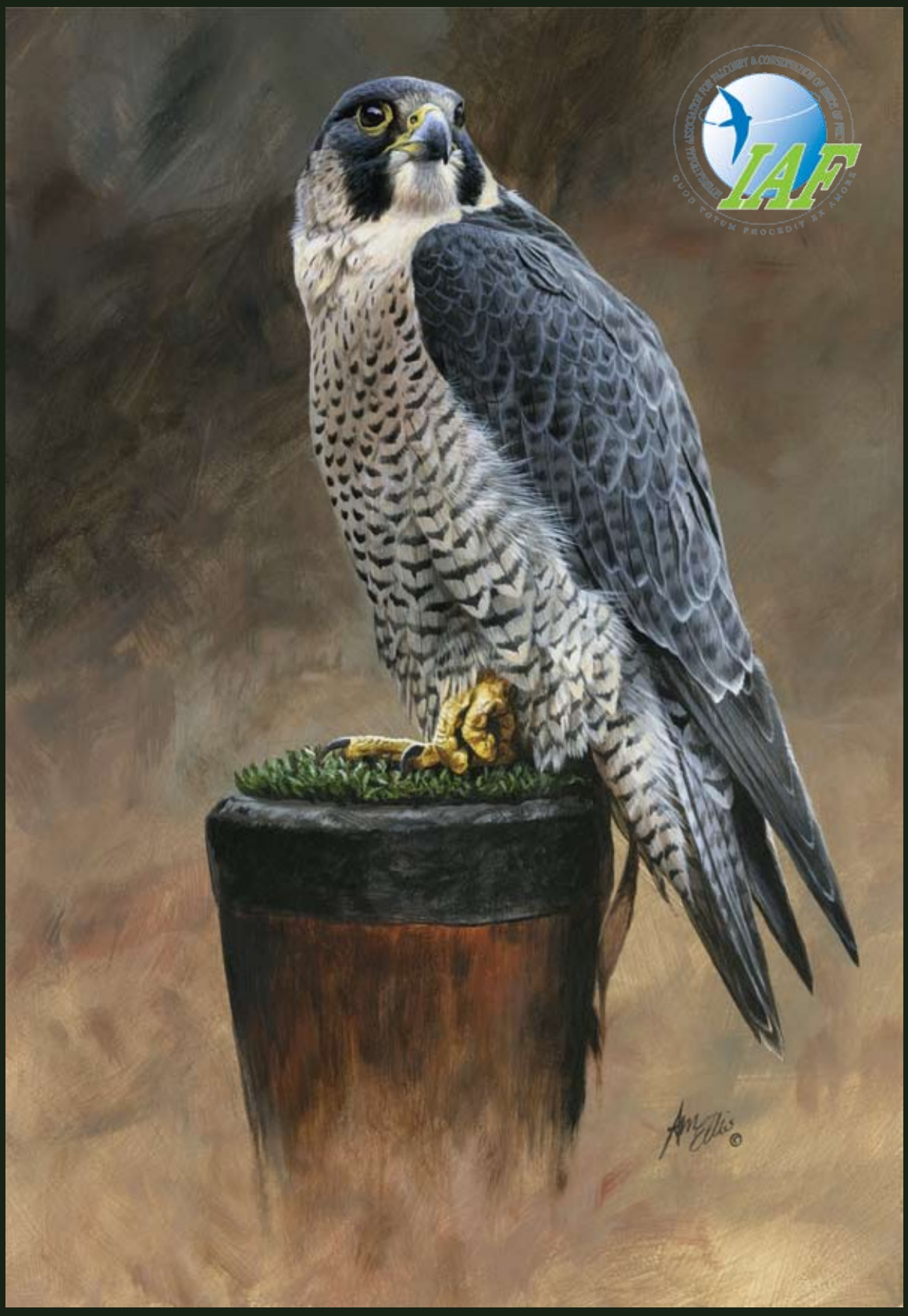
The International Journal of Falconry



Summer 2010

International Association for Falconry and Conservation of Birds of Prey

Member of IUCN

A Peregrine Falcon in its hood, a Curlew below
Oil on canvas - signed with monogram and dated '1844' - 36 x 28 1/4 in. (91.4 x 71.7 cm)

William Brodrick (1814-1888)

Despite being the son of a barrister and having a degree in medicine from Edinburgh University, William Brodrick's fascination with birds of prey instead led him to pursue a career in falconry and taxidermy. His knowledge in both these areas inspired a talent in avian portraiture which he used to produce a collection of paintings and several books on the subject of falcons. Together with Francis H. Salvin, Brodrick published `Falconry in the British Isles' which was long considered the best falconry book. For over 3,000 years Peregrine falcons have been used in falconry beginning with nomads in Central Asia. In this painting, the hooded hunter perches near his conquered stone curlew; a popular quarry among Arab falconers.

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Editors Forward

Today I cleaned out an aviary and reupholstered the perches, limed the floor and walls then stood back and installed Fleur, my brown female Peregrine for her first moult. So that is the hawking season, completed and in recession for at least five months in my routine focused upon game hawking. Maybe my unexpected sleep on the sofa this evening was some reaction to that sudden change in way of life routines and recognition that my long hawking season, which started last July, has been very strenuous and is now relieved into this period of rest. However it has undoubtedly been very enjoyable and now gives way to reflection - somebody recently asked me what that might be?

My whole falconry perspective is focused on the time of life for my falcon with awareness that its performance changes naturally with age dependent on experience creating its functioning neural pathways. It could be that it's not just coincidence that so many young birds die in the wild.

When wild falcons were the norm for falconry it used to be that trapped passage hawks were trained and entered to rooks for the spring season. The initial part of training was often unhurried and quite long. After rooks the falcon would then be moulted before being taken up again and retrained for a new discipline of game hawking by which time the creature was more than a year old, out of its juvenile mindset and developing into a mature psyche, naturally capable of establishing a relationship. In the wild a hawk of this age, although still not of mature mindset, would be showing its first signs of interest in its potential mate for subsequent breeding years.

In today's environment most of our falcons are captive bred in routines with little appreciation on the part of many falconers for values in terms of the falcon's natural protracted development. Today's falconer is in general not so close to nature as in years gone by, with little pressure for closeness to natural values. In general the falconer will have an objective mindset with a scientific outlook for understanding falconry as a process in which training technique is seen as the desired discipline. Most falconer's understanding of the dynamics of the falcon is founded on the conclusions of science and athletic training techniques, little related to traditional values of the sport but all simply adapted to fit an imposed concept of what falconry must be to conform to the modern falconers' way of life.

In general eyasses are fledged in July

and immediately enter a training regime generally focused upon the start of the game season in August or September. In game hawking falconers are focused upon the demands of a 'waiting on' style of flight. Training techniques to maximize immediate success set goals for achievement which unknowingly may well miss many nuances of natural balance and rounded characteristics in what is 'falcon'.

Most falconers seem to believe that it is somehow their own ineptness limiting progress and assume that occasionally they are just lucky in finding a star who has immediate success. Alternatively some falconers have learned that it takes several seasons to develop a falcon into a consummate game hawk but few seem endowed with belief in the relationship they create and its importance to both falconer and falcon. In our modern scientific world it is far easier to believe technique is everything and that this creature will respond like a machine rather than have to focus on the creative process in the art that is falconry.

On a separate subject this is the second edition of our new style of publication – my thanks to all who have contributed and in particular to Janusz Sielicki for his help in printing and distribution. We have been asked to make this Journal an available pathway for international publication of peer reviewed research papers and at the back of the Journal you will find the first of such contributions from Gail Robertson. We hope that this does not limit other less formal contributions and include several such items of interest in the usual manner.

By the time you receive this publication there will have been significant developments with regard to IAF's status in relation to UNESCO which will be covered in our next edition.

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Cover picture courtesy of Andrew Ellis.
A portrait of his own falcon 'Missy'. The pair have become well well known in the field over the past three seasons to his many friends. This picture is featured in Ed Pitchers new book *The Flying of Falcons* and the picture is also available as a print via Andy's website:
www.andrewellispaintings.com

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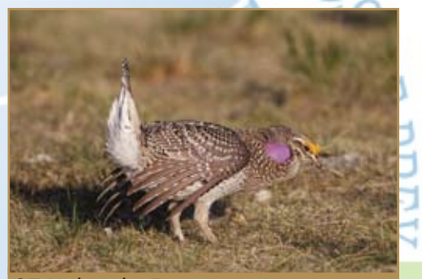

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IAF AGM 2010

Mojmirovce, Slovakia

Sun 17th - Sun 25th October

Annual General Meeting of the International Association for Falconry and Conservation of Birds of Prey

Hosted by The Slovak Falconers Club

The AGM IAF meet in Slovakia will be held as a continuity of Czech and Austrian falconers field meet, as thelargest gathering of falconers in Central Europe. Delegates can plan their attendance on both large events and then be transferred to Slovakia. On 17th October in the city of Kezmarok-Vrbov on the foothills of High Tatras Mountains, a unique falconers meet for IAF delegates will start for those who are interested to see this specialized falconry style, hunting Roe deer and fox by Golden eagles. On the evening of 19th October an AC meeting will be held in Slovak cottage style restaurant during the Eagle hunters meet. All delegates will be transferred by Slovak delegates to the village of Diakovce, where in the thermal spa resort a National Slovak Falconers Meet will be held, together with the IAF meeting.
Evenings will be dedicated for meetings and parties in a large tent designed as a Slovak countryside village. Every delegate is welcome to join this large event and stay as long they can afford. We have planned a daily fee of 75 EURO which covers accommodation, food, local transfers in hunting fields and permits for hunting grounds. The AGM is planned as a friendly relaxed gathering with lots of opportunities to see real falconry and hunting.
See below for an outline of the planned timeframe. Further details and a more detailed programme will follow.
Contact: **iafslovakia@centrum.sk**

Date	Programme
6th to 10th October	National Field Meet in Opočno
14th to 17th October	60th anniversary of Austrian Falconers Club
	IAF MEET IN SLOVAKIA
17th October	Arrival of IAF delegates, transfer from Austrian meet
18th to 19th October	Golden Eagle falconers meet - roe deer and fox hunting
19th October	**For IAF delegates** - evening AC IAF meeting in Tatra Mountains
20th October	Morning arrival of IAF delegates on Slovak National Falconers Meet. Afternoon to relax in thermal spa
21st October	**9am** - Opening ceremony of IAF and Slovak National Falconers Club Meet. Day 1 of IAF meet and day 1 of falconry field meet. **4pm** - Closing ceremony. **Evening** - welcome party in Grand Tent
22nd October	**9am** - Day 2 of IAF meet, afternoon falconry field meet **5pm** - hunt closing ceremony **7pm** - cultural evening welcoming guests
23rd October	**9am** - Day 3 of National Field Meet **5pm** - closing ceremony **7pm** - falconers party
24th October	**9am** - breakfast and departure

Genghis Khan and His Falcon

One morning, the Mongol warrior, Genghis Khan, and his court went out hunting. His companions carried bows and arrows, but Genghis Khan carried on his arm his favourite falcon, which was better and surer than any arrow, because it could fly up into the skies and see everything that human being could not. However, despite the group's enthusiastic efforts, they found nothing. Disappointed, Genghis Khan returned to his encampment and in order not to take out his frustration on his companions, he left the rest of the party and rode on alone. They had stayed in the forest for longer than expected and Khan was desperately tired and thirsty. In the summer heat, all the streams had dried up, and he could find nothing to drink. Then, to his amazement, he saw a thread of water flowing from a rock just in front of him. He removed the falcon from his arm, and took out the silver cup which he always carried with him. It was very slow to fill, and just as he was about to raise it to his lips, the falcon flew up, plucked the cup from his hands, and dashed it to the ground. Genghis Khan was furious, but then the falcon was his favourite, and perhaps it, too, was thirsty. He picked up the cup, cleaned off the dirt, and filled it again. When the cup was only half empty this time the falcon again attacked it, spilling the water. Genghis Khan adored this bird, but he knew that he could not, under any circumstances, allow such disrespect; someone might be watching this scene from afar and, later on, would tell his warriors that the great conqueror was incapable of taming a mere bird. This time, he drew his sword, picked up the cup and refilled it, keeping one eye on the stream and the other on the falcon. As soon as he had enough water in the cup and was ready to drink, the falcon again took flight and flew toward him. Khan, with one thrust, pierced the bird's breast. The thread of water, however, had dried up; but Khan, determined now to find something to drink, climbed the rock in search of the spring. To his surprise, there really was a pool of water and, in the middle of it, dead, lay one of the most poisonous snakes in the region. If he had drunk the water, he too, would have died. Khan returned to camp with the dead falcon in his arms. He ordered a gold figurine of the bird to be made and on one of the wings, he had engraved:

Even when a friend does something you do not like, he continues to be your friend.

And on the other wing, he had these words engraved:

Any action committed in anger is an action doomed to failure.

From Paulo Coelho's 'Like The Flowing River'

The Archives of Falconry

The IAF's latest Supporting Member

By S. Kent Carnie

S. Kent Carnie is the Founder/Curator Emeritus of The Archives of Falconry:

"At the IAF Annual General Meeting held in the UK last July The Peregrine Fund's The Archives of Falconry (TAF) was honored to be elected as the IAF's third Supporting Member organization. TAF was pleased to host the national delegates attending the IAF Annual General Meeting in Kearney, Nebraska in 2006. For those not attending that visit or not already acquainted with TAF we offer the following description of TAF's own history and how we are going about efforts to preserve the history of our sport."

Kent's personal Gyr hybrid 'Sport'.

We can find no tangible evidence of any practice of the sport by the native peoples in North America. Falconry here can be traced back literally as far as the voyages of Columbus (1495). Subsequent brief practice by Spanish Conquistadores in Mexico and even an early New England pilgrim-falconer really had little if any lasting influence. Records of those attempting to practice the sport in the ensuing several centuries are rare indeed and their absence likely reflects a lack of both interest and participation in falconry on the continent. With the origins of falconry elsewhere in the world going back some five millennia, the history of the sport in North America clearly can be termed nothing if not brief.

A handsomely illustrated magazine article in 1920 finally aroused a more than passing interest in the sport in some. It provided an accessible reference in an era when falconry books were both expensive and difficult to find on this side of the Atlantic. By the 1930's we find a growing interest in the sport, especially among young men associated with eastern universities. By the 1980's, however, we began to lose those early American falconers. With their deaths correspondence, notes and old photos were relegated to trash bins and more than one fine old falconry book found its way to a neighborhood garage sale for 50 cents or a dollar. The cause for this dissipation of the record of our history was simple enough: no one had elected to collect it - there was no dedicated repository.

Facing this loss, some of us became concerned. Our North American Falconers Association (NAFA) was the logical place to start. There we faced two problems however. First: NAFA had no place, no physical facility to house anything. Second: to collect our sport's memorabilia, some of which represent significant monetary value, donors needed at least the potential for some sort of compensation. We had no source of funds from which to reimburse contributors for valuable books and art. The logical alternative was to use the tax deductible system offered by the US government for charitable donations to approved non-profit organizations. However, since NAFA actively engages in lobbying to influence the regulators of our sport, it does not qualify for such tax deductibility.

In contrast, The Peregrine Fund (TPF) -- a body founded by dedicated falconers concerned with the Peregrine's decline -- filled all needs. As hard-core falconers, TPF's founders readily recognized the need to save our historical record. TPF had recently built the World Center for Birds of Prey in Boise, Idaho, i.e. it had a permanent physical facility. Finally, TPF already had federal tax deductible status.

In late 1985 I proposed to The Fund's Board of Directors the establishment of a falconry historical archives within that organization, dedicated to the collection and preservation of the physical evidence of the history of falconry in America. That proposal was accepted with the caveat that while such an archive would function as an integral part of TPF's organization, it would - uniquely - have to be financially self-sustaining. Many of TPF's financial supporters might be concerned if their donations seemed to go not to the restoration of endangered raptors but instead to the preservation of the history of this field sport; this despite the very strong ties between The Fund and our sport.

Working under that caveat, the "Archives of American Falconry" was formally launched in 1986. That first year we moved into a closet-sized office in the Administration Building at the World Center for Birds of Prey. During that year eight falconers provided ten accessions of historic materials. Two of those accessions were sizable libraries. The widow of a recently deceased falconer gave $20,000; half we banked - for our future. The other half we used to buy archivally suitable cabinetry and filing materials and to allow me to attend special classes for the beginning archivist. Then, as for The Archives' first 19 years, I was the sole resident, salaried member of the archives staff; my first year's salary: $1.00.

The "Archives of American Falconry", in its entirety, 1987.

Within special archival boxes, sorted correspondence and other papers are filed in individual acid-neutral folders.

Since that first year we have continually expanded. Early on we became the official repository for NAFA's corporate records, though the association retains formal ownership. By 1991 we had to add an 800 square-foot wing onto TPF's Administration Building to house our expanding collections. Recognizing that such an undertaking cannot function on annual gifts alone, between 1991 and 1996 we successfully campaigned to establish an endowment fund to provide interest to meet annual operational expenses. Today through the generosity of falconers, the Archives Endowment Fund has reached nearly a million dollars. By 2001 too, we had outgrown the 1991 wing and we raised an additional half-million dollars, again all from the falconry community; these funds were used to build a modern, dedicated 4,000 square-foot facility at The Fund's World

The Archives of Falconry today; here the Library and Display Room.

Center for Birds of Prey.

To date over 1,200 donors have provided us with more than 2,100 accessions of historical materials. These have ranged from a single -but most appropriate - postcard to whole libraries of first editions. In addition to personal correspondence, diaries and photographs passed on to us from American falconers, past and present, Archives collections now include what we believe to be the world's finest library of falconry-related books in the English language. We also have manuscripts, translations and periodicals, as well as art: originals, prints and sculpture. Our holdings of equipment include not only some elegant, and historic hawking bags but over six hundred hoods dating back over the past century and a half. Current Archives collections are valued at approximately three million dollars, again all either donated by falconers or purchased with funds donated by falconers for that purpose.

Beyond the more normal archival activities reflected in those collections, The Archives undertakes a number of additional, history-related programs. In 1999 we commenced an 'Archives Heritage Publications' series and to date have printed three books: an early, previously unpublished American introduction to the sport, the day-to-day diary of the Craighead twins' experiences in royal India in 1940 and, most recently, the rarest of English hawking books, a text from 1603. Only one copy of the latter was known to exist before our reprinting. We are now at work preparing Volume IV in the series for printing, a bibliography of all the English-language books on falconry printed up to the year 2000.

Other such programs include establishment and maintenance of a Wall of Remembrance honoring falconers who have passed away, an oral-history recording program to preserve the remembrances of the older generation of falconers and an electronic silent auction annually making available to the falconry community books received which are duplicated in archives collections.

We now provide our quarterly 'newsletter' electronically to keep those interested up to date on Archives' activities.

For much of the first decade of our Archives' existence, I conducted my curatorial duties alone from my home in New Mexico. As The Archives expanded, however it became essential that I move to Boise to deal with the organization's activities on a daily basis. I received an inordinate amount of support from John

Top: The archivally-approved steel cabinetry and special, acid-neutral filing boxes used at the Archives.
Above: One of the cabinets containing personal correspondence, diaries and notes. Included in this cabinet are the diaries of Canadian falconer Frank L. Beebe covering the years 1932 through 2002 in addition to others of his papers.

Swift who, while never in residence in Boise, contributed so much, assuming the role of Curator of Books and Manuscripts.
We have been joined over the years by a number of prominent falconers living elsewhere, often abroad, as Research Associates who assist TAF's efforts with significant advice and support. Shortly before my ostensible 'retirement' in 2007, handing over the reins to John Swift, TAF finally succeeded in adding a trained administrator to our 'staff'. As an experienced library administrator, David Wells brings much to TAF's efforts beyond his administrative abilities, having become a real part of the team despite having no desire to become a falconer.
Although originated as the 'Archives of American Falconry', many of the materials which have made their way into our collections came from early American pioneer-falconers. In their days, there were no American falconry books, no American falconry art, nor any locally made equipment. The result was/is that a sizeable portion of our holdings are of foreign origin. Already more than aware of that situation, the receipt of two major gifts, the British Thornton gilt-silver commemorative tea urn of 1781 from staunch Archives supporter Bob Berry and a Bedouin Arab tent from the generosity of His Highness Prince Mohamed bin Zayed Al Nahyan through the Emirates Falconers' Club in Abu Dhabi, reflected the fact that we had, in fact, moved from a national effort into a truly international undertaking. Considering this international scope and our then-unique position in the world, at the start of 2004 we re-christened the former 'Archives of American Falconry' as 'The Archives of Falconry'.
Receipt of the two major gifts which had focused our attention on our international status, the Thornton tea urn and the Arab tent noted above, also helped alter the focus of our efforts. Heretofore, we had dealt with the collection and preservation of historic materials, with only minimal effort toward their exhibition. These two gifts, however, called for appropriate display. The Thornton urn is unique as well as of great historic significance. If its acquisition caused us concern regarding its place in British falconry history, that concern was overshadowed by the fact that it had found no takers when offered for sale in Britain well before its arrival at TAF. The tent was accompanied by the wherewithal to construct an entire wing devoted not only to documenting but displaying the significant role of our Bedouin heritage. While the tent itself is hardly unique, the resulting combined stunning Arab heritage display is unique, at least in the western world. Giving The Archives a much more 'museum' aspect than previously, such an attraction earned us over 5,000 visitors from among the general public in the first year of those displays.
While almost all of our support to 2004 had been provided by members of the American falconry community, the success of our endeavors has encouraged the support of others within the international community, witness that of H.H. Sheikh Mohamed. We look

Above: While the traditional Arab goat-hair tent is its focal point, the Arab Heritage Wing goes much further in demonstrating the significance to our sport of our Middle Eastern heritage.

Right: The exhibit devoted to Colonel Thornton goes well beyond simply displaying the famed commemorative silver-gilt tea urn.

forward to a significant expansion of foreign involvement in our future but only with the understanding that we are NOT attempting to usurp the national treasures of others. Our hope is to see each country with its own archives, collecting and preserving those materials which comprise your heritage and which make unique your own history and approach to the sport. What TAF does seek internationally, instead, are samples, copies or duplicates of those materials which make your own falconry unique so that we may more completely represent the whole of international falconry.
We urge the members of all IAF member organizations to visit TAF's facilities, whether for the purpose of in-depth research or simply to enjoy with us the astounding historical materials included in our collections. Our new membership in the IAF provides an expanded means by which we can keep the world of falconry informed as to our continuing efforts to preserve the physical evidence of the sport. Significantly, it also offers a conduit by which we can provide national member groups with advice and assistance in forming their own archives, based on our almost quarter century of preservation efforts. It also gives all a channel through which other members can assist in adding to our collections.
In closing, I would only emphasize that while materials put into any archives are, by definition, physical in nature they in fact reflect and actually substantially expand upon the significance of those rich intangible aspects of our worldwide falconry heritage!

The History of Falconry in Ireland

Hilary White

This article sets out to summarise what is known about hawking and falconry on the whole island of Ireland, regardless of whatever political situation was defining its borders at the time. With this information condensed, it is hoped it will be more easily digestible to club members or anyone for that matter.

Eric Dempsey's thorough and engrossing book Ireland's Lost Birds has a wealth of information on this subject, especially in the chapter about the Goshawk, which will be looked at later. Where other authors have often fallen into the trap of looking at raptor history and cultural references while ignoring the etymology and reverence that was directly as a result of falconry, Dempsey not only acknowledges it, but reveals so much more than we would have known had he not undertaken the task. For this, he is due a debt of thanks from the falconry community here.

Liam O'Broin's *The Sparrowhawk: A Manual For Hawking,* itself something of landmark in the development of modern Irish falconry, has a chapter in which Liam charts what is known about the sport's presence here, detailing the people and places that emerged through his rigorous research. It makes for fascinating reading, and when I was younger, always gave me a sense of legacy and cultural continuity from those who had gone before.

The history of Irish Falconry is a nebulous subject. It has very often been looked at as something that simply went on here from time to time, something transient that was occasionally brought by visitors. This is not quite the case, as we will see. Meanwhile, Irish raptors were much in demand.

But how far back can we look to see an interaction between man and hawk for the purpose of actual hunting? The difficulty lies therein – for example, Eric Dempsey discusses fossil evidence of an interaction with Goshawks. Remains of these once common accipiters have been found in Mount Sandel, Coleraine (c.7000 BC), and Dalkey Island, Dublin and Newgrange in the Boyne Valley (c. 3000BC). But was this true falconry? Regardless of whether it was or not, it indicates that man and hawk certainly dwelled together in some capacity.

The earliest known reference to falconry is in the Irish text Betha Colman Maic Luachain (The Life of St Colman Maic Luachain) in the 7th Century, in which the King of Tara is described as having *'da seabhac selga',* or two hunting hawks. Actual falconry references are nowhere to be found until the 12th Century, when it would seem the arrival of the Anglo Normans finally secured falconry's place here, albeit amongst the nobility.

At this point, the country already had a reputation for providing the best hawks available at the time. A Welsh monk, Giraldus Cambrensis wrote in his book *Topographie Hibernae* (The History and Topography of Ireland) about the abundant game and raptors: *'Ireland has none but the best breed of falcons. Those inferior falcons commonly called by the name lanner are absent.'*

They were so good in fact that a roaring trade opened up. Raptors, particularly the goshawk, became a valuable commodity, something to be harvested, and subsequently used to pay rent or

to gain political leverage with overlords. A lucrative black market soon emerged. It got to the stage that by 1481, stiff levies had to be imposed on trappers and tradesmen: *'Whatever merchant shall carry a hawk out of Ireland shall pay for a peregrine 13 shillings four pence, for a tiercel six shillings and eight pence, for a falcon ten shillings and the poundage upon the same price.'*

But legislation existed even before this. Reginald Talbot, in 1218, was heavily fined for illegally trying to smuggle a goshawk out of the country at Dalkey. In 1386, during the reign of Richard II, a proclamation was made at Drogheda against the export of raptors, and rigorous searches took place to curb black market trade.

A 14th Century document from Kilkenny Castle details the only three types of hawks that were to be used for rent payment. Elizabethan falconers prized falcons from Cape Clear off Cork, and Horn Head in Donegal. In 1531, Archbishop Cromer, the Louth-based Bishop of Armagh, presented a cast of hobbies to Henry VIII. The Earl of Thomond at Bunratty Castle, Clare, has his signature on legal documents from 1615 in which the rights to his harvest of goshawks are made legally binding. This was serious stuff – raptor stocks actually written into the law. In the late 16th Century, an inventory had even been written up of Gos nests in Kerry and Limerick. Thomas Molyneux, depicting the natural history of Leitrim in the 17th Century, says: *'The woods are full of large and excellent timber: and well stocked with excellent goshawks.'* In his book Falconry or Hawking (Edited and Transcribed by Derry Argue), George Tubervile refers to one French falconer by the name of William Tardisse who had this to say about our Goses: *'But truly there is no goshawk more excellent than that which is bred in Ireland in the north parts, as in Ulster, and in the County of Tyrone.'*

A Tudor poem describing the falconry birds available in Ireland sums up the sentiment at the time:

The Goshawke first of the crewe
deserves to have the name
The Faucon next for high attemptes,
in glorie and in fame,
The Tarsell then ensueth on,
good reason tis that he:
for flying haukes in Ireland next,
the faucon plaste should bee.
The Trasell is gentels course in nexte,
the fourth peer of the lande:
Combined to the Faucon, with
a lovers friendly bande.
The pretie Marlion is the fifth,
to her the Sparhauke nexte,
and then the Jacke and the Musket laste,
by who the birds are nexte.
These are the haukes which chefly breed,
in fertile Irish grounde:
whose match for flight and speedie wing
elsewhere be hardly founde…

(From by J Derrick's 1581 book *The Image of Ireland*.)

In the mid 1600s, Charles II's viceroy Lord Ormonde established Phoenix park as a Royal Hunting Park just at the edge of Dublin city. The sight was stocked with deer and pheasants for hounds and hawks. A high wall was built around it to keep game in and poachers out. The park was finally handed over to the people of Dublin in 1745. Meanwhile, in 1693, a newspaper called the *Dublin Intelligence* carried an ad for a lost hawk belonging to Lord Capall, offering a handsome reward of 30 shillings for its return.

Things really took off sport wise in the mid to late 18th Century. There are records from 1762 of Lord Bandon having a mews of hawks and a falconer at Ardfert Abbey in Kerry. Around 1800 or so, it would appear that the Curragh in Kildare began to be exploited as a key destination for rook and magpie hawkers. Captain Salvin was based at the Curragh military camp in 1857. He and John Barr, falconer to Maharajah Dhuleep Singh, became fierce magpie hawkers, advertising meets in local papers to get beaters on board and reportedly nailing 184 magpies with two tiercels in four months. EB Michell refers to woodcock hawking in Monaghan, while Salvin was joined by names like

Broderick and Lascelles for continued sport on the Curragh.

It is around this time that we come to the formation of the first Irish Falconry Association. In 1870, 212 Great Brunswick street, Dublin played host to a meeting chaired by Lord Talbot de Malahide to establish the Irish Hawking Club. The aforementioned Dhuleep Singh donated £50 towards the fund. After that, no records survive of what went on. Eventually, the present club was reconstituted in 1967. Before then, the hawking parties came and went. William Rutledge and Jack Mavrogerdato went lark hawking with former IHC president Dr George Luke in the west and north west. Ronald Stevens and Philip Glasier would visit Willie McDougald at his home in Ballymanus, Co Laois.

One hopes that they were aware of the use by Nobel Laureate WB Yeats of falconry imagery in his post-war poems at the start of the century. It is undocumented whether or not Yeats actively participated in falconry. What is known, however, is that he would often watch wild falcons from his spiritual home of Drumcliffe in Sligo. His family may also have socialised with the Coopers of nearby Markree Castle, Lord Cooper himself a keen austringer. Yeats also had a fascination with Japanese culture, which often featured falconry-related images. Much is written on the poet's use of the falcon and falconer metaphors, some perhaps missing the point, or unaware of the presence of falconry around the time Yeats was in his formative years. The falcon and falconer remain vibrant symbols of matters close to Yeats' heart, particularly his torment over the unrequited love of Maud Gonne – the falcon is the unhindered, wild companion, ranging and wandering as the falconer strives, in vain, to attain total mastery of her. The falcon is emotion and the falconer intellect. In *The Second Coming* (1920) we have lines such as:

Turning and turning in the widening gyre
The falcon cannot hear the falconer;
Things fall apart; the centre cannot hold; Mere anarchy is loosed upon the world,
The blood-dimmed tide is loosed, and everywhere
The ceremony of innocence is drowned;
The best lack all conviction, while the worst Are full of passionate intensity.

However, it is in *The Hawk* (1919) that the falconry metaphor is taken to new levels:

Call down the hawk from the air;
Let him be hooded or caged
Till the yellow eye has grown mild,
For larder and spit are bare,
The old cook enraged,
The scullion gone wild.'

'I will not be clapped in a hood,
Nor a cage, nor alight upon wrist,
Now I have learnt to be proud
Hovering over the wood In the broken mist
Or tumbling cloud.'

'What tumbling cloud did you cleave,
Yellow-eyed hawk of the mind,
Last evening? that I, who had sat
Dumbfounded before a knave,
Should give to my friend A pretence of wit.'

It is arguable that Yeats meant to say 'cadged' rather than 'caged' in the second line of the first stanza. Another raptor reference, presumably instilled by his time in Sligo is his little-known one-act play *At The Hawk's Well* (1916), in which a dried-up well on a desolate mountainside is guarded by a hawk-like woman.

The author, Hilary White.

That one of 20th-Century literature's most revered poets and dramatists should adopt falconry imagery is unsurprising and not entirely original. But unlike Shakespeare, who used hawking as a tool and a set of symbols, Yeats probed right into the heart of the falcon-falconer dynamic, and leaves us with a sense that he must have at least fraternised with falconers to attain such insight into the relationship.

No history of Irish falconry would be complete without a mention of Ronald Stevens, unquestionably the guru of the sport in modern times. Stevens came to live in Connemara in the early 1960s, settling in the remote Fermoyle Lodge. In a letter in the British Falconers' Club journal, *The Falconer*, Stevens describes his move to Ireland, his search for a remote place where 'my hawks can fly without risk of being sniped at' and his hacked Jerkin coming to sit on a nearby rock *'above the tumbling waters'* while he was fishing.

Despite his best efforts, his house became something of a Mecca for falconers from all across the world. Stevens not only inspired generations through his classic treatise *Observations on Modern Falconry* and *The Taming of Genghis,* but also imparted much knowledge on to a privileged handful of Irish falconers, particularly the Hon Johnny Morris. The two accidentally invented the hybrid falcon in the 1960s, when Stevens became frustrated with trying to breed peregrines and asked Morris if he could try the tiercel with Morris' Saker falcon, a bird sourced by the then Iran-based US falconer Kent Carnie. The pair got on famously and hatched out two males that first year. Letters of congratulations and intrigue arrived from around the world. Stevens and Morris flew one each, noting a similar temperament to the peregrine.

A further three were bred the following year, this time including a female who stunned the two men by her size. This bird appeared on the glove of Charlotte Rampling in the John Boorman film *Zardoz*. She was lost by Stevens in Mayo.

In his later years, Stevens' eyesight began to fail and falconry became less practical. He moved to the smaller, more manageable Bunagipaun, closer to the village of Oughterard. He died in 1994, leaving some money to the IHC which went towards a breeding fund. A hooded falcon sat on the glove of Johnny Morris during the funeral ceremony in Oughterard.

Hopefully this has provided an overview of Ireland's falconry heritage. It remains to be seen what new details are uncovered on the topic, of which many must still exist. For those who would like to have a more detailed account of what we know, I refer them to the two books which I mentioned earlier.

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Long awaited tree-nest of Peregrines in Germany *(G. Kleinstauber)*

New prospects for tree-nesting Peregrines in Central and Eastern Europe – the last victims of DDT-era

By Janusz Sielicki,

European Peregrine Falcon Working Group,
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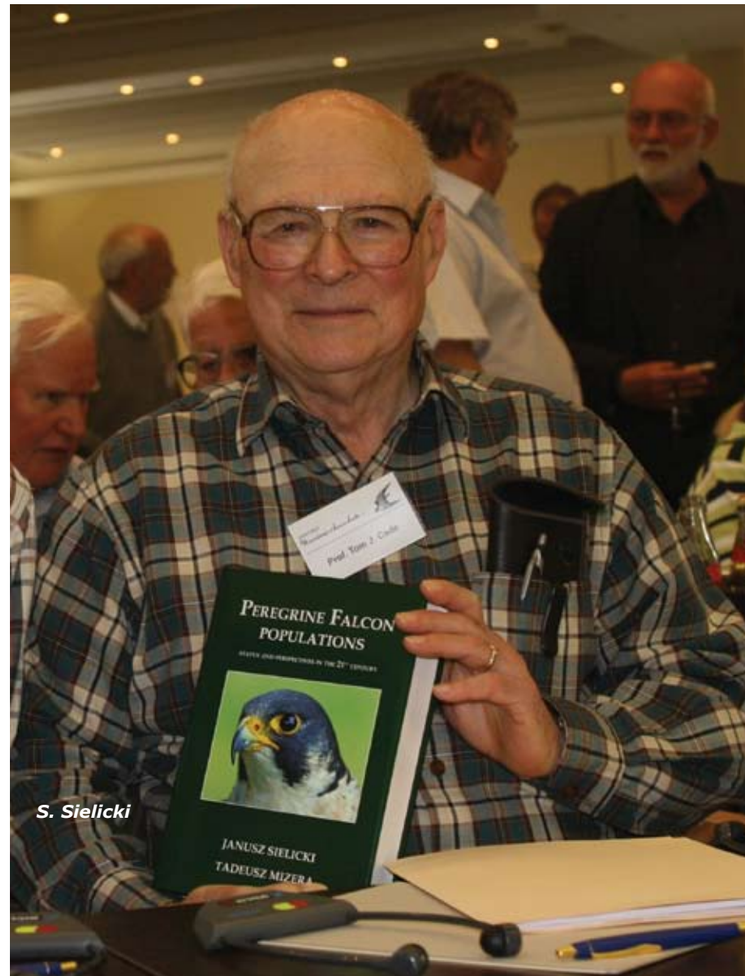
Peregrine tree-nesting population in Europe

In Central and Eastern Europe the Peregrine Falcon was nesting on trees, using nests of other large birds. The size of this population is estimated at around 4000 pairs.
The tree-nesting population occupied an enormous area from northern Germany, Poland and Belarus to the forests of central Russia, as well as on the Baltic countries - Denmark, southern Sweden, Lithuania, Latvia, Estonia and southern Finland. In the north that ecotype appeared alternately with ground-nesting.
By adapting the nests of other birds in the trees, Peregrines significantly widened the scope of its potential. The dominant types of nesting of Peregrines worldwide are nests on the rocks, rock shelves and on the river cliffs. This type of potential nesting site are almost missing on the area of tree-nesting Peregrines.
In around 1950 there was a catastrophic decline in Peregrine populations due to DDT contamination and the tree-nesting population virtually vanished. The last known tree-nests of Peregrines were found in the mid 1960's and since that time only single isolated cases of Peregrines nests on trees were known. That ecotype disappeared in the entire area of its existence - from Germany, Denmark, Poland and Belarus to Russia, as well as in the southern basin of the Baltic Sea.
There are isolated cases of Peregrines nesting on the trees outside the historical occurrence of tree-nesting ecotype. However these did not lead to a creation of an area with such a dominant form of nesting.

German success
The first reintroductions aimed at the restoration of the tree-nesting ecotype started in Germany and Poland in 1990. Different experimental methods were used however a more effective program has proved to be pursued in Germany.
The German project was conducted by the German Peregrine Working Group (Arbeitskreis Wanderfalkenschutz e.V.) in cooperation with the German Falconers Order (DFO - Deutche Falkenorden e.V. - which provided the project with young Peregrines for reintroduction) and the Hunting Corporation of Mecklenburg-Vorpommern.
Since 1990 a total of almost 400 Peregrines from captive breeding were released, and in addition more than 100 birds were relocated to forests from wild nests in cities. In that Project, five hacking stations were used and most of the birds were released by hacking; more than 60 were allocated in nests of wild Peregrines through adoption.
The first nest was found in 1996; growth of this initial population is slow. In 2009 the total tree-nesting population in Germany was circa 25-30 pairs. In all other countries of former tree-nesting area, including Poland, there is no single pair known. There are some possible nests on trees in Russia, near the Ural Mountains, but the status of the nests there is not clear.
At the end of May 2010 AWS in cooperation with Landesumweltamt Brandenburg (environmental authority of the federal country Brandenburg) organised a meeting under the topic "The successful finish of the project of reintroduction of a tree-nesting population of the Peregrine in the wooded lowlands of middle Europe".
Our German colleagues decided to close in 2010 the reintroduction of captive bred Peregrines. In one reintroduction site they will continue releasing birds relocated from nests in cities.
Many prominent ornithologists and falconers from Germany (including most of DFO Board members) took part in the meeting in Rheinsberg-Kleinzerlang, with the presence of many guests, including Prof. Tom Cade and a delegation from Poland and Belarus.
During the meeting our German hosts presented a theoretical background of the project based on imprinting (Prof. Dr Wolfgang Kirmse), the most important results of individual marking scheme (Dr Gert Kleinstäuber), methods used for releasing Peregrines (Paul Sömmer), an overview of work of five release stations (Wolfgang Köhler, Holger Gabriel, Günther Röber and Silvio Herold), the story of a single tree-nesting Peregrine pair in Nordrhein-Westfalen (Thorsten Thomas and Dr Peter Wegner) and future plans of the AWS concerning management of the newly established tree-nesting population (Dr. Torsten Langgemach).
During the meeting there were also presentations by foreign guests. First Prof. Dr Tom Cade presented a brief history of Peregrine recovery in North America and told about the tree-nesting Peregrines around the world, especially in the Australian province of Victoria and discussed the potential for the current re-established population to expand on its own into unoccupied forest habitats. Next, Dr Günther Trommer and Pawel Wieland from Poland presented historical data on Peregrines in Poland and the first years of Polish Peregrine Project.
Janusz Sielicki and Sławomir Sielicki from Polish Society for Wild Animals "Falcon" presented the overview of 20 years of efforts to restore the tree-nesting population in Poland with discussion of results so far and presented the new Polish Peregrine Project, which new rules are based on German experience. The Peregrine reintroduction in Poland will be remodelled – only a small number of hacking sites will be used and there will be a preference to release males. In addition to the Polish project, the prospects to start a project in Belarus and Lithuania were presented.
In the evening Prof. Dr Christian Saar presented a fascinating slide show and spoke about the history of Peregrine breeding and reintroduction in Germany. Later on Dr Gert Kleinstäuber, Paul Sömmer and Henry Lange presented the stories of all nests in newly established tree-nesting Peregrine population.
Most of the results presented at the meeting are included in the book *"Peregrine Falcon Populations – status and perspectives in the 21st Century"* edited by Janusz Sielicki and Tadeusz Mizera (www.falco.strefa.pl).
The next day was extremely interesting – attendees had a unique chance to visit tree nests of wild Peregrines, take part

Prof. Tom Cade at the Tree-nesting Peregrine Conference with the book from the Peregrine Conference in Poland.



S. Sielicki

in ringing chicks and releasing of last captive bred Peregrines in this project.

Project for tree-nesting Peregrine in Central and Eastern Europe

After the Peregrine Conference Poland in 2007, the IUCN / Birdlife International were asked by the European Peregrine Falcon Working Group to take into account the very special situation of tree-nesting populations in lowland Central and Eastern Europe. In general the Peregrine Falcon as a species has the status of 'Least Concern' as assessed in 2008. A new description of the Peregrine conservation status changed in 2009 says that this species as a whole is not threatened, but the tree nesting population is an exception, which needs further active protection: "Significant further efforts are needed to fully restore it across its former range, which included Germany, Poland, Russia, Belarus and the Baltic States" (www.iucnredlist.org).

The German tree-nesting population is a seed for restoration of this ecotype in its whole former range. The next most important area is Poland.

Society for Wild Animals "Falcon" and European Peregrine Falcon Working Group, together with Polish falconers, plans to intensify reintroduction aimed at the tree-nesting population, also in neighbouring countries. 2010 is the first year of the Polish Peregrine Project in its new form; to achieve the aim it is necessary to conduct the project the new way within next few years.

We started to discuss the possibility of obtaining Peregrines from Germany, as the tree-nesting reintroduction there was closed. There is a general consensus on it, including good relations with DFO and Prof. Christian Saar (who run a breeding project aimed for the tree-nesting population in Germany) and preliminary positive opinion of German authorities. The final decisions should be done in the autumn of 2010.


S. Sielicki


Falcon Society archive

Clockwise from above: Janusz Sielicki with a just-ringed Peregrine from the tree-nesting population in Germany; Young Peregrines are lifted to the nest-cage on the tree in Wloclawek by Slawomir Sielicki; chicks in the reintroduction cage.


C. Hauschildt


S. Sielicki

Clockwise from bottom left: Dr Gert Kleinstauber with ringed wild chicks from the Peregrine tree-nest; Janusz Sielicki and Frank Skaarup Hansen releasing Peregrines in Poland; Peregrine chick with a satellite transmitter, which will help us to understand their life.


S. Sielicki

The second option for the future is cooperation with University of Goteborg in Sweden, which is soon closing its Peregrine reintroduction project in Sweden.

Another support for tree-nesting project in Poland is the co-operation with Danish Hawking Club and Zoo of Aalborg, which funded few young Peregrines for Polish reintroduction in 2010 and we very much hope for continuing this cooperation in future.

As Belarus is the next area important for the tree-nesting population, the Polish "Falcon" Society started co-operation with Belarusian Bird Protection Society APB. We visited Minsk to meet the ornithologists interested in Peregrine, financed a falconry course in Poland for two young ornithologists who learned basics about handling birds of prey and financed a trip of Alexander Vintchevsky to tree-nesting meeting in Germany. This all is aimed to prepare official programme for Peregrine reintroduction in Belarus.

There are also some plans to start the reintroduction of tree-nesting Peregrines in Lithuania. In both cases the Polish "Falcon" Society plans to help our colleagues with practical training in Poland and then in obtaining birds from breeders in Europe, while local costs and organising the reintroduction will be their responsibility.

With all those new plans there is a big hope that the tree-nesting Peregrine ecotype will come back to most of its former range. The help of the falconry community and breeders in this plan is a crucial for its success.

Partridge hawking in Belgium

By Patrick Morel

Apart from the elusive woodcock, the partridge is probably the most difficult upland game to capture with longwings in our region; it requires perfect knowledge of its habits, life cycle and feeding behaviour of each covey.

Biology of the partridge

The partridge is a symbol of the great plains and as a sedentary small game bird it is most exciting. It has a sedentary lifestyle, precisely enabling us to realize the obvious - the partridge populations are undergoing gradual but sure decline over several decades.

The partridge is a lowland bird, sociable, living in coveys which call each other at sunrise and at sunset. It can be found both in small fields near homes (Flanders, Hainaut) or in the huge areas of monoculture as in the plains of Brabant and Hesbaye; though generally everywhere, from the late fall and winter, like grouse, they tend to cluster near houses.

The partridge is a sedentary bird, flying low over the ground, except when it moves to its staging area at sunrise and sunset or to escape a predator. The favourite roosting places are ploughed stubble but also the edges of fields, adopted as a strategy of preventive defence against nocturnal predators, especially foxes.

The partridge is a very territorial bird; it is almost always located in the immediate vicinity of the field where it was born. The partridge is considered part of 1% of birds that are 'faithful' and genetically monogamous. The partridge is prolific and is the bird that produced the largest clutches (15 eggs on average) but it is also a fragile bird experiencing the highest mortality due to enduring the rigors of harsh winters, too cold or too rainy spring and also due to natural predation.

Behaviour and life cycle

The family association of the covey is extremely strong and parents care for their brood for a long time until the time of pairing in spring. Partridge coveys remain grouped in one area until February / March when the birds separate to mate. The life cycle of the partridge is divided into two periods characterized by two very different attitudes: a social group (called the Covey) and a highly developed life pairing marked by great intolerance towards other cogeners.

Behaviour towards predators

The most sensitive period of breeding is the confrontation with a predator. It involves setting up a defence system varied with the type of predator, age and size. In young birds, it means cowering on the ground at a signal from their parents to hide in the nearest cover. If the danger is more pressing, a parent may simulate an injury like a broken wing, leading in the opposite direction from the brood, meanwhile the other parent leads the young away. When there is a winged predator, the tricks are more limited. The covey can flatten to the ground and one parent can sacrifice and attract attention to itself. In falconry, too, especially early in the season, sometimes a parent sacrifices itself and draws upon itself the falcons' attack, saving the covey which then flushes at an opportune moment.

Feeding behaviour

The partridge densities are high when the percentage of grain crops and especially winter cereals (over 60%) is high. Its habitat is very connected to humans since the partridge endures changes of scenery modelled by agricultural seasons. In fact, in terms of food, adult partridges adapt to their environment and the various changes it undergoes (crop rotation or the presence of artificial feeding for example). In summer, partridge enjoy a wider variety of food such as insects and return of seeds of all kinds. In autumn, seeds of cereals are still numerous. In winter, on the contrary, there is nothing left; partridge then eat green grass or winter cereals. Spring is the time of year when green food peaks. The low calorific value of green foliage in relation to grain means that the partridge must ingest three times more green leaves than of grain to fight against the cold. This explains the importance of winter artificial feeding.

Declining populations of partridges

The partridge, once common throughout Western Europe, saw its population decline mainly due to agricultural practices. The causes of the decline of the partridge are multi-faceted: the partridge is integrated in an environment in which people interact with animals and plants in more complex ways so that same environment is profoundly altered by human activities. This complexity is already in relationships that bind the partridge to its environment, its diet since changing from one regime of insects to herbivore in adulthood whilst also adapting to the seasons. The partridge, dependent on human practices, has seen its habitat change, making survival more difficult.

Several factors have affected populations of partridges: disappearance of their favourite nesting habitats (grubbing hedges, land levelling, levelling of the slope), lack of adequate food for chicks (because of the massive spraying of herbicides and insecticides), scarce cover in winter and higher predator numbers. Monoculture has replaced mixed farming, extreme mechanization replaced draft horses, speed and efficiency replaced the slow pace of nature. Indirectly, the use of the tractor has removed natural fertilizers and dung of horses. Increasing the size of agricultural enclosures has limited field edge effects, both for nesting and insects which are so important because they are the almost exclusive source of food for chicks during the first three weeks of their lives. Dwindling winter cover in addition exposes partridge ever more to predators.

All these "advances" affected partridge populations which have seen their numbers decline steadily since the late 60s, while their productivity has seen a noticeable decline related primarily to reduced survival of chicks during their first six weeks.

Partridge as 'quarry' for falconry.
The partridge is a special attraction for the falcon and is "THE" game of choice for the waiting on flight. With its compact size, average weight: 390gr for males and 380gr for females, the partridge is the ideal game for the smaller falcons and tiercels. It is a cautious quarry, fast and flying well. In our region it is, undoubtedly, the quarry that contributes most to making high flying falcons. It is also the game bird that is best for pointing dogs. For these reasons, it has always been highly prized by waiting on falconers.
The partridges are more or less nervous depending on the type of terrain: very sociable around homes and in mixed farming areas where they coexist with humans daily, they are extremely wary in monoculture. The slightest suspicious movement, such as slowing a vehicle, is detected and the birds are alert. When previously flown by a hawk, unlike pheasant, the grey partridge does not fly unless forced to do so; the flight is long and true. In general, when they take off, the entire covey takes off.
As stated in the preamble, the flight of the partridge requires perfect knowledge of both the ground and patterns of every covey, and manoeuvres worthy of a military strategy are required along with perfect discipline of the falcon.
If the partridge holds well on point at the beginning of the season, it is no longer the same after a few weeks and the falconer must change tactics and fly on 'assumption or speculation'.

Evolution of flight of the partridge in Belgium
As in many places in Europe, waiting on flights in Belgium were deeply affected by the change of habitats.
When I started flying in the mid 60s, with my friend Gilles Lafosse, we flew our falcons mainly in Flemish Brabant (25km north of Brussels) in a rather enclosed polyculture biotope with a very high density of wild partridge (at the opening of the hunting season, it was common for hunters to harvest 1 partridge/ hectare!)
The plots were very small (a few acres), often poorly cared for, lined with hedgerows and embankments. Ploughing was done primarily using draft horses, natural fertilizer contributed to the presence of insects and partridge were numerous everyday despite the proximity of many people working on their knees in small plots of 'chicory' crops. The 'chicon' (witloof in Flemish) or 'endive' nicknamed the 'Belgian white gold' is the name of a typical Belgian plant obtained from roots of wild chicory. The chicon is put into small iron tunnels heated by stoves, covered with soil and regularly watered. After several weeks in dark and warmth, white leaves are developing.
The terrain was slightly undulating sloping fields with grassy slopes or a hedge on each side of field.
This polyculture gave the game a many opportunities for escape and also pretty short and less high flights! Flights and kills were many (it was normal to have 5 or 6 flights each afternoon, often with multiple reflushes). The quarry book numbers were high: around 200-250 partridges average each year with a team of 2-3 falcons; the season lasted two months (early September to early November).
The flights were mainly made on a 'presumption / speculation' or by spotting. We were sure of finding partridge - hawks were put on the wing and we ran down the fields under the waiting on falcon. We did not let the falcons get too high because the risks of checking on pigeons were ubiquitous (Flanders is fatherland to the racing pigeon), nevertheless, we had often to recover our falcons on their prey, almost always a racing pigeon not very far from its loft!
'Visual flight' is to catch the game after spotting from a vehicle. The plain is traversed slowly, using a vehicle and fields are carefully quartered and observed through binoculars or telescope. The search requires a good knowledge of the game, land and habitats, because it is not always easy to identify the head of a partridge when flattened in a field. It is important to know the habits of game, to know that game is more active at the beginning or end of the day because it

is in search of food or gravel it needs to aid its digestion (gritting).
There are advantages of this type of approach: the identification from the quiet car is only a slightly disturbing process for the quarry: usually only the covey spotted is disturbed if it is flushed. If conditions do not look good, the group is not flushed and is not disturbed unnecessarily. On sites with high density of partridges, it is sometimes possible to identify two or more coveys and provide a 'second chance' that will allow a second service if the hawk would have failed. This can be beneficial for a young falcon in training when a second service may be of value.
Screening allows the identification of the field study (counting, wind, position of birds) and develop the best strategy calmly, plan an attack and choose the most suitable bird for the flight (e.g. a young hawk to put on a covey of young birds or in case there is a need of a 'second chance' flush). The service can be done with some precision, the falconer choosing the best time to flush under the hawk.
This type of strategy offers excellent commitment (number of birds, age, gender etc) and better management of populations, for example by not flying on pairs without young or small coveys. Sometimes, in cases of premature flush from the covey, a preliminary count will know that there are still one or two birds left to flush.
Excellent binoculars or a telescope of high quality is essential equipment. The key element is the quality of the optics and image clarity with respect to the preferred magnification. A good compromise is a pair of 8x32 or better 8x42, 10x32 or 10x42 combining magnification sufficient to excellent brightness and lightness (650gr to 850gr).
How do we proceed? Birds in the open are very suspicious, and a covey has always one or more guards whose role is to alert the whole group upon the occurrence of any threat. The reactions of the falconer must be fast: he must analyze the situation in a moment, consider all possible scenarios, anticipate the direction in which the game will fly away and decide if the opportunity presents itself for the quarry to be "flyable" or not .
Putting the falcon on the wing is the crucial point: if the falconer has misjudged the situation, it will often be the moment of "now or never" for the game which takes the opportunity

to escape, taking wing immediately. We aim to pass the partridges by several hundred meters before stopping if possible ahead of the group. The distance should be carefully estimated as partridges are worried enough to clamp to the ground and not move, but without being too afraid to fly that early. The preparation and equipping of the hawk and putting on the wing are done on the opposite side of the vehicle from the partridge - this has the double benefit of hiding the falconer from the partridges and avoiding showing the hawk to them whilst it is still lacks aerial dominance.

Once the hawk is on the wing and has started circling to gain height, if the game did not fly, the situation presents itself differently. The falcon soon has the height so as to constitute a threat quickly enough to block the partridges from taking wing. The anxiety and nervousness caused by the falconers' approach are offset by natural fear of the falcon. The balance will change in one way or another depending on the position of the falcon and the falconer's change of position and / or his assistants. The falconer must adapt his advance based on his interpretation of the direction in which the balance of the flight develops.

The falconer moves in a zigzag direction across the wind, to centre the hawk and get it overhead. Once it has reached its pitch, the falconer slows down the hawking party, stopping whenever the hawk is downwind of the field. If she is up in the wind or vertically above, the partridge is most evasive because the falcons' strike happens too fast to allow her to manoeuvre; alternatively, if she is up in a headwind, the falcon will bind to its quarry, taking advantage of its preference for trussing of its prey.

With experienced hawks, we make the same manoeuvre, but into the wind. The field will be working into the headwind, dogs pointing normally. This implies that the hawk rides the wind and passes in front of dogs.

The CAP (Common Agricultural Policy) has led to land consolidation. Small plots of several acres have been replaced by several hectares of crops and maize has emerged and gradually cannibalized all production and currently covers over 50% of our area, making hawking impossible before mid-November.

In the late 1970s, we changed territory and we migrated to the plains of the Hesbignon Brabant, ideal habitat for waiting on flights and famous for large ranging field trials: large flat or gently rolling plains, without barriers or pylons. The plots were much larger (several hectares to several tens of hectares). Again, as elsewhere, the regrouping of lands had wreaked havoc and, in many places, "beautiful" plains, ideal for waiting on flight, turned into a veritable game desert. The sunken lanes were filled and concreted; it is now possible to hunt in shoes!

One other major cause of declining partridge numbers has been the expansion of predators following the disappearance of the gamekeepers. The result was immediate: the fox, unknown in my youth in the southern area of the Sambre and Meuse, multiplies and is ubiquitous throughout Belgium. In addition, the game laws have changed and many 'pests' cannot lawfully be destroyed and their mode of destruction is strictly regulated (prohibition of most 'indiscriminate' traps and prohibition of night shooting).

We then arrived at the 'miracle' solution: bridging the gap in natural production by supplementing with farmed game. Wild populations of yesteryear were, in fact, initially, well reconstructed. There was general euphoria for a few years ... then the side effects were not long in coming: the partridge breeding brought diseases and gradually eliminated and replaced the wild stock.

The dangers for wild game coveys are:

Health-Pollution: the high densities of animals in farms promotes the development of various cycles of parasites. Thus, when to the point of being released, game farming is still a carrier of infection, just waiting to proliferate during the period of stress and deprivation due to changes during release. These are real bacteriological and parasitic diseases bombs that could infect wild populations.

Introduction amongst endangered wild birds with captive breeding stocks with a depleted genetic makeup (this is the result of farming after several generations).

Behavioural changes are vital: in farmed birds, some hereditary traits essential for survival in the wild can be altered or eliminated in a few generations in captivity.

Influence on predation: studies show that predators do not regulate prey : on the contrary, the opposite occurs. The introduction of farmed birds is a prime target for predators, increasing artificial prey population resulting in parallel increase of predator populations. This is the case in my territory where the harriers (especially the cicrcus aeruginosus) have made an appearance in force after the release of farmed birds on which they specialize. They stay all autumn and weather permitting, they overwinter.

What now? Compared to the sixties, the partridge has declined by 70% to 90% depending on the region. In many places, particularly in the finest consolidated holding plains of Hesbaye and Walloon Brabant, it has almost completely disappeared.

In the few places where there are a few remaining wild stocks, it has been primarily conservation of existing natural habitats (hedgerows, fallow land, slopes, sunken lanes) or replace habitats lost by the creation of shelter belts and the development of fauna friendly crops and use of supplementary feeding that has been their saviour.

In places where partridge have disappeared or territories with too low densities (less than 5 couples/100ha), the only solution is repopulating with farmed partridge.

To continue flying partridge the hawker has no choice: he has to become a manager!

Example of managing of a territory in Brabant

This area is ideal for waiting on flights: an area of one block of 800ha in the middle of a 1500ha plain, surrounded by 3 villages, slightly undulating, without poles, fences, power lines, rich in partridge and hares until the late 1970s (the usual harvest at the opening of the hunting season was over 600 partridges in two days - 0.75 partridge / ha!).

Crop rotation and crop plots:

On this land, crop rotation is usually a three-year rotation of sugar beet or

chicory (25-30%), wheat (25-30%), winter barley (25-30%) and alternating potato or peas (15%). There is fortunately little or no maize or rapeseed (1-2%). Green manure (mustard, ryegrass ...) seeded after the harvest of winter crops (July) to fix nitrogen, provides food for game and cover with protection from predators in autumn, at a time when no other land provides cover. Two rows of fifty meter hedge are the only persistent natural habitat in the area (they are attended daily in fall and winter by migrating thrushes).

The objectives were to repopulate the territory with partridge.

The work initially started by an accurate census of wild populations: all coveys have been identified and recorded on a map. This map has been kept updated throughout the season and has led, for example, to identify young couples without young and helped determining the exact number of birds of each covey, which is an important element for good management practices. A spring census provided gravely harrowing results: thirty partridge remained (4 patridges/ 100ha)!

It was necessary to determine the capacity of the territory and ensure its development (variety of food, shelter against the weather and predators).

Intercalary bands culture

Several bands of intercalary hunting cultures, planted in the direction of prevailing wind, in strategic locations in the territory. These strips have a corn narrow width (8 to 10m) and a length corresponding to the length of the parcel along which they are positioned (175 to 300m). The purpose of these strips is to break the monotony of large parcels (often 40 to 50 ha) and in the case of maize, to recreate a "hedge" in a few months. These hurdles are of course artificial and miss the rich fauna of natural hedges, but they can attract the partridge, with the edge effect they generate by offering them food and shelter against bad weather or predators. The anti-predator behaviour being taught by parents, which inevitably has a strong impact on the successful resettlement of released birds, we must 'educate' the birds and give them the opportunity to shelter from predators. One of the main predations on my territory is that by the harriers, numerous during the migration and often wintering as they find a pantry well stocked!

Grass strips of fallow land fauna

These are grass strips located on the edge of cultivated fields to establish transition zones between crops and their near environment (fences, streams, slope ...). They are planted with a mixture made from 70% grass and 30% legume. Their width is 8 to 10 meters. They are maintained till harrowing in spring. These bands are of interest by the amount of insects they contain and by the addition of green food in winter.

Establishing feeders

For partridges, modern agricultural practices provide limited available food resources: few natural plants other than those grown, less grain left on the ground after harvest, earlier ploughing or disking burying any food. To address the scarcity of food, artificial feeding is a good example of simple and inexpensive management.

The system I use for artificial feeding is made of a hung plastic bucket with a lid tightly closed as a hopper with access to the grain arising at the bottom of the bucket. The feeder is suspended 25cm from the ground on an iron or wood support to limit access to rodents such as rats and to prevent the germination of wheat. Type of food: wheat, oats, barley and cracked corn. Thirty feeders are spread over the territory. The feeders are placed at fixed locations accessible by 4x4 along the road or along the edges between cultures and visited once a week. This makes for ease of handling, time saving and least disturbing for the fauna.

Restocking

Wild populations being close to extinction, we had to deal with the repopulation by farmed birds.

Farmed partridges are released early in the season (August) in different ways:

Wild couples without young are identified and a covey of partridges is placed close to where they are usually held in a cage. If the pair starts hanging around the cage, it is just opened and usually the pair adopts young. These wild pairs are very helpful in protecting and defending the partridges and teaching anti-predator behaviour.

The best way to establish farmed birds is rearing partridges under bantams and to release them with their adoptive mothers.

Otherwise, partridges of 10 to 12 weeks are placed in coveys of a dozen birds in small cages to release with two adults. After a few days, the cages are open and partridges can leave the cage while the adults are held in one half of the cage as 'callers'. Releasing cages are placed in

sheltered areas (edges of crops, fallow strips or hunting cultures).
Of course, points of feeding and watering are provided and spread over the whole territory.

Hawking farmed partridge

The reactions and behaviour of farmed partridges are not the same as those of their wild counterparts. As said above, wild partridges are gregarious birds, living in coveys; they stand on their guard and fly away as soon as danger threatened. The indigenous birds always come back near the place that gave them birth.
This is not true of the farmed partridge and they have not the same concept of territoriality and leave the country if hunting pressure is too high or if their flight takes them into uncharted territory.
The farmed partridge bond to places where they find shelter and food or near where they were released if the cages retain the 'callers'. Coveys of farmed partridge have less intolerance towards others and often come together to form 'packs' of 50 birds or more.
Less attached to locality, they also often have higher but also longer flights (1.5km or 2km!) which take them sometimes outside the country without coming back! It must therefore be taken into account and avoid flying in strong wind. (I have seen coveys climbing as high in the sky as starlings and disappear!)
The falconer must seek to limit the number of services to one single flush for one covey which maintains the double advantage of preserving the game and making high mounting falcons.
The manoeuvres are also somewhat different from those adopted for wild partridges. Early in the season, the hawk is flown on supposition. When on a assumption flight, it's purely speculative: the falconer takes the risk of flying over familiar territory because he knows the density of game and is almost certain to present an opportunity to attack the quarry. When using a dog, it is released after the placing the falcon on the wing and when it is high enough to dominate the game on the ground. This implies a high flying bird and patience since the flight is often delayed with the risk, firstly, not to reward the bird and, secondly, to flush the game at an inopportune moment – also of course there is a danger that young hawks get bored and take the opportunity for check.
Once the falcon has reached its pitch, cover is searched to flush coveys that fly in groups and will often land in several neighbouring fields. In cover such as a field of maize, especially if it is flushed by a dog, the flight of partridges is almost always uncertain and, in most cases, occurs when the hawk is in a bad position. This forces the falcon to anticipate the flight and compensate by gaining a higher pitch (300m to 500m) to 'control' its territory. If the falcon misses her attack, she is called down to the lure. The first flight is generally reserved for the highest flying falcons and for the ones who cover the broadest territory (the ones which have the best efficiency cone).
The following of flights are usually achieved over a dog on point: groups of partridges tend to disperse into coveys in neighbouring fields (beets, chicory or green manure). In ground cover, the work of a pointer is the basis of the waiting on flight; it is the key element of the floor show and the guarantor of the quality of the flight. The flight implies perfect knowledge of the dog ... and total confidence in his qualities: the falconer must be sure that the game pointed is of the 'feather' and not 'fur'. The dog must also be of perfect obedience in order to avoid premature flushing.
Once a dog is on point, the tactic is to walk towards the dog without worrying about the position of the falcon or the wind, the hawk quickly learns to be well placed upwind and at its best pitch! Partridge often fly towards their favourite shelter. As mentioned above, it is important to avoid following them and to reflush them several times – for without fail you will soon see the game leave the territory.
Defences of farmed partridges are obviously lower than their wild counterparts who know the least part of their territory and have an amazing record of feints and delaying tactics.
It is tempting to believe that flights on released partridge are always easier than those on wild ones, but I noticed that in many cases, the falcons of visitors are confused by this flight different and often longer from that of their wild counterparts, which leaves them empty-handed more often than they wish!
I also have the opportunity to fly twice a week on another ground in Flanders where there are only wild partridges. These partridges are particularly difficult to fly as most of the ground is covered by maize fields in which partridges tend to hide. Besides this, the ground is located adjacent to Brussels airport and high pitches are dangerous with landing planes. Nevertheless, my falcons mostly perform in the same way as they do on farmed partridges and regularly catch the wild ones.

Conclusion

Attitudes have changed, the modern hunter had to adapt and become primarily a manager; the falconer also had to become a manager. This management task is obviously very time, energy and labour demanding. Currently, the falconer spends 70% of his time managing his territory and only 30% flying his falcons!
The 'purist' falconer that I am also regrets the replacement of the flight over a pointing dog by a 'spotting' flight or flight on assumption. The long car-drives and hours of spotting will never replace the thrill of the quest for the dog, frozen on point in alfalfa, with scent of a partridge in the nose.
It is certainly regrettable, but in the evolution of time! 'O tempora, o mores' - other times, other manners!
How times have changed, our behaviour as a falconer also has adapted considerably. Twenty years ago, densities of wild partridge were important and allowed many flights every day and large 'scores'. It was also normal to flush and reflush the partridge several times, often at the expense of the pitch and quality of flights. Since the 1990's, the falconer also had to adjust the focus and quality of flights, he forced himself to make only one flight per bird, and except in the case of young or inexperienced hawks, not to reflush the quarry.
Farmed partridge never will replace wild ones, but I noticed, unexpectedly, that the reduction of wild partridge and their replacement by bred birds has, in some ways, been beneficial for the quality of flights!

Urban and suburban Gray Hawk

(Asturina nitida)

nesting in a Great San Salvador area, El Salvador. (Aves: Falconiformes: Accipitridae)

Gray Hawk (Asturina nitida) breeding pairs were observed during their breeding season in urban and suburban areas of Great San Salvador city. This is the first breeding report for this species and the first urban breeding report for the Order Falconiformes in El Salvador.

By Julio Ernesto Pérez Chávez
Veterinarian and Zootechnician

There is very little information recorded about raptor occurrence and population dynamics in El Salvador.

It is stated in *Ley de Conservación de Vida Silvestre de El Salvador*, that the sustainable use of the fauna resource can be done in such a way that it does not produce an adverse effect in the biological diversity in the long run (Art.3). In this area, the Ministerio de Medio Ambiente y Recursos Naturales (MARN) is the responsible body to realize or validate this research in order to know the actual status of our natural resources (Art. 5). The "Proposal for a Hunting Regulation" (MARN 2006, unpublished data), recognizes Falconry as the art of hunting wild prey by the means of trained raptors, and suggests the use of a Falconry license scheme as well as allowing a wild raptor take for Falconry purposes. Beyond these demands, the present research was realized.

Although there is an economic and geographical range limitation, this study is a call for future research and intends to show that this species can be sustainably used in Falconry.

Dickey and Van Rossem (1938: 114-116) do not show any nesting reports, but suggest that the breeding season is from March to April, and location for their breeding range is in open fields with scattered trees and secondary growth forests. J.N. West provided two definite nesting reports for El Imposible National Park between March and June (West, 1980). Breeding season is reported from December through July by Ferguson Lees between Costa Rica and Surinam (Ferguson-Lees 2001:646-648) who also reports green material in the nests, and describes them as platforms located 10 to 30 meters in height in branch divisions or lateral branches, 2 (1-3) eggs per clutch, 32 day incubation period, and 42 days until fledging. *Asturina nitida* nesting has also been described by Bibles, Glinski and Johnson who recorded that in south Arizona nests were concentrated along rivers and creeks of the Gila River stream, and in Texas, along Grande River. They describe their nests as a compact structure usually in the top of Cotton trees. The same authors state as well that Mesquite trees (*Prosopis spp.*) are a primary requirement for breeding. They also registered that males of this species apparently select their foraging places based on forest structural characteristics that increase prey vulnerability, instead of selecting areas with higher prey density (Bibles et al, 2002).

During the years 2006, 2007, 2008 and 2009, observations were made on the location of *Asturina nitida* breeding pairs in the south and west parts of urban and suburban areas of San Salvador city, Department of San Salvador, El Salvador. This is the first documented nesting record for the Order Falconiformes in an urban area in El Salvador. This document provides a report about *Asturina nitida* occurrence and breeding activity in the highest urban concentration in the country.

Materials and Methods

Observations were made by visual and audit exploration in highly vegetated areas or from panoramic sites. Three nest reports were obtained through a post on the internet forum of Grupo de Observadores de Aves de El Salvador. Observations were made with 7 X 35 Bushnell Medalist Binoculars. A vehicle was used for moving in the city. Reports and nest locations were confirmed by breeding pair activity in the nest and by fledgling presence. Geographic locations for the nests were recorded using Google Earth software.

Results and discussion

Fifteen active Gray Hawk nests were detected in the south and west parts of San Salvador city in urban and suburban areas. The nests were found in variable situations ranging from partial isolation in a suburban area to places of maximum car and human movement. This report is higher in number than that of West for El Imposible National Park. This demonstrates that the species has adapted to living in growing cities, taking advantage of the food resource available and probably of the habitat structural characteristics as suggested by Bibles et al., and that probably this species population is growing and expanding in range in this habitat. This also demonstrates that this species can be used and captured in a limited quantity in the range of this research.

Many questions arise about total population in the urban area and in the whole country, population density and dynamics, and about the comparison between urban, suburban and agricultural areas where the species is also common. Other questions arise about other raptor species that were occasionally observed during this research as Buteo magnirostris, Buteo brachyurus, Elanus caeruleurs y Falco peregrinus of which no documented occurrence or nesting records exist.

The chick´s easy adaptation to an unnatural environment is very notable as is shown by nest 9 located in a palm tree in the middle of Alameda Manuel Enrique Araujo, major vehicular traffic artery, and by nest 1 located over Calle Venustiano Carranza. Also notable is the use of the food

resource that could be reptiles, feral pigeons or rodents as well as the diseases accompanying this type of prey.
Lastly, and no less important, there is a need to compile and complement the information from Rescue Centers that receive many individuals of this species each year, and which´s analysis could provide valuable information about new localities, breeding success and more common threats to adult and immature birds.

Table 1: Location of 15 Asturina nitida nests in the south and east areas of San Salvador city.

	Location	Coordinates	Height
Nido 1	Parque Zoológico	13°39'17"N 89°12'48"W	20 mts
Nido 2	Finca Manderley	13°41'02"N 89°11'39"W	20 mts
Nido 3	Jardín Botánico La Laguna	13401070-89145259	20 mts
Nido 4	Km. 5 ½ a Planes de Renderos	13394238-89115249	15 mts
Nido 5	Parque Lomas de Altamira	13402878-89130874	15 mts
Nido 6	Estación CEL San Antonio Abad	13433965-89135106	15 mts
Nido 7	Finca Holanda	13410506-89120993	20 mts
Nido 8	Cantón El Carmen, Col. Escalón	13423748-89153362	15 mts
Nido 9	Alameda Manuel Enrique Araujo	13413351-89134822	20 mts
Nido 10	Finca Navarra	13404437-89124916	20 mts
Nido 11	Restaurante El Rosal, Col Escalón	13422866-89144702	15 mts
Nido 12	Embajada Americana	13395128-89155798	
Nido 13	ISSS 25 Avenida Norte	13421661-89121044	
Nido 14	Colegio Guadalupano	13423498-89121573	
Nido 15	Lomas de San Francisco	13404030-89135718	20 mts

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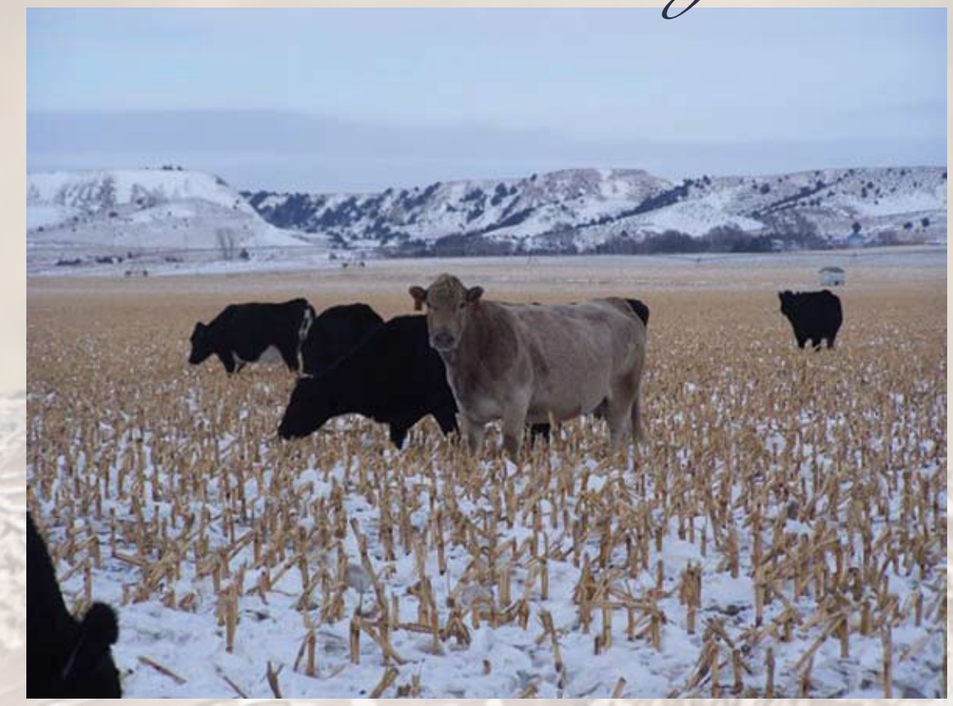
Nebraska Days



William F. Johnston, Jr.
USA

Falconry, a most ancient craft often becomes much more than a simple pastime for some. The real hard core are obsessed with it, the challenge, the never achieved quest for perfection, the love of the birds and the environment of the hunt. We all know falconers who never married. A prospective wife, or husband would never accept a preoccupation that so divides a spouse's attention and that absolutely couldn't be competed against. One solution is to marry another falconer and share a common interest. What works well for many is a supporting wife, or husband who doesn't practice the art, but tolerates it in their mate. We all know of falconers who have relocated, some to another country, for improved sport. Often falconers sacrifice a career, opting for a less demanding profession so as to spend more time in the field. There are those that only fly on weekends and some, if possible who will fly their birds every day.

I came late to the sport and so fall somewhere in between although since I retired six years ago I find myself spending much more time with my birds or in falconry related activities. You know it's sad when one becomes so one-dimensional that anything non-falconry is either a chore or boring. My falconry started some 40 odd years ago when in my late twenties with a wife, child, mortgage and a demanding occupation but that isn't to say that I didn't sacrifice time with my children, or spare any expense. The kids by the way were always welcome to come along as beaters.
Several years before retirement I purchased a second home in Nebraska to improve the quality of my falconry. Of course, I also had to buy a vehicle suitable for the transport of falcons, dogs and equipment. I can rationalize it all by pointing out that hobbies are good and lots of people

have one. My brother-in-law owns two houses, one on a golf course in Maine for the summer and the second in Alabama for the colder, snowier months.

My place in Nebraska is located near the Sandhills so named for the rolling grass covered dunes and hills that cover approximately one quarter of the north central part of the state. In the United States, Nebraska is about dead center and Arnold, Nebraska is located dead center of the state. I bought in Arnold primarily because of an abundant and available population of Greater Prairie Chickens to hunt nearby. The Sandhills are one of the most unique areas in the world. Spanning almost 20,000 square miles, it is the largest sand dune formation in the Western Hemisphere. Following the last ice age, prevailing winds blowing in from the west brought huge amounts of sand creating vast dunes, their wind eroded contours now more or less stabilized by a covering of grass and other plants that collectively account for 720 species of which only seven percent are exotics. The sandy soil makes farming in the Sand Hills largely unproductive so much of the region has been left as virgin prairie. It is to this area and in grassland in surrounding valleys and tableland that "chickens" roost and nest. The climate can range from a typical low of – 40 degrees Fahrenheit in winter to 110 degrees in the summer. Wind born snow can easily drift to 20 feet, or more. Wide variations over a short period of time are not unusual. In autumn when I am there, I have often seen temperatures in the low twenties in the morning become sixty in the afternoon. Wind is a constant problem, although early mornings are generally calm.

It is in the low areas and tables that most crops and cattle are found. Although relatively dry, most cropland is irrigated by drawing water from the Great Ogallala Aquifer, which contains in excess of one billion acre feet of ground water recharged by the extensive Sandhills area acting like a sponge. The major cash crop is corn, followed by soybeans with lesser amounts of cane and alfalfa. It is to these harvested crops that Prairie Chickens come to feed, usually twice a day, morning and night.

Nebraska's soil has been farmed since prehistoric times, but the Native Americans of the plains, notably the Pawnee, devoted themselves more to hunting buffalo than to farming in times when buffalo and pronghorn were abundant. The Homestead Act and the close of the American Civil War in 1865 saw a western migration of people wanting to settle and farm the fertile lands of the American Midwest.

Nature has seldom been kind to the people of Nebraska. Ranching was especially hard hit by the ruinous cold in the winter of 1880 – 81 and farmers were plagued by insect hordes from 1856 to 1875, by prairie fires and by the recurrent droughts of the 1890's. Many were faced with financial ruin so that today abandoned farm buildings, outbuildings and homes still dot the landscape. Five years ago the area was hit by one of the worse blizzards in almost 40 years. It was the last weekend of November and I was not prepared for the wind and blowing snow that lasted for three days. Once the storm moved on one could see irrigation pivots that had been toppled in the 90 mph winds. Cattle were lost, found wandering miles away, or dead in the field. Prior to the storm I had seen and hunted a respectable number of pheasants as well as the ever-abundant chickens. Once I was able to get back out and travel the back roads I could not find one pheasant. The native " chickens" however seemed unaffected by the ravages of nature. They were as plentiful as ever. The only difference that I could discern was that they seemed to be coming and going from their feeding areas all day long instead of the ritual twice a day routine.

In 1883, Richard Allen formally established the Village of Arnold, where I bought my house. Allen and his family left their Iowa home by covered wagon in search of arable land in central Nebraska. Formerly ranch land it was originally claimed as range for cattle. Among the early ranchers was a man named George Arnold, the town's first postmaster and after who the town is named. Arnold's population peeked during the 1950's with 936 residents. After that, as farms grew through the use of technology, the number of residents began to shrink to the present where the town boasts a population of barely 600. Farms that once consisted of several hundred acres worked by many people now cover five, six, seven thousand acres, or more with far fewer people working them.

The area in and around Arnold is ideal longwing country. Lots of wide open spaces with few trees it has a rebounding pheasant population, ducks before the freeze and of course prairie chickens. It is to the harvested crops that chickens come and it is to these same areas that falconers come to test the mettle of their birds, considered by most to be the most formidable, difficult and challenging game bird for falconry in North America. Prairie chickens are easy to find, easy to mark, and easy to flush, often without the aid of a dog. As with all true grouse, Tympanuchus cupido have a bony plate in their backs that a falcon often strikes without affect. They also have a barrel roll wobble that they employ just before the bird attempts to bind which causes the falcon to miss, sometimes by inches. As I was traveling down a secondary road one afternoon on my way back home, I noticed a group of chickens cruising along side of me. My speedometer registered 55 mph, the chickens passed me then hooked a left turn, crossed in front of the truck and headed out to the grasslands for the night. They were not being pursued by a predator or felt threatened in any way, they were just heading home after

dinner. Whereas some game birds look for the nearest cover, prairie chickens have a lot of motor and unless they are really intimidated, they just out fly their pursuer either by speed or endurance. The only way for a falcon to catch a healthy mid winter chicken is to start from way up overhead and in position. In fact pitch is everything, 1,000 feet is a good start, higher might even be better. Second is position and footing comes in as essential in order to administer the coup de grace. Falcons soon learn that a tail chase is a waste of time and energy. Early season chickens are a bit easier to bag, but by mid November and on into the close of the long season in March they are a match for the best hawk anyone has flown successfully at any other quarry, including Sage Grouse!

Although there are usually duck slips before the ponds and stock tanks freeze and pheasants seem to be staging something of a comeback, grouse are the reason why falconers come to central Nebraska. There are two principal species, The Greater Prairie Chicken (Tympanuchus cupido) and Sharp-tailed Grouse (Tympanuchus phasianellus). Lesser Prairie Chickens (Tympanuchus pallidicinctus) are found in Southwest Kansas, Oklahoma and Northern Texas. Slightly larger than sharp-tail, prairie chickens are compact galliformes, "red meat" birds with lots of motor! European settlers named the native grouse "prairie chickens" because of its relative size of 18 inches tall and weighing about two pounds, about the size of a small domestic chicken. Nostalgia not withstanding, the prairie chicken is about as dissimilar to a domestic chicken as a gull is to a parrot.

I am told that sharp-tails are a little easier to bag than chickens. They are more easily intimidated and are inclined to bail into cover more readily than do chickens. None the less anyone who is regularly taking sharp-tails has absolutely nothing to apologize for. They too are a demanding quarry. Most falconers would, or should be proud to be taking them! The little town of Arnold boasts two sometime residents, there for one thing only - prairie chickens. Me and Tony from Colorado. Tony calls his place, "chicken manor" and keeps a logbook of those who have taken chickens. It's appropriately called the "chicken book" and no matter what other quarry is taken, be it sharp tail, a hybrid chicken x sharp-tail, duck, pheasant, or what have you, only the Greater Prairie Chicken merits entry into Tony's book. Two well-known falcon breeders, a husband and wife team from Oregon also have a seasonal home about 20 miles from Arnold. They regularly bring ten, or more falcons with them to fly exclusively at chickens. Two of my friends, again a married falconry couple left sunny Florida and moved to Nebraska for, you guessed it, prairie chickens. Eric and Anita fly every day that they can during the long season and have enjoyed considerable success for their time and for their sacrifice. Another falconer who lives about 25 miles west of Arnold moved to Nebraska about 23 years ago from Idaho. He found flying chickens more challenging and rewarding than Sage Grouse.

Suitable habitat is the limiting factor with prairie chickens. They require relatively treeless grasslands, but can tolerate small islands of low native shrubs such as blackberry, dogwood, wild plum and sumac. They use slightly weedier pastures, crop fields and alfalfa for brood rearing. Although prairie chickens sometimes land in trees, and even eat tree buds when ice covers other foods, numerous studies confirm that their survival rate is far better where trees are absent throughout very large areas.

The best place to hunt chickens is in cut cornfields. They are loath to go into standing corn, or other tall vegetation. They also feed in cut alfalfa, soybean and other "clean harvest" crops. But, whereas it's tempting to fly chickens in these exposed places, one wing beat from a cast off falcon sends them up and away. The only practical method of hunting chickens under these circumstances is to launch your falcon a half mile away and once she has reached her pitch, have her follow your truck to the grouse. Prairie chickens feel much more secure in corn stubble. Hidden in the furrows, their cryptic plumage affords some measure of protection against detection. They are much more likely to crouch down and hold while a falcon is put in the air. Because of their propensity to stay loyal to a particular feeding area and habit of commuting in twice a day, several hunting strategies have been developed. The easiest, but not necessarily the most effective is to park near a known feeding field and simply watch the birds fly in. It usually works and a flight will ensue. Large cornfields of a section or more can, however, present a problem. Although chickens don't run and hide, where you thought that they put in might not be where they actually landed, particularly if the area is some distance away. A good pointing breed and a steady falcon are usually required when an issue such as this arises. If the field is small and the chickens come in close, or too close simply mark their location and back your hawking vehicle to a distance that's safe enough for you to get out and cast off your bird.

Another very effective strategy is to slowly drive along the facing rows of cut corn and glass the area for chickens. There are binoculars that work well in dim light, which will assist in spotting grouse that would otherwise go undetected. The easiest way of doing this is to roll your window down half way and rest the binoculars on the edge. Once chickens are spotted, simply drop an object, say a blaze orange beanbag, hat, or small safety cone out of the window and keep driving down about 20 or more rows before stopping the truck. Quietly release your falcon and when she has reached pitch and position walk back to your marker and proceed down the cornrow to flush. Should your bird stray, stop and wait until she is back

in position. Lay down in the furrow if necessary. If you falcon will respond to a waved glove, or some other object use this to entice her back. Once you flush and the falcon is committed, stand back and enjoy the spectacle. Remember, if your falcon fails, but will remount then there are almost always more chickens that did not flush the first time. A bird that continues to go back up may have three, four, or more opportunities as successive grouse are made to leave the sanctuary of the corn. If a dog is used, it's absolutely necessary that it stop on command and hold until released. Some falconers prefer morning flights, as this is the time of day when there is usually little or no wind. Obviously the falcon should be flown up wind when conditions demand.

My memory is crowded and I recall one adventure when keeping to my routine, I arose at 5:30 AM, put the two short hair pointers out and started the coffee maker. While the dogs enjoyed their breakfast, I took my first sip of strong black coffee and turned the T.V. on to get a weather forecast. Coffee finished, dogs satiated and forecast good, I stepped out to the mews to collect and weigh the female Gyr-hybrid. At 1,135 grams, she is right on. She killed a pheasant three days prior and had not been flown in the interim. Dogs and falcon installed in the truck we set out for one of my favorite spots for hawking prairie chickens. The digital thermometer registered a chilly 14 degrees below zero, Fahrenheit. Dawn was still some time away, but there was evidence of people stirring as trucks ambled toward farms, barns, and equipment sheds to start a day of crops and cows.

I settled the truck on a slight rise in an alfalfa field. Below me and on both sides are fields of cut corn; while behind the truck lies endless prairie grasslands and pasture. It is from the latter that the grouse will emerge. At three years old, my falcon knows the drill. Dogs, hawks and old men have an affinity for routine and today will be no exception. An occasional tinkle of bells and the soft whine of one of the pointers is the only sound in an otherwise silent world. Presently faint light begins to pierce the eastern sky, converting inky black into rosy pink. Large flocks of winter crows pass overhead like sullen chimney sweeps on their way to daytime labors. It has become light enough to make out my surroundings and in the half gloom a group of about 30 grouse silently alight in the alfalfa about 300 feet away. I watch as some of the cock birds perform their little minuets making short runs at each other, wings down and pinnate up. At times they hop a few feet in the air, or fly a short distance to start over. All the while the hens sit oblivious to the goings on. After about 15 minutes they all lift off and fly into the cut corn. Time to go!

Telemetry affixed, all is in readiness as the falcon steps from perch to glove. She is large and white and looks like a gyrfalcon. The cold temperatures invigorate her and give testament to her arctic origins. I watch as she heads out and up, away from where the chickens have settled in to feed. I know that they have seen her as she ranges out and begins to make a turn heading back over at about 1000 feet. I wish that she would have gone up a bit more, but know from experience that she has decided that she is high enough. By now I have walked to the edge of the corn with both dogs on a leash - I won't need them for this flush as I can see where some of the chickens have sought concealment in the furrows.

The falcon is just about straight overhead and I know that it's as good as it's going to get. I find it difficult at times to keep an eye on the hybrid as well as the grouse. This time however I manage to do both. About 20 chickens bolt out of the corn and make for a strip of cedar trees about 1,200 feet away. I watch in awe as the falcon descends, wings tucked, standing on end at an inverted, pulling G's as the grouse level out. The chickens have narrowed the gap and are now about 300 feet from the cedar windbreak. With the velocity that comes from a dive of over 900 feet the falcon soon overtakes the fleeing chickens and strikes one, scattering a shower of feathers in its wake. The blow was to the chicken's side and momentarily slows the bird down in its quest for safety. The falcon does an out run and tries again, but by now all of the grouse are in the trees, secure from her onslaught. At this the big hybrid sails over the cedars and heads out to the adjacent grassland. I watch as she begins to remount, although when she comes back over the second time she isn't quite as high. Both dogs are on point and I race for the flush. A half dozen grouse are up and heading away when the falcon stoops hitting one squarely in the back and sends it smashing to the ground. A quick roll over and the falcon comes in beside the fallen chicken. Had the quarry been pheasant or duck, a warm meal would have been in the offering. Not so the resilient prairie chicken. I watched as it lay there on a little mound of dirt appearing quite dead. I have witnessed this little trick before and predicted Lazarus rising from the dead. That's when the falcon made her second, or third mistake. Instead of coming right in on the grouse she landed next to it. Goodbye chicken! It sprang to life and in an instant was gone leaving a bewildered falcon with a foot full of nothing behind. Such is life, a falcon a little out of position, down wind or without enough pitch, or one that fails to bind looses. Her reward is to go home hungry to be fed a cold meal later in the mews. Prairie chickens are survivors in a demanding environment. They didn't evolve to be easily caught and eaten by any predator that happens along. Hopefully today's exercise helped reinforce the lesson. Although I wanted to bag a chicken, I am pleased with how things worked out. Falconry is a business of futures, we live on optimism. Tomorrow perhaps the Grouse Gods will smile and favor us with success!

A Few Good Flights

Alan Harvey - South Africa

It's funny how some flights stick with you for years, while others just fade into a blur especially if you have two or more experienced birds flying every day. We tend to take good flights for granted, that is until you start a new bird and realise the time and work it takes just to get kills, even just average ones.

Over the past couple of seasons I have flown a particularly good passage female Peregrine, a good Red Nape and few other hacked eyases that have provided me with some spectacular flights that I will never forget. I don't keep a falconry diary so these memories stay in my mind and are dredged up on those days when I'm slogging home after a long drive looking for quarry or the flight has just gone pear shaped, again! And I am wondering why I practice this sport as opposed to being normal and playing golf or propping up the bar counter!

A few years ago I was flying the Red Nape at a small dam that had a mixed bag of shovellers, teal and yellowbill. It was a calm day for once. As I cast the bird off she started tailing a single duck that I had not seen that was heading down the valley. The yellowbill had a good start and easily made to the big holding dam a kilometre away. With the bino's I saw the Nape throw up high and start some serious ringing over the valley. After an age of trying to call her over she finally started back arriving at a serious pitch. When she was vertical I sent my pointer Kell in to flush. As the dog raced around the perimeter of the pond the ducks got up and headed. As the falcon went into a full tuck, one shoveller lost its nerve and tried to get back in. As the duck came back over the dam wall going full taps the falcon arrived in a hissing rush and drilled the shoveller on the back of the head. The duck skipped twice on the surface of the water and came to rest with its head under hanging straight down in the water. The Red Nape coasted in after the strike and landed next to me on the dam wall and started chupping like mad. My dog dived in and swam out to the dead duck. As she got back to the bank with the duck, the falcon waddled down to the waters edge and unceremoniously grabbed the shoveller from Kell and proceeded to make sure it was finished. Kell, also an old pro of many duck hunts calmly accepted this treatment as she knew her place in the pecking order.

This flight was with my four times intermewed hacked Peregrine Kayla. She had been released the previous season but had hung around and occasionally coming in for food every couple of weeks. After an absence of two months she suddenly arrived at the hack site with a badly bruised wing. I picked her up and after a month she was as good as new. The day of this flight I had a guy and his son out with me who wanted to see what falconry was all about. The setup was a dam of about two hectares in the middle of a flat alluvial plain. The mist was coming in but the ceiling was high enough to fly, and besides the dam was chock full of a mixed bag of ducks! I cast Kayla off and she straight lined it for the horizon. My guests looked at me and said something like "look she's flying away". This was how she usually mounted so I told them not to worry she would soon turn and come back with big pitch. I had no sooner said this than the mist came rolling in with visibility at about 50 meters. After about ten minutes of standing around praying for the mist to lift the ducks decided it was time to go. The whole flock climbed steeply into the mist and disappeared. I was standing there swinging the lure dejectedly trying to decide what to do with this guy and his son while I tracked my bird down. As we started back for the truck there was a loud thump in the mist over us and the next thing a very dead teal came plummeting down to hit the ground next to me followed immediately by Kayla who proceeded to chup like crazy as she started plucking. The relief was indescribable!

Topping the list is probably a flight I had last season with my old passage at what I call the Banana dam. This dam is actually a holding area for my local ducks and is too big to fly as it is about five hectares in size and is situated in a valley surrounded by some serious mountains in the 2000m range and when the wind blows, as it does most days the resultant wind shear and rotor are not for baby hawks. Towards the end of last season the dam had about 200 yellowbills on and I was running out of smaller ponds. I think I was taking pond burnout to a new level with the local ducks only moving onto flyable water after dark.

So anyway I decided to see what the old bird could do late one freezing and windy afternoon in August last year. I cast the hawk off and she was immediately whisked a way by the gale and I lost sight of her against the backdrop of the mountain shadow. The ducks started to form a raft in the middle of the dam as some of them had most likely seen this scenario played out before. After awhile I caught sight of the peregrine as she came racing back above the rimrock on the skyline behind me. She was tiny with her wings tucked right in trying to hold position. As I started for the dam she broke free from the rim lift and came flicking vertically over at a huge pitch. I got the ducks started with a few strategically hurled rocks. This big flock lifted easily with a roar of wings and climbing almost vertically into the wind. As they reached about two hundred feet they turned and started to break downwind. The passage shadowed them, holding off waiting for the flock to clear the wall. As the first lot of yellowbills straitened out heading down the valley she started the most awesome vertical stoop. There was instant pandemonium with ducks swirling around trying to get back into water. The peregrine drove through the stragglers and sliced a yellowbill into the water course where it hit the water with some serious speed. The experienced falcons throw up was huge and she was almost immediately back at her original pitch. The big flock had split up into smaller groups that were staying high over the sanctuary of the water. Whenever a group looked to put in the other flocks would suck them up into the sky again. I just sat back and watched this drama unfold. When one of the smaller flocks reached about 500 ft they tried to make a break for it. Instantly the Peregrine sliced through the yellowbills, cutting one down into the water and immediately remounting to the huge pitch over the rimrock. This scenario repeated itself for the next 20 minutes with ducks getting pounded down into the water at regular intervals. I was only a spectator at this stage of this incredible display of mastery of the air and the quarry by this experienced old passage falcon. She alone was controlling this flight and the destiny of this big flock of yellowbills. Finally she bound to a big drake high over the water and tried to fly him over solid ground. The pair finally came to ground on the steep rocky slope on the other side bank and I could see the drake was going to have his way with the falcon and get back in to the sanctuary of the water. I suddenly realised my role in this little drama and raced around the muddy perimeter of the dam arriving just in time to help the heaving peregrine who was hanging onto a bush with one foot and grimly holding onto the big yellowbill with other. I made myself comfortable next to the peregrine as she took a full crop. The wind had started to drop as the snow started falling gently and the weak winter sun glowed red against the ironstone on mountain tops as dusk set in.

As it should be...

By Mark Williams, Canada

Today was not to be taken for granted but reminded me of last and previous seasons typical hawking days. This season has been very tough not least by the cold spring and short cool summer resulting in late crop harvests. The weather also had an impact upon some quarry species and in particular the Hungarian partridge that are my main quarry once the ducks fly south for winter.

I got out as usual to greet the sunrise although today I have a day off work and all day ahead of me, for a change with no timelines, normally to get back quick shower and go to work by 11am. I am fortunate to have over 30,000 acres of prime hawking near where I live comprised of many parcels of land. I reach a favorite spot but find no coveys beside the road this time but do get a nice point in the twilight with "Lewis" my English pointer. It was such an open set up comprised of some 400 acres that had no fence, wire or obstacle of note in sight and it just screamed for the Jerkin. Mulligan is a first year imprint Jerkin. He got the name as my last one tragically died the year before due to an impacted esophagus caused by a duck neck bone and this Gyr was my second chance much like the term is used for in the game of golf. I like to give him the choicest of set ups that are big and open. I unhood him and he jumps on top of the truck as he has taken to doing lately. He mutes and sits with one foot up. This is not a good sign so far; meanwhile Lewis is holding a staunch point a few hundred yards yonder.

For reasons only known to the Gyr he decides to leave and heads straight at the dog and it's the same height off the ground. This does not look good and I anticipate a smack on the dog's head, as imprint Gyrs are prone to do, particularly if they have been raised with the dog. However not this time fortunately, he starts to climb up over the dog and does an almost vertical climb pumping all the way into the gentle breeze. I am taken aback at his speed of ascent and in relatively close proximity to me. No circling around me but just straight up as if on a very steep ascending elevator. He reaches his best typical pitch of around 600ft in moments and yet still climbs. I keep watching in the nice crisp -14c air and think it has some influence to his mood this morning. The sun is now just breaking the horizon and the snow-covered mountains in the distance makes for a spectacular if not dramatic backdrop.

Now he is over 1000ft and still climbing aggressively and I am now waving the glove to turn him, but he is heading further south of me. The dog is rigid and we are all filled with anticipation and bubbling with excitement. Rarely does he go this high and he isn't stopping yet. "Oh my gawd", I think to myself as he is getting hard to see and I wished I had my binoculars around my neck. I dare not take me eyes off him now as I walk backwards to the truck. Then it appears he saw something and booked it south at such height and purpose usually only seen in a pursuit flight. I could not turn him and he just disappeared out of sight. I just stood there dumbfounded wondering what the heck he had seen up there and what I should do next. Instincts said to wait. I was unconcerned, as this baby bird does not fly off. He is a full imprint and this season he has shown when he is done playing he will usually come back looking

for me. Moments pass and I see a small flock of late season ducks passing high up but not as high as he was, watch them for a few moments to see if he is in pursuit. Probably only ten minutes pass but it felt much longer and I turn to the truck and get out my receiver, while swinging the glove in case he sees me. I still have a dog holding point now for over 20 minutes. The signal is strong and no real direction as it feels he is close. Next moment I see him skimming on the ground towards me and "talking" on his approach. I put out my glove and call him in and put him away. Damn it, these imprints, you gotta love 'em or hate 'em. Meanwhile Lewis is giving me the look of "just how long do I hold this point"?"

I put Adam up, my intermewed small Gyr x Peregrine hybrid and he is all business and climbs nice, circling around me but flies nothing like the Gyr. He seems to be around 400ft, his usual pitch and I am content to walk in on the point as he is still climbing. Up go the huns and instead of heading to the one and only small piece of cover behind me they head out into "no mans land".

Adam puts in a nice snappy wing over and stoop and slices through a hun but in his throw up, he turns to another partridge racing away at a 45-degree angle to the one that he hit. Meanwhile the one he hit is hovering and semi fluttering and falls to the ground. I think it took a head shot and is a gonner so I glance back to the business at hand as Adam pursues the other hun he selected. He puts it down, throws up, but does not have it as he hits the ground. I run over there and Lewis has followed the flight, which I encourage him to do, and he now has it nailed on a point while Adam is running around in the stubble frantically trying to find it. He must have come close to it as the hun panics and takes off quickly followed by Adam and a 200-yard tail chase ensues but he nails it out in the open. After I crop Adam up I go to where the first hun fell as extra hawk food is always welcome and I try not waste anything. To my amazement the "dead' hun gets up and fly's out of sight. I scratch my head as minutes earlier I thought for sure this hun was fatally hit.

Another hour or so of driving passes as I head to the southern most limits of my hawking territory and I finally find another flight for the Jerkin. Lewis has a covey nailed, but has inadvertently run right into the middle of the covey probably caught offside as he changed the direction of his run. A hun bumps, then followed by another and, before you know it, the whole covey lifts and head out in a stream of birds. Lewis looks back at me as if to say "oooops". Fortunately he holds still and I watch them go, keeping an eye in case they land. I see two birds put in as the others disperse and I ready the Jerkin. This time, with dogs running the field it encourages him to

Below: Huns hiding in their dig

Huns busting out.

Adam chasing his downed.

leave instantly.

The huns put in about 350 yards away in open stubble but in the direction of a farm and gravel road. I decide to drive to them while the dog's quarter in front of me.

The Jerkin is following above me nice and high as I glance up through the sunroof of my truck but he is nothing like he was in his first flight. He is about 400ft and holding when I stop and get out. He is being buzzed by a flock of small birds, probably snow buntings.

I call in Lewis my pointer and Monty my old wirehair is already at my side. "Find the birds" I say as I frantically look for the huns in the area I had roughly marked them to be. Up they go and I head jerk upwards to see the Jerkin's light colored body accented by the clear blue sky as he comes powering down. A quick mental survey of the direction the flight is taking and the proximity of cover or hazards puts my mind at rest as I see it is all free and clear. He selects an old cock bird and powers it down for a bind, feathers spray everywhere and they both hit the ground in an uncalculated follow through.

Fortunately the foot high grass cushioned his blow into the ground. He turns and is trying to run down the hun that gets up and heads out. He is also up within a flash and it does not make 60 yards before he binds to it. The dogs run up to check all is under control and I walk up to him allowing him to crop up. It is his first kill in over a week but this baby bird has done very well so far this, his first season.

A sense of bittersweet success falls over me and I glance at the distant White Mountains and smile to myself as the Jerkin plucks. "This is as it should be" I think to myself as I reflect upon the tough season to date and how quickly I took for granted my recent seasons and how different it is now. Mornings like this put you in the frame of mind for anything life can throw at you.

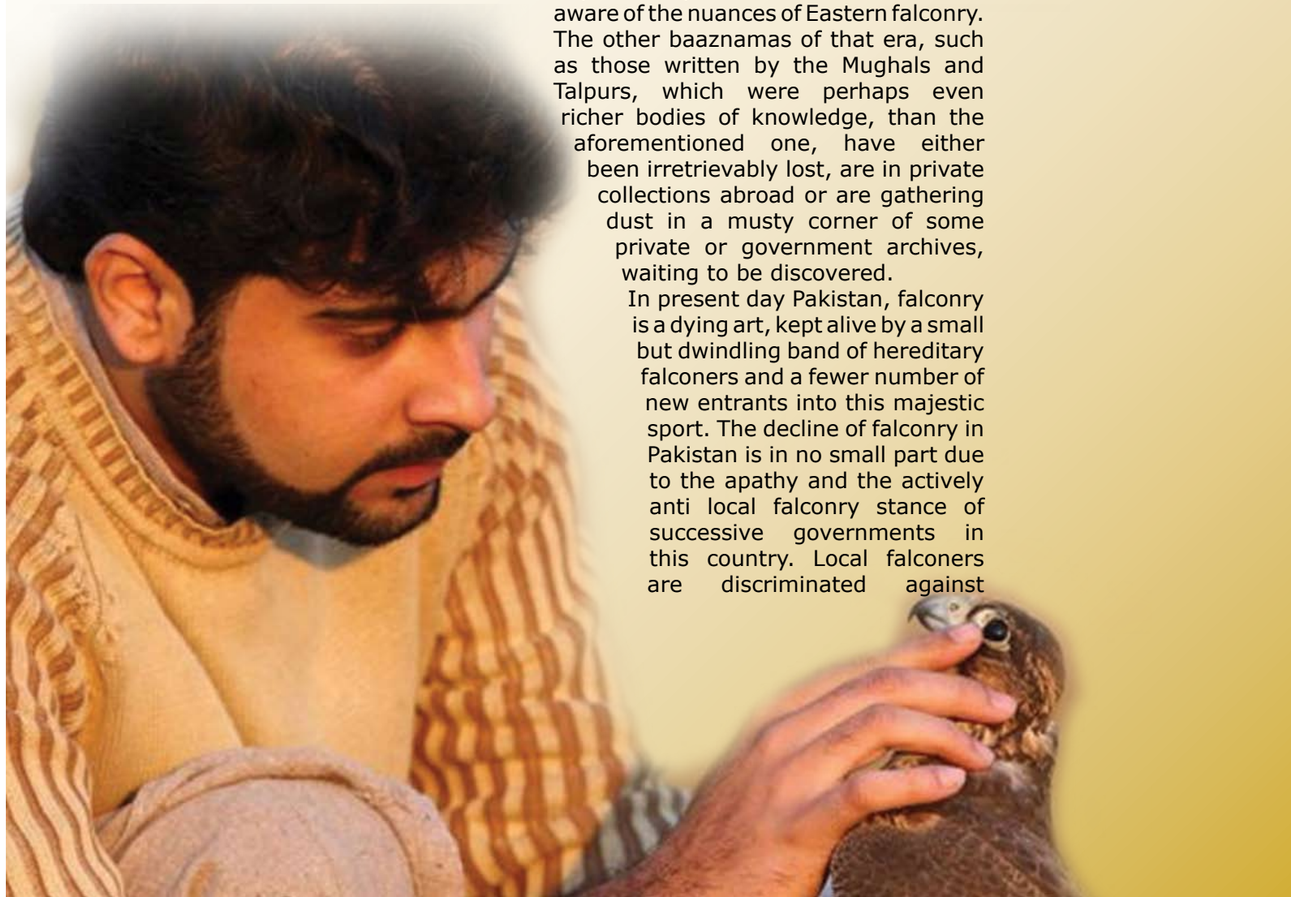
Falconry in Pakistan: the past and future

SALMAN ALI & RAFEY ARSHAD

Pakistan has a small population of falconers, the majority of whom are austringers. Most of these falconers belong to the province of Punjab, followed by Sindh, NWFP, Northern Areas and Balochistan provinces. Falconry has been practiced in the Indo-Pakistan subcontinent since at least 600 B.C. but the royal patronage during Mughal era has had the most profound and far reaching effects on the sport till date. It was in this era that formal documentation of the observations regarding falconry, and both the raptors and the prey species was initiated.

Most of the literary works pertaining to falconry and hawking of this region also originate from this period. These works are known as Baaznamas, literally meaning "hawk journals". Sadly most of these baaznamas have either been lost or are with private collectors of Oriental Art and Literature outside the country, mostly in the West. One of the better known Baaznamas is the Baaznama of Khushhal Khan Khattak, a 17th century warrior, poet and tribal chief of the Pashtun tribe of Khattak. This baaznama has also been recently translated into English by the Pashto Academy in Peshawar, though the translation is for the most part, a literal translation, and needs to be edited and improved by an erudite falconer, well aware of the nuances of Eastern falconry. The other baaznamas of that era, such as those written by the Mughals and Talpurs, which were perhaps even richer bodies of knowledge, than the aforementioned one, have either been irretrievably lost, are in private collections abroad or are gathering dust in a musty corner of some private or government archives, waiting to be discovered.

In present day Pakistan, falconry is a dying art, kept alive by a small but dwindling band of hereditary falconers and a fewer number of new entrants into this majestic sport. The decline of falconry in Pakistan is in no small part due to the apathy and the actively anti local falconry stance of successive governments in this country. Local falconers are discriminated against



all falcon species are known as "Siyah chasham" (black eyed) due to their darker eye coloration.

Traditionally, the bird of choice for Pakistani austringers has been the goshawk which is used to hunt hares, partridges, bustard, water fowl, and even gazelles. Traditions in Pakistani falconry are born more from necessity and lesser from any other factors. The goshawk winters in Pakistan and is well adapted to hunting in our weather conditions. The female of the Goshawk is called "Baaz", while the male is called the "Jurra". Traditionally the goshawk is thrown from the fist in a manner unique to this region.

This method is in known as the "Batola". The Jangoli (the halsband) is pulled down till the hawk is parallel to the ground, and then both the jesses and the Jangoli are gripped between the thumb and the index finger, and the moment a partridge is flushed, the hawk is thrown the at the fleeing game with hawk bearing arm fully extended and swiveling motion of the upper body of the falconer, so as to impart maximum moment to the hawk. From the hands of a skilled falconer, a goshawk thus thrown will kill more often than not, in the first flight.

The humble sparrow hawk (BASHA) is also widely used and there is a common saying that a good basha is better than a jurra, as it eats less and scores more. A wide variety of quarry can be taken by a sparrowhawk ranging from partridge, teal, lapwing, moorhen, and pigeon to quail, wagtails and sparrows. A well trained sparrowhawk, in the hands

and denied access to hunting areas, and recently to long-wings as well, while foreigners are provided every facility possible to come and hunt here, and they keep longwings as well.

This modern day apartheid is the biggest reason behind the virtual death of longwing falconry in Pakistan. The handful of committed longwingers that remain and the comparatively larger number of austringers, are the patrons of falconry in this country. Most of these longwingers and austringers employ professional falconers (Baazdars) during the hunting season. Some of these baazdars are permanent employees all year round. These Baazdar's are also hereditary falconers, having learnt the art of falconry from their forefathers, and there are some of them whose ancestors were the baazdars of the Mughals and the Talpurs.

In Pakistan, hawks and falcons are distinguished by the color of their eyes. All shortwinged hawk species are known as "Gulab chasham" (red eyed) as their eyes turn ruby colored with maturity, while

regard the red-headed merlin as a semi-hawk due to its arboreal habits. It is usually found in habitat similar to that used by shikras - usually irrigated fields and grassland with a few trees and small copses located at least a few hundred yards apart. Its hunting habits are also rather accipiter like in certain respects, and it likes to ambush and out-fly its quarry and is thus treated almost the same way as a sparrowhawk or shikra.

Of all these three birds, the shikra is the hardiest and most courageous. It not only looks like a small goshawk, but it also has the courage of one. A well trained shikra will not hesitate to catch crows on a regular basis, and can be hunted all day long. It is quite tolerant of the heat and rough handling, unlike its northern cousin, the sparrowhawk, which has a rather delicate constitution and a very unforgiving memory. A spar never forgets a mistake made by a falconer, while the shikra is quite a large hearted bird. While the shikra also does not have the lightning quick speed of the sparrowhawk, it makes up for this with tough constitution and tenacity.

It must be noted here that while most Pakistani falconers prefer the female sparrowhawks the most amongst these smaller hawks, they do not find flying muskets worth their while. As muskets are very delicate birds, and if they flown even five grams too sharp, they may suffer fits and die.

The males of shikras and red-headed merlins, particularly the latter, are specially prized for hunting quails. In fact, some falconers here specialize in quail hawking, and with a good pointer and a cast of hawks, they catch up to forty quail a day! One falconer here also hunts quail at night time with shikras with the aid of search lights!

From the Siyah chasham family (Black eyed –Falcon family) we have a variety of resident falcons like Black Shaheen, Red Naped Shaheen, Luggar, Red Headed Merlin and Saker These resident birds breed here and can be seen in the warmer regions of Pakistan in early August-September. Non-resident birds such as Sakers, Peregrines and common merlins migrate to Pakistan from Siberia, Mongolia, China, and Afghanistan etc. Locally falcons are employed to hunt game such as houbara bustard, stone curlew, grey partridge, black francolin and water fowls. Both waiting on and out of the hood flights are used for the appropriate quarry.

Longwings, as mentioned earlier, are flown only by a small band of dedicated men. These master falconers like the rest of the falconry community are a reclusive bunch and mostly keep to themselves. They follow a centuries old code and every year, after the end of the hunting season they release most of their falcons back into the wild. Only the truly spectacular ones are kept through the moult. These falconers usually prefer sakers and peregrines, but they also use red-naped shaheens, black shaheens, luggers and red-headed merlins, sometimes.

There are no active eagle falconers in Pakistan today. Of the three eagle falconers that there were about forty years ago, two have died, while the last surviving one has grown old and is no longer an active falconer.

Falconry is a dying art in Pakistan and falconers an endangered species. If remedial measures are not taken at both the policy level and the operational level then very soon all that will remain of falconry here will be foggy memories and perhaps a passing reference in some traveler's book as to what it once was.

of an expert can take up to two dozen quail a day. The sparrowhawk is held in the palm like a spear and is thrown in a similar manner as well. This gives the hawk a tremendous advantage, and a good sparrowhawk, properly thrown, will often take game on the rise.

Shikras (*Accipiter badius*) and Red-headed Merlins (*Falco chicquera*) are also thrown from the fist in a similar manner, and done properly it turns these little birds into angels of death for all that rises in front of them.

An interesting feature of Pakistani falconry is that most falconers here

Mongolia

The tradition of hunting with bird in Mongolia

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Lecture from Ulaanbaatar, 2008

Mongolians going out to hunt. Chinese picture from the Yuan dynasty.

There is evidence that hunting was a priority of people from the prehistoric period. At this time most food, clothing and almost all other unnecessary items have been obtained only from hunting and since that time people have accumulated knowledge about the biology of wild animals and details of their natural environment through their hunting activity.

We can read in historical books how those first ancestors of human being and birds of prey originated from the Asian continent. Scientists argue that wide steppes and vast sand deserts are the most suitable environment to develop the art of bird hunting.
Mongolian people since ancient times have had historical traditions to worship, feed, and train to hunt and catch wild animals with splendid and powerful birds of use in the essentials of their lifestyle and there is a substantial probability to conclude that this art had originated in Central Asian.

Kublai Khan hunts together with his guards. Chinese picture from Yuan dynasty Kwanten 1979 p179

By the written works of scientists and travelers we can see that Mongolian ordinary people have obtained a major part of food through hunting and "… males haven't trouble for anything, they have only made war and hunted with their falcons". Researchers have classified the concept of hunting with birds of prey as "shuvuulakhui" and there are many records, demonstrating that Mongolians are people with substantial systematic knowledge of falconry.
By the materials in our hand, ancient Mongolians, apparently, have been feed, train to hunt, keep under hungry regime and catch wild animals with birds included in the class of eagle, falcon and hawk. Forthwith, have been used their natural specific characteristics and strength. Records show they used the eagles to hunt mammals such as wolf, fox, steppe fox, hare and other mammals, but falcons and hawks to hunt grouse, duck, goose and other birds.
In the medieval era, the falcon named "aksognkur" in Turkey, "sonkar" in Mongolian, "hai-ch'ing or "hai-tungch-ing" and as referred in historical sources, the fastest hunting birds are big falcons of few species such as white falcon (Falco rusticolus), ordinary falcon (Falco peregrinus), saker falcon (Falco cherrug), which have capability to catch big water birds such as crane, goose, duck etc. These falcons have nature hunting skills, don't fear from whoever and whatever, courageous and might win bird and animals, which often catch animals bigger than themselves. It is common that a good trained saker falcon might catch the black tailed gazelle.
Also in this book it records that the white falcon is biggest in the falcon species, very beautiful, most courageous and respected. Therefore, the white falcon was the worship of the ancient Mongolian "golden origin" or Khiad Borjigin tribe, which was written in the

Parts of the illustration drawings of world history book, written by Rashid–ad-din Faddulakh, a Persian scientist from XIY century an now storing in the Tokapi-carai library.
Hassig, 1992, p. 278-279.

Hunting Mongolians.
Now storing in the Tokapi-carai library/ EW, 1968, p. 25, 52.

history of Butanchar – ancestor of the great Chinggis Khaan.

In the "Mongolian sacred history", article 63 referred: "…When Esukhey Baatar in company of his son Temuugin had met Dai Setsen from the Khongirad, Dai Setsen said "Esukhey Khud! I've seen a prophet dream last night: A white falcon flew in with the sun and moon in its hands and stepped down on my hand! We are seeing sun and moon with our eyes. This is wonderful! I've told people of this amazing event. Esukhey Khud! You are come with your son! This is explanation of my dream. What is dream? There was worship of your Khiad Borjigin who came in my dream!"

The great kings have been brought such good falcons mostly from the Baigal Lake, Manchuria, Far East, Korea and Bokhai. There is no doubt that white falcons were native in Mongolia. An Italian traveler, Marko Polo, had written in his book "The various bizarres of the world", article 74 "… If you make a journey of four days you would reach a sea /North Ocean/… On the islands of the sea … much more white falcons, so the king can have more of them than he wants…" As referred in the "Lu. Golden History", lords from Uigur and Khirgis, captured by Zuchi – old son of Chinggis Khan, delivered to Chinggis Khan White falcons and hawks.

One of the diplomatic traditions to present gifts between tribes and countries was the falcon since the time of Hunn and Dunkhu nomadic tribes. Therefore, Mongolians have honored hunting falcons and hawks as gifts and not just when asked for. However, they were also known to take gifts and oblige as a tax such precious hunting birds from defeated or captured tribes. For example, the "The Mongolian Sacred History" said in chapter 29 "… While they request for Bodonchar's hawk, he hadn't gave…" In the chapter of 239 "In the year of hare /1207/ "… When Zuchi had started war against a oin ard /forest people/ , Bukha had gone as quide…and Zuchi's cavalry had reached Shigdhis / Shishgid river/ through the territory of Tumen Oirad, the khirgis noyod /lords/ and oirad noyod have met the Zuchi's cavalry giving presents to Chinggis Khan with white falcons, white horses and black sables…" The Korea dynasty, existed from 918 to1392, had paid huge taxes, including Shon Koi Mae or falcon in very large numbers. During the great Mongolian imperial time they had been paid taxes with falcon birds to Mongolian imperials from Russia. Later, famous Russian traveler Afanasy Nikitin in his book about India had referred to "… The carriages with white falcons, sent by the great tsar have waited tatarian envoy Shirvanshin Asanbek for two weeks and in the carriages 90 white falcons…". Also, in 1491 Russian tsar Ivan III had

Chinggis khan hunts with falcon.
Chinese picture from Yuan dynasty.

signed an agreement with Tatarian khan Mengli-Girtei to add white falcons to his tax payment. The latest evidence of such practices is in 1491 where six best white falcons were among gifts to Mongolian Bogd khan by Spafary.

Mongolians have used hawks and eagles in hunting. As referred to in the "Mongolian Sacred History", Bodonchar –Munkhag, referred in the history as Mon khan - one of the leaders of an original Mongolian tribe from Three (Onon, Kherlen and Tuul) Rivers had lived in a grass hut on the Baljun island of the Onon River because he was expelled by his brothers. Once, he had been seen with a grey hawk he had caught that was fed with black khur bird - he had caught this with a snare made with long hairs from his horse to keep and feed it. This was written in the "Mongolian Sacred History", chapter 25. An Italian traveler Marko Polo had written in his book "The Bizarre Variety of the World", article 92 "… The great Khan also has many eagles having caught wolf, fox, gazelle, and deer. Those have sufficiently many numbers of varieties of wild animals. Eagles, which catch wolves, are the biggest and most powerful. There were no wolves, which could be saved from their talons…".

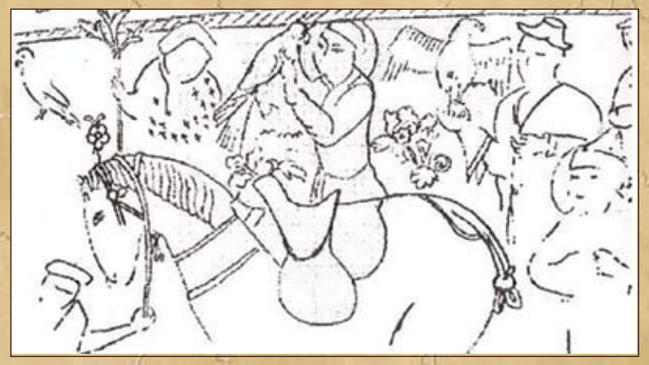
During the great Mongolian empire, the hunting with birds of prey ended as one of main forms of livelihood and was changed to the specific form of hunting activity, having a character of entertainment for Mongolian great khans and warriors. Great Chinggis Khan has an extraordinary knowledge of hunting with birds (falconry) and he brought hunt activity to the high level of state activities. In his period hunting with bird of prey was closely connected to war and military structure and white falcon was portrayed on the imperial army flag as the coat of arms.

It is mentioned in various historical sources, the khevtuul or inner guard of khishigten or the imperial guard had direct responsibility for operation of hunting with bird (falconry) during the emperor's hunt. As written about it in the "Mongolian Sacred History", chapter 232 "… When we will hunt with bird, the khevtuul are allowed to follow us! Some

Mongolians going to hunt.
Chinese picture from Yuan dynasty.

"The steppe's queen" by D. Erdembileg

Falconers.
Picture from Kidan dynasty.



Picture of the Mongolian great khans, inherited from warriors of Timur khans.
Esin, 1977, p. 18.

Two works by B. Monkhzul.

birds let place in carriers!..' and in chapter 278 was referred as Chinggis Khaan and Ogodei Khan have issued a decree "… When we are going to hunt and hunt with bird, some khishigtens let the palace guard and others follow us!... Ogodei and Tsagaadai, sons of great Chinggis Khaan have had hunt with bird too. As referred in historical source, every week have sent caravan of 50 camels, carrying hunted cranes.

Hubilai Khaan of the great Mongolian Yuan dynasty had continued the hunting tradition with bird for his mental and spiritual pleasure. Above mentioned Marko Polo had note in "The Bizarre Variety of the World" Khubilai khan "… goes to hunt followed by ten thousand bird keepers with five hundred falcons and simple eagles and brown head eagles. Also, goes to hunt water birds along the river basin with eagles. Khan doesn't keep too many people and birds in the same place. He deploys them in different places and hunters present the greater part of hunted birds to khan….". Further, "Khan goes with twenty best falcons and several lords and warriors of higher range for pleasure. Khan ascends in the Ger residence, harnessed several elephants and lords and warriors follow him. If they shout: "Great khan! Flock of cranes is coming" the khan will look at flock of great many cranes and free one of his birds of prey. Freed falcon or eagle undoubtedly intends to catch a crane. So the great khan pleasures…".

After death of Chinggis khan and disunion of his great empire the tradition of hunting with birds of prey had continued as heritage for a long time.

Recently, Mongolian archeologists (U. Erdenebat and others) have found a head bone of hawk (Assipiter nisus) during excavation of a grave from XYI century is the guarantee of the tradition that Mongolians have buried their khans and honored people together with their precious possessions and important domestic animals.

There is a tradition of Mongolians, which inherited to comparative late period such as selecting, catching, keeping, training and feeding of falcons, eagles and hawks. There were people with special duties to perform these activities, named as "Falconer", "eagler" and "hawker" and method and operation of hunting with birds have detailed order and have correspond to particular season and characters of particular bird and special "language". For example, the linguistic work of several Mongolian science authors in 1746 "Dictionary of thirty six" has a special chapter named "Hunting falcon and dog's for entertainment". This chapter contains many Mongolian terms, connected to the custom of hunting with birds of prey. Therefore, we have an opportunity to analyze these terms in comparison to historical knowledge and etymology sources of ancient Mongolians to find some information on hunting with falcon and hawk .

There were different methods of catching of birds of prey such as to take chicks from a nest, catch adult birds with bird bait, use a snare, catch while such birds could not fly because their feathers were wet with rain water or hard to fly caused by extra eating. The best method is to catch with a snare because the body of the bird would not be injured and will catch only bird of prey, not another bird. A bird snare for trapping is called in Mongolian "toor urkhi".

There are some main terms in Mongolian terminology:

Barimui/keeping: This term means keep bird of prey such as falcon and khyargui on the hand. In the "Mongolian Sacred History", chapter 266 it is noted "let birds be kept by outstanding boys! Allow them to follow the hunt!". Wilhelm de Rubruk, messenger of king Ludovick of France, had written in his travel book "… Khan ordered to bring hunting-birds and stand them on his hand to stare at…", when the French messenger had paid a visit to Mongolian khan.

Suulgamui/standing: This term means bird of prey such as falcon and khyargui standing on the "togor". In other words, stand feeding and training birds to make them calm in the specially made setting.

Duluulmui/be awaking: This term means training of bird of prey such as idleg falcon and hawk by keeping it awake in night time. To adapt to domestic condition could keep hungry and awake, because wild birds are very ferocious.

Ogimui or uriadmui/calling: This term means to call, showing any bait to a bird of prey such as falcon and khyargui. This is one of the important parts of the training of birds of prey and birds trained with such methods in future don't fly away and give hunted bird or animal to the trainer in full.

Uriaduulmui/coming by call: This term means that birds of prey come by call of the trainer or passive voice of call. In other words, be called with bait and this method used after taming of the bird of prey.

Buulimui/training to hunt: This term means bird of prey such as falcon and khyargui or hunter-dogs trained to hunt wild animals such as hare or birds. As referred in the "Mongolian Sacred History", chapter 27 "…Qabur boluba. Noyod ireüi cay-tur garcyai-bayan teilegüizü oyurba. Noyod yalayud qoziyulas tutun qunsiyud küenzüigles tutun qunsiyud hünistele talbiba…" or (Spring season arrives. Then come the ducks, he has kept the hawk hungry and freed it to hunt. He has jerked ducks and geese on every stump and every stub everywhere). If analyze this phrase, above mentioned Bodonchar-Munkhag had kept his female hawk hungry and when comes spring season, he had freed it to hunt ducks and geese. This is the buulimui or training to hunt. Many researchers have agreed that referred here word "teilegüizü" is a special term, meaning "keep hungry and free to hunt", basing on the translation of the "Mongolian Sacred History" into Chinese. Some researchers have explained content of word "oyorba" as free or fly birds of prey for hunting wild animals and birds and have note as referred in 249th chapter of "Mongolian Sacred History".

This information is evidence, arguing

that Mongols from the steppe have been trained and hunted with birds of prey and when researchers have explain content of word "gunsiyud" as "jerked fowl" and unanimously agreed that translation of Ts. Damdsinsuren as "has hung two or three of fowls on every stump" is just right translation.

Amtshuulmui, eremshuulmui/ training with bait: This term means bird of prey such as falcon and khyargui or hunter-dogs train to hunt. In other words, to give a possibility to taste the fowl of the hunt, to become encouraged and stimulated and inspired with own might. Generally, a Mongolian word "bolovsrokh" or train has content to strength and repeat learning by any human or animal. Word "amtsikh" means any live subject adapts to own actions, returns permanently and word "eremshikh" means further advancing on the basis of previous events and actions.

While birds with hunting experience have no need to train, newly caught chick or bird of prey, with no experience, need to train. For this purpose, first time trains by the way to give live birds to catch. Only well trained bird of prey must be free to hunt.

Amtashjukhui, eremshjukhui/ trained with bait: This term means bird of prey such as falcon and khyargui or hunter-dogs were trained to hunt. To hunt with bird of prey, a hunting man could go by hillside or high place and before freeing bird to hunt could discover head and untie the bind of legs. Generally, during hunting with bird of prey there is a need to involve two or more men and after catching of bird men must come on fast. About it referred in one of source "… When the great khan goes to hunt with all eagles and other birds, followed by ten thousand warriors. They divided to many small groups by pairs. The pairs named as toscaor, means guard. They deployed wherever in pairs and this is covers a wide territory. Each man has a small pointed hat and woodwind instrument. With this instrument they call eagles and other birds. Once great khan ordered they shall free birds and shouldn't follow them. But deploy here and there to watch after birds, if the birds need help then immediately go to them". Because, birds of hunt might be tired caused by long fighting with animal to hunt or wild animals might injure them. Also, hunting birds kill animal and eat fresh meat or might be damage skin and hair. A good trained bird awaits their trainer, guarding hunted animal and does not let approach other animals and birds.

Hogshiluulmui /feeding: This term means feeding hawk and other hunting birds. The "Mongolian Sacred History", chapter 26 referred "When there wasn't food, Bodonchar had killed with an archer gazelles, which was stolen by wolves to eat and had been He took the remains of wolves eating to feed his hawk to overcome winter season".

Tuulgamui/feeding: This term is mean feeding any animals to feed in purpose of overcome the winter season. Feeding methods of hunting birds are different and depend from particular season of the year caused by keeping hungry, growing in weight and cause to molt. Generally, gives meat without fat of marmot, gopher, fox and hare after washing with water, but does not give meat of livestock. Wilhelm de Rubruck had noted in his travel book "Mongols don't use meat of long – tailed mouse /gopher/ but gives to keeping birds".

Togor/seat: This term is means the seat for hawk, khyargui and falcon. Newly caught bird of prey let wear hat, sets on the right side of ger /felt tent/ on the seat with three poles, specially made with wood or fasts with long rope outer of ger. Some ferocious birds are set on the moving bar to let them be calmed: bird tires attempting to find body's balance and strengths its skill to keep. When going to hunting place, some big birds such as eagle uses the fork-wood with leather string on one side to bind to saddle for purpose of supporting the hunter's hand.

Malgai/hat: This term means the leather hat (hood) to cover birds such as eagle. The hat used to hide bird's eyes to let bird be calm.

Devsger or yasun: This item used to contact with khonkh /bell/. Apparently, this is aims to bind the small bell to tail of hawk and falcon – also used on one hand to make fly water birds from lake and river, or on another hand to prevent from attack of other bird of prey such as eagle.

Khonkh /bell: This term means bell, which is made in the way of few miniature iron or brass balls as a spherical small container.

Orvolgo /wrapper: This term is means the wrappers of white and black color, which tie wing and tail of hawk and khayrhui. During training of birds of prey it ties their wing and tail in parts with leather and cloth strap named utugan. This is aimed to limit height of flight of bird. French traveler Wilhelm de Rubruck had referred about it "They /Mongols/ tie a leather halter from head to middle part of chest and setting on right hand. After freeing of birds, directly they pull the rope with left hand in the purpose of limiting flight height".

Khorobkhi: This term means bind between wrapper and devsger, made with silver or brass strips.

Tushaa/lace: This term is means cord or lace with felt cover, binding legs of birds of prey such as hawk and others. To this cord ties leather leash of 30-40 cm and the trainer keeps in his hand the other end of the leash.

Erguul/whirl: This term is means a whirl, made with copper or brass and binds to one end of the leash. It is used to tie the bird.

Shijim/rope: This term is means the long rope to tie to lace. It's used to

fasten with rope.

Suljee/wooden tie: This term is means the wooden tie connected with rope.

Beelii/glove: This term is means a leather glove for hunters hand to keep bird. Hunter wears a long glove of about 50 cm, made with cow skin with felt inner layer to protect his hand from bird's talons. By the illustration drawings of world history book, written by Rashid –ad-din Faddulakh, a Persian scientist from XIY century an now storing in the Tokapi-carai library, was shown Mongolian hunters, wearing such glove.

Taartsag/bait container: This term is meant the small container or sack to contain baits for birds of prey.

Goyo/stomach clearer: This term is means items, used for cleaning up stomach of birds of prey. Such clearers (castings) may be made with different materials: paper, bone, felt etc. using such clearer. Hunter clears stomach of birds from remains of eating such as meat, bone, hair and others in the way of belching.

Uria/call: This term means method and items for calling of bird. Mongolian hunters have specific calling sounds and some musical instruments. To call birds of prey he shall show bait from sack and blow musical instrument.

Thus, the hunting experiences of ancient Mongolians with birds of prey such as falcon, hawk and eagle proved by historical sources and the traditional terminology in the Mongolian language, connecting to feeding, keeping and training of birds of prey. Also, in the comparison of names of birds of prey and terms, used in training and using of birds of prey in some Asian countries of Turkish origin and in Russia are almost same. Therefore, "shuvuulakhui" or hunting with birds of prey, obviously, has an ancient common origin. For example, seat for setting of bird hunting bird is called by Mongolians as "toor", Kazakhs "tugyr" and this word had entered into Korean language in old time, because in the Korean-Chinese dictionary, published in XYIII century saved as "toor". Name of peregrine falcon /falco peregrius/ in Russian language "sapsan" had originated from kalmyk language and Russian name of male hunting bird is "chelig" and originated from turkey's "Chayulyu".

Some names of birds of prey, containing same forms and contents are shown in following table:

Mongolian Name	Middle Asian Name	Korean Name	Russian Name	Latin Name
Idleg shonkhor	Itelgi, itelgu, itolgi	Igdoogui	Baloban	Falco cherrug
Turamtai shonkhor	Turumtai	Toruntai	Kobchik	Falco vespertinus
Egel shonkhor	Lashin, lhachin	Col	Sapsan	Falco peregrinus
Jadan shonkhor	Shumkar, sunkar		Krechet	Falco rusticolus
Khartsaga	Kharchiga, kharshyga	Khaljyge	Yastreb	Assipter gentius
Burged	Burgut, byrkyt		Berkut	Aquila chrysaetos
Sar	Saryja		Sarych	Buteo buteo
Tarlan sar	Tarlan			Buteo rufinus

Present day hunting party in Mongolia.

So, hunting with birds of prey was changed to entertainment in the custom of khans and elite warriors - ruling minorities of the Mongolian society then in the period at the end of the Mongolian empire brave Mongolians have terminated traditional shamanism and have lost the political right to outer powers, the hunting practice of wild animals and birds changed to shooting of target or ball. Therefore, later among the all Mongolian nations was forgotten tradition of hunting with birds of prey and custom of keeping, feeding and hunting birds.

Evidence of worship of power of birds of prey were saved on the symbols of police organization and strictly protected areas. Also existing, many other examples such as title "hawk" given to national wrestlers, successfully participated in the national wrestling competition and title "Falcon" young wrestlers, who won the national wrestling competition.

Mongolians haven't killed wild animals in massive numbers, but have followed rational norms for protecting of wild animals and have made law not to kill any wild animals and birds in their reproduction period or from to March to November. Furthermore, as referred in some historical sources, ".. have circled the silver ring on the legs of birds of the great khan and high level aristocrats with written name of proprietor and keeper. Therefore, any men, who catch such bird shall know its proprietor and deliver it to proprietor and keeper…".

So, Mongolians not only feed and train birds of prey to use in hunting practice or their daily life needs, fun and entertainment, but have also protected them. There is high probability that Mongolians have found the scientific method of research for bird's movements using ringing techniques. On the other hand, methods of hunting with birds of prey has an advantage not to massacre wild animals and birds and leave some injured or maimed; hunts are more reliable with an awareness to protect nature.

Ancient Steps Engraved in the Cliffs of Breeding Sites of Peregrine (Falco peregrinus)

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Summary

Peregrines were not breeding in Hungary between 1965 and 1997. After the long break, the first breeding was recorded in Pilis Hills in 1997. The pair – consisted of an adult male and a 2cy female – bred successfully in Raven nest in an abandoned quarry and they fledged two juvenile males (Bagyura 1997). At the same time, we observed an adult male and an immature female at an ancient breeding site in Börzsöny Hills, however breeding was not recorded. In 1998, in the incubating period the breeding of the pair in Pilis Hills failed for unknown reason. However, the new pair in Börzsöny Hills bred successfully.

Ancient rock-cut steps.

In order to avoid unnecessary disturbance, we observed the nest from a great distance, and saw that the adults fed the chicks regularly.

We found 15th May a proper date for ringing the chicks. Considering safety precautions János Bagyura and András Békefi slowly descended to the nests on appropriately tied ropes. Meanwhile the adult Peregrines were above them – the male higher than the female – calling loudly. When descending and finding safe places for their legs, they realised that there were foot-sized cavities engraved in the cliff in a stair-like arrangement. They managed to reach the nest by using those 'steps', which was a natural cliff ledge. There were two males in the nest. In 2003, the pair bred in a Raven nest on the same cliff, but on its northern side. Surprisingly, there as well, there were steps engraved in the cliff that lead also to the ledge suitable for nesting. There were 3 young females in the nest that fledged successfully.

In 2005, at another ancient breeding site in Pilis Hills, István Lotár Molnár found also steps engraved in the cliff.

The steps may be even more than one hundred years old and they were very likely made in the medieval ages. Certainly, falcons have been breeding since ancient times at those sites mentioned above, thus the link is obvious: considering technical possibilities of that time, it must not have been easy to access the nests of the cliff-breeding falcons; Middle Age falconers, therefore, made the harvest of falcon chicks for falconry easier and safer that way.

Falconry is an ancient hunting technique; one of the earliest written records of it can be seen in the so-called 'Képes Krónika' (Illuminated Chronicle – a medieval illustrated chronicle from the Kingdom of Hungary from the fourteenth century). Prince Álmos, younger brother of Könyves Kálmán (King Coloman, the "Book-lover"/ 1095-1116) hunted the Rook with a Peregrine – as it can be seen on one of the miniatures of the Chronicle. Falcons and their breeding sites were highly appreciated. In 1264, the Csanád dynasty was litigating for the ownership of the cliffs named Sólymos-kő (Falcon Rock) or Sólymos-fej (Falcon Head), and Fel-kő (Upper Rock) above the village of Bertény. According to the subsisting documents, they acted separately for the ownership of the falcons breeding there (Ballagi 1900).

Falconry was popular in the subsequent centuries, however from the 18th century; it lost its importance significantly as firearms were being improved.

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Avian Malaria in Imported Gyr Falcons in United Arab Emirates

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Summary

Authors reviewing a clinical history of avian malaria cases in gyr falcons (*Falco rusticolus*). In 2001 and 2002 seasons an infection caused by Plasmodium relictum was diagnosed in seven captive-bred gyr falcons (Falco rusticolus) admitted for general examination in Abu Dhabi Falcon Hospital and H.H. Sh Sultan Bin Zayed Al Nahyan Falcon Hospital. The falcons were shipped to Middle East in autumn 2001 and 2002 from North America for traditional falconry purposes. Neat's stain of blood smears of these falcons showed high (44% and 36%) parasitaemia in two cases, two moderate, (18% and16%), and three cases of low parasitaemia, (below 10%). Clinical examination of the individuals with high parasitaemia revealed an acute onset of severe dehydration, (PCV 55-58%), reduced performance, decreased appetite and thickened- grey discoloration of the urine part of the faecal. Radiological examination showed splenomegaly, nefromegaly and hepatomegaly. Treatment consisted of primaquine -PRIMAQUINE PHOSPHATE, (0.75 mg/kg SID) and chloroquine MALAREX, (25 mg/kg SID initial loading dose continued with 15 mg/kg) in 0-12-14 and 48 hours . In two cases relapses occurred. Repeated treatment with increased dose of primaquine (1.9 mg/kg) and chloroquine (37.5 mg/kg) resulted in another relapses of parasitaemia. Treatment regime with pyrimethamine-DARAPRIM (12 mg/kg) and sulphadiazine-DUPHATRIM (25 mg/kg SID) for four days cleared the parasitaemia. Three months after treatment initial body weight was reduced by 12% and Plasmodium parasites appeared again in the peripheral blood but with no clinical symptom. Mefloquine –MEPHAQUIN (25 mg/kg SID) 0-12-14-48 hours apart continue with 25mg/kg once a week for the next four weeks was used for treatment. From all treated falcons a blood sample for hematology and biochemistry examination was collected twice a week during the whole treatment regime. In 2002 one falcon died due to *Plasmodium relictum* infection in which case an above mentioned mefloquine treatment regime was used. Histopathology reveled large amount of malaria pigment in liver and kidney. The Falcon died due to parenchymatic organs damage caused by the extra-erythrocyte stage of parasite development. The presence of the vector species in Middle East and large number of imported captive-bred falcons are questioning the importance of malaria screening in birds traded from North America.

Introduction

Gyr falcons are one of the most valuable and priced species of falcons used for a traditional Arab falconry. Captive bred falcons are shipped in autumn from North America and Europe to Middle East for traditional falconry purposes.

According to Garnham (1966) there are probably six species of *Plasmodium* occurring in birds of prey: *P. fallax, P. gundersi, P. hexamerium, P. polare, P. relictum* and *P. subpraecox.* In some cases it is difficult to differentiate *Plasmodium* sp. from *Haemoproteus* sp. especially in a low parasitaemia. In Plasmodium infection both gametocytes and schizonts may be observed in peripheral blood. The gametocytes contain pigment and they are more likely to displace the host cell nucleus than *Haemoproteus*. The schizonts are round to oval cytoplasmic packets containing numerous basophilic staining merozoites (Pierce, 1989). Mosquitoes of *Culex* and *Aedes* sp. are the vectors of avian malaria infection (Baker, 1976). Of all *Plasmodium* sp. infecting raptors only P. *relictum* is considered to be a virulent and highly pathogenic. Kingson et al. (1976) reported occurrence of 16% parasitaemia in Peregrine falcons (*Falco peregrinus*) and Gyr

falcons (*Falco rusticolus*) in North America, which required treatment. Transmission is frequently seasonal depending upon the activity of the appropriate vectors. In a tropical environment many species of birds are often in a low state of nutrition before the onset of parasites frequently occurs. This is particularly noticeable in transcontinental migrants at the end of their migration when patent infection reverse to a latent phase after arrival. *Plasmodium relictum* was reported in different wild and captive-bred species of birds, Hawaiian crow (*Corvus hawaiiensis*), (Massey et al., 1996), Hawaiian amakihi (*Hemignathus virens*), (Atkinson et al., 2000). In Europe avian malaria was considered to be the primary cause of death of robins (*Turdus migratorius*), (Beier, 1981). Together with aspergillosis, avian malaria plays a significant role in morbidity and mortality of captive penguin species; African black footed penguin (*Speniscus demersus*), (Cranfield et al., 1994; Stoskopf and Beier, 1979) and Magellanic penguins (*Speniscus magellanicus*), (Fix et al., 1988). Clinical symptoms in all cases were associated with a presence of exoerythrocytic schizonts in liver, spleen, lungs, kidneys and brain. These lesions resulted in dysfunction and non-specific tissue damage of parenchymatic organs (Graczyk et al., 1995). Haematological findings in post-parasitaemia stage were lymphocytosis, reactive lymphocytes, toxic heterophils and poikilocytosis of erythrocytes (Graczyk et al., 1994).

Methods and results

Two of the six captive-bred falcons shipped from North America to Middle East were presented with complain of reduced performance ability and dehydration. Because of the exceptional value, excellent previous performance and high morbidity rate of the gyr falcons in Middle East climate, radiological, endoscopical, haematological and blood chemistry examinations were performed. Splenomegaly, nefromegaly and hepatomegaly were visible on x-rays. Endoscopic examinations showed 2 small nodules in lungs parenchyma not associated with malaria. Hematology showed normal blood panel. By Nea's stain of thin blood smears the schizonts of a haemoparasit were discovered in numerous erythrocytes. Sizes of schizonts were generally 15-24 microns by 9-17 microns. They contained a merozoits of two distinct sized nuclei. Based on the morphology of abundant intra and exoerythrocytic forms a tentative diagnosis of avian malaria was made. Blood smears were sent for identification of parasites to Dr. M. A. Pierce at MP International Consultancy, London. Parasites were identified as *Plasmodium relictum*. Histopathology of liver and kidney biopsy revealed numerous intraendothelial schizonts. All six falcons were tested and the same clinical findings were discovered in two other gyr falcons. Antimalarial therapy was initiated using chloroquine (MALAREX, 25 mg/kg SID initial loading dose continued with 15 mg/kg SID) together with primaquine (PRIMAQUINE PHOSPHATE, 0.75 mg/kg SID) in four divided doses at 0, 12, 24, 48 hrs. All six falcons were screened for parasitaemia in 3-4 day intervals.

Four days after the first treatment, erythrocytic stage of development was cleared out. Haematology results showed lymphocytosis, severe toxic changes of heterophils, reactive lymphocytes, anisocytosis, poikilocytosis and regenerative anaemia. In blood chemistry, a non-specific tissue damage - elevated CK, LDH, AST was observed. Plasma protein electrophoresis showed a significant increase of 2-globulins. Two weeks after the first treatment a relapse occurred in two patients of four patients. Moderate parasitaemia, moderate lymphocytosis, reactive lymphocytes and numerous toxic heterophils were observed. Repeated 4 increased doses of chloroquine (37.5 mg/kg SID) and primaquine (1.9 mg/kg SID) were administrated at 0, 12, 24, 48 hours. After 3 days no parasites were observed in blood smears. Three months later, when a weight of falcons was reduced for training and exercise purposes, the two repeatedly treated patients relapsed. Low parasitaemia was present (8% and 6%). Performance of the falcons was drastically decreased. The same increased dose of chloroquine and primaquine was administered in four divided doses. Intensive oral and subcutaneous rehydration therapy assisted the treatment. One month later the two treated falcons relapsed again. Treatment consisted of pyrimethamine (DARAPRIM, 12 mg/kg) and sulphadiazine (Duphatrim, 25mg/kg) in single daily dose for four days. Falcons received rehydration and hepatoprotection(Simepar) therapy. After this treatment all falcons were monitored for the next three months. No relapse of parasitaemia was observed while birds maintained the good body condition and weight. In 2002 3 of group of 5 imported gyr falcons were diagnosed with *Plasmodium relicum* infection . One bird with high parasitaemia and sever clinical symptoms was treated with MEPHAQUIN-mefloquin (25mg/kg) 0-12-24-48 hours .One week after the treatment the falcon died due to parenchymatic organs demage. Histology shoved numerous malaria-pigment containing Kupffer cells in the liver as well as hepatitis. In the kidneys malaria pigment was mainly found around large vessels.

Discussion

There is very little data associated with the clinical cases and treatment of *Plasmodium* sp. infections in falcons. The used treatment regime of gyr falcons was extrapolated from the other avian species. The main clinical findings were splenomegaly, hepatomegaly, diagnosed by x-ray and parasitaemia, severe dehydration in all infected cases. Morbidity was associated with occurrence of exoerytrocytic stage of development of *Plasmodium relictum*, when schizonts are responsible for the nonspecific tissue damage of parenchymatic organs.

This was confirmed by elevated enzyme activities, lymphocytosis and toxic heterofils in the peripheral blood. Relapses occurred in two falcons. Relapses after the chloroquine-primaquine treatment was reported in penguins as well (Cranfield et al., 1994). Chloroquine is considered as an effective medication only for the intraerytrocytic schizonts. Primaquine acts on the exoerytrocytic- parenchymatic schizonts.

Mefloquine should be effective against malaria parasites which have developed resistance to other antimalarial drugs. All treated patients received hepatoprotective treatment and intensive oral and subcutaneous rehydration. Reduced body weight during falconry training can be responsible for the induction of latent infections or relapses after the treatment.

Conclusion

Four falcons infected with *Plasmodium relictum* parasites were successfully treated with chloroquine-primaquine, pyrimethamine-sulfadiazine and mefloquine antimalaricidal therapy. Infection caused a severe performance reduction. Supportive treatment and intensive rehydration avoided further damage of the organs. Regular screening was necessary to monitor patients and prevent high parasitaemia after possible relapses. Avian malaria should be considered as a significant factor of morbidity of the falcons, especially because a lot of captive-bred falcons are imported to Middle East from regions were geographical distribution of hematozoas are confirmed.

Avian individuals surviving infections and repeated treatments without severe organs damage should have a long lasting immunity and can be considered as suitable candidates for introduction in to such an environment where avian malaria is enzootic present.

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WANTED:

Saker Falcons of European origin for a reintroduction programme.

The Saker Falcon is probably extinct as a breeding species in Bulgaria and following extensive consultation, we could find no documented record of Saker Falcons breeding in Bulgaria since 1997.

Since 2006 intensive annual surveys for Saker Falcons have been undertaken by researchers from the Central Laboratory of General Ecology, Bulgarian Academy of Science (CLGE, BAS) and by the Bulgarian Society for the Protection of Birds (BSPB) but no breeding pairs have been found. The species appears to be extinct as a breeding bird in the country. The story of the last-documented pair of breeding Saker Falcons exemplifies the recent plight of the species in Bulgaria; the two chicks were stolen from the nest by thieves. Fortunately, the theft was witnessed and the nestlings were replaced back in the nest to fledge successfully. Other pairs were less fortunate and it is thought that a high incidence of nest robbery and trapping of falcons in the 1990's was responsible for the rapid demise of the Saker Falcon. It is believed that Bulgaria held a population of up to 50 pairs of Saker Falcons prior to the 1990's and that this was itself a mere remnant of a more widespread and abundant population that existed before the 1920's.

In the 19th century Saker Falcons were common and widespread breeding birds in Bulgaria. but from the 1920's Sakers were more or less eradicated in the lowlands of Bulgaria; since that time many varied and dramatic changes have taken place in this landscape. We know that Sakers managed to maintain an existence in the upland of Bulgaria until much more recently, but now, since the final demise of the species we have no way of undertaking a detailed ecological studies of the way Sakers interact with modern Bulgarian landscapes. So we have to make assessments based on our knowledge of the Saker Falcon and the Bulgarian landscape. Over the period 2006-09 we have undertaken research in Bulgaria as part of a feasibility study to examine the potential for reintroducing the Saker. We have undertaken a detailed appraisal of 15 diverse areas, representing ca. 7% of Bulgarian territory, in order to determine their suitability for breeding Saker Falcons. We used GIS to examine land cover, quantified the availability of potential prey species such as sousliks, voles and birds, quantified the availability of suitable nesting sites and the presence of other birds of prey that either occupy a similar ecological niche to the Saker (such as Peregrine, Long-legged Buzzard and Imperial Eagle) or could competitively exclude them (Golden Eagle, Peregrine).

The conclusion of this site assessment was that suitable areas for breeding Saker Falcons do still exist in Bulgaria, in both upland and lowland landscapes. Current upward trends in the Peregrine and Long-legged Buzzard populations in Bulgaria indicate that the persecution pressure that impacted bird of prey populations in the past are now much diminished. Consequently, the potential for successful re-establishment of the Saker Falcon looks positive. We are currently at the consultation phase with various stakeholders in Bulgaria, some opposed to the proposal of reintroduction and others supportive. The outcome of these discussions will determine whether or not the next phase of the project is implemented.

During the release phase young Saker Falcons would be 'hacked-out' using tried and tested techniques that mimic the normal fledging process for nestlings. This is the technique that has been successfully adopted in many Peregrine

Falcon reintroduction projects. During hacking the birds would gradually explore their surrounding landscape and learn to hunt for themselves. Like most young Sakers, after gaining independence they would probably disperse far and wide but, it is envisaged that the strong degree of natal philopatry in Sakers would eventually bring them back to the hacking site when they are old enough to breed.

The young Saker Falcons could be sourced from healthy populations elsewhere by being taken from the nest; a process known as translocation. Alternatively, young Saker Falcons could be bred in captivity specifically for the purpose of reintroduction, though this is a much more expensive and time consuming process.

The origin of the donor stock should be as similar as possible to the previous Bulgarian Saker population. We have taken samples from museum specimens of Bulgarian Sakers and also from Sakers elsewhere in the Western Palearctic in order to genetically compare these populations. This work is currently being undertaken at Cardiff University in the United Kingdom.

Our feasibility study has included a model to assess the number of Sakers that need to be released in order to establish a viable breeding population. The model includes a range of estimates for survival, age at first breeding and breeding productivity. Our model indicates that the annual release of ten male and ten female juvenile Sakers over a period of five years would result in the establishment of a viable breeding population. Our model predicts that ten years after the first release an increasing population of 8-15 pairs would exist in our chosen release area. Monitoring of the released birds via satellite tracking will help refine our predictive models and enable us to adjust release rates accordingly as the project proceeds.

We are trying to establish a database of potential stock for captive breeding and would be grateful to hear from any falconers and breeders with Saker Falcons of European origin. If we go down the route of using captive bred birds in the reintroduction (either in conjunction with or instead of translocated wild birds) we would be interested in either purchasing breeding stock or alternatively their offspring for release in Bulgaria.

If you have birds that may be suitable for this purpose please contact Dimitar Ragyov:**dimitar.ragyov@gmail.com**

More information on the project can be found at **www.mefrg.org**

Presence of the IAF at international conferences

CHRISTIAN DE COUNE

The IAF has among its aims, to represent falconry throughout the world, to develop, maintain and amend national and international laws, treaties and conventions to permit the pursuit and perpetuation of falconry.
To fulfil this mission, the IAF must, where possible, attend the international conferences dealing with conservation and sustainable use of birds of prey. It is IAF's policy of presence.
IAF must endeavour to retain its place amongst the most significant international NGO's in the field of sustainable use and conservation.
Within this framework, I attended several international conferences, and have summarized here the reports I made of those of the last two years.
The full text of my reports can be found on our website: **www.i-a-f.org**

SECOND MEETING TO CONCLUDE THE MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION OF MIGRATORY BIRDS OF PREY IN AFRICA AND EURASIA UNDER THE CONVENTION ON MIGRATORY SPECIES

Abu Dhabi, United Arab Emirates
20-22 October 2008

The MOU, contains an Action Plan as a part of it.
The text of the MOU and the attached Action Plan had been adopted at the first conference at Loch Lomond in September 2007, it was agreed that only minor changes would be made to it.
The Chairman of the Abu-Dhabi conference recalled it in his introductory speech : "only minor changes may be made to the MOU, discussions will not be re-opened on the text itself".
To my dismay, I stated that a substantial change had been made to the Loch Lomond text of the Action Plan.

The substantial change consisted in the addition of: **"only where there is no other satisfactory course of action."**
Loch Lomond had confirmed the possibility of sustainable taking of raptors from the wild,
As such the text proposed in Abu-Dhabi would have weakened drastically that possibility.
I alerted our colleagues, Nick Fox and Andrew Dixon of the change to the Loch Lomond text. I drew the attention of the Secretariat as well.
We approached several personalities explaining them that this restriction was

From left: Baron Gilbert de Turckheim, president of FACE; Dr Yves Lecocq, secretary general of FACE; Christian de Coune.

a negation of the principle of sustainable use of natural resources and was in contradiction to the centuries long tradition of falconry in the Middle East and elsewhere in the world. Most persons we approached showed sympathy for our point of view.
When the Action Plan came for approval, I took the floor at the session of the meeting in following terms :
"In the name of the International Association for Falconry and Conservation of Birds of Prey, I "wish to draw the attention of the meeting to the following:
"Point 1.2 of the Action Plan has been discussed at length at Loch Lomond. A text had been adopted. It was said that the text could possibly undergo only purely formal minor changes without questioning the principles of the text.
Between Loch Lomond and now, the text of point 1.2 has undergo a substantial change.
A far reaching restriction has been added."

The Loch-Lomond text excluded the taking from the wild unless this can be shown to be sustainable.
"This is consistent with the spirit and the words of the Convention on Biological Diversity, which admits the sustainable use of natural resources. Sustainable use is a principle that is now widely approved.
"The text which is submitted to us today contains the following substantial restriction: where there is no other satisfactory course of action. This restriction has not been discussed at Loch-Lomond, it is a step back in the principle of sustainable use.
I ask you to revert to the text adopted at Loch-Lomond and remove the added restriction."

The Chairman and the Secretariat proposed that the issue would be discussed in a small working group; nobody objected to this procedure.
A small group was formed with Lahcen El Kabiri (CMS Secretariat), Nick Fox, Andrew Dixon, Marianne Courouble, Jean Philippe Siblet (both from France, representing the EU of which France holds currently the presidency), David Stroud (UK), Saleem Javed (Abu-Dhabi), Brigadier Mukhtar Ahmed (Pakistan), Mohammad Sulayem (Saudi Arabia), Christian de Coune (IAF).
This small group worked in an atmosphere of perfect mutual understanding and in a very straightforward mood.
The Secretariat explained the procedure following which the said amendment had been made, but did not take a position on the substance of it.
We insisted on the principle of sustainable use of the Convention on Biological Diversity, that is sufficiently covered by

Loch-Lomond's word "sustainable". We said that the restriction "no other satisfactory solution" was purely European and that there was no reason to expand it to Middle East and farther. This restriction dates back to the EC Bird Directive, 1979, since then the concept of sustainable use has made its way and is now widely accepted. We said that the word "sustainable" was sufficiently restrictive and that there were no reasons for adding more restrictions to it. The proposal of removing "no other satisfactory course of action" was making its way. It was ultimately agreed to remove the following words: "only where there is no other satisfactory course of action". The modified text was submitted by France, as holding the presidency of the EU, to the other EU representatives. After apparently difficult discussions, they declared themselves ready to approve the new text provided we added the word "sustainable". Our little group agreed to this addition. The text reads now as follows :

"…c) egg-collection and taking from the wild. Unless this is authorised by the competent body and only where the action is sustainable and not detrimental to the conservation status of the species concerned".

The whole text of the Action Plan has been adopted unanimously by the Meeting.

Personal comments

The absence of the concept of "no other satisfactory solution" from the Action Plan of the Memory of Understanding for the Conservation of migratory birds of prey in Africa and Eurasia is not simply "by default". It had been deliberately discarded in Loch Lomond and adopted at this meeting.
This decision strengthen the principle of sustainable use of wild birds of prey and weakens the restriction "no other satisfactory solution" contained in the EC Bird Directive and in the Bern Convention.

SPECIALIST MEETING ON THE CONSERVATION OF THE SAKER FALCON

Abu-Dhabi, 5-7 April 2009

Background

The Conference of the Parties of the Convention on Migratory Species adopted in December 2008 in Rome, a resolution (9.20) on the Saker Falcon, which "urges Parties to assist in the delivery of a research programme, initially supported by Saudi-Arabia, designed to re-evaluate vigorously the conservation status of the species across its range".
If this is not being done by mid 2010, The Saker will be proposed for listing on Appendix I of the CMS with the support of the Scientific Council of the CMS. This means that derogations from extremely protective measures could be granted only in exceptional circumstances.
Sustainable use of the Saker is at stake!
This resolution was the result of a compromise aiming at persuading the proposing country to withdraw its proposal to list the Saker on Appendix I, filed at the CoP in Rome on 1-5 December 2008.
The decision of CMS to postpone the decision of uplisting is the result of its will to base decisions on facts and science rather than on emotionalism.
The said resolution was the back-ground of the Specialist Meeting on the Conservation of the Saker Falcon.

The meeting

The meeting has been convened by The Environment Agency of Abu-Dhabi, and I was invited as the representative of the IAF.
The meeting was attended by some 50 participants from 18 countries.
The meeting was expected to insist on the fact that the population of Sakers may be influenced by multiple factors such as habitat loss, extermination of rodents, and not only by wild take for falconry. The situation in Asia is not perfectly known and the multiplicity of factors make the situation very complex. The situation in Europe is much better known and is not unfavourable; Hungary is a good example of this.
The issue of sustainable use of the Saker falcon should be addressed by the meeting.
In my corridor conversations with M. Al Bowardi and Majid al Mansouri, I insisted on the importance to recall that all decisions by CMS and others should always be based on facts and scientific evidence
On several occasions, I took the floor for some remarks or recommendations, I summarise some of my interventions:
1. C. de Coune complains about member states introducing exceedingly stricter measures, conventions are the result of compromises, stricter measures distort them. Stricter measures should be introduced exceptionally if necessary and if there is no other solution.
2. C. de Coune: there are very few falconers in Ukraine and Middle East falconers want only passage birds. The media have a very great responsibility by publishing huge amounts that falcons can fetch, this pushes people to take falcons in the hope of making big money and ultimately they realise that either they have little value or simply they cannot sell them.
3. C. de Coune: a large part of the solution lies with the end-users. Supports the sentence : "never use a poached bird". If the demand for illegal birds disappears, the supply will disappear too. There is a need that falconers make a commitment not to acquire illegal birds. Falconry clubs have a major role to play, they must see to it hat their members keep exclusively legal birds. Associations must have authority over their members and take measures if they infringe the laws. In Europe and N. America clubs have played an important role in falconers abiding by the laws.
4. C. de Coune: the CMS Memorandum of Understanding on migratory raptors is indeed the framework for all we wish to undertake here. This MOU contains and confirms the principle of sustainable use. Falconers (IAF and myself) intervened strongly last year in Abu-Dhabi, in order to safeguard the principle of sustainable use that, without our intervention, was about to be made unworkable. The text of it has then been accordingly amended and sustainable use was saved.
There is a need for a strong commitment of the end-users not to acquire illegal birds, a great part of the solution is there. To this end it is essential that falconers have a structure possibly under the umbrella of the IAF. Falconers have done so in Europe and in N. America, it must be possible here too.
5. C de Coune: drafted a text of a resolution to be adopted by this meeting The text of it had been displayed on the screen for everyone to read it carefully.
Upon a question of the chairman, I confirmed that it is the position of the IAF.
The text is the following:

- *Aware* of the cultural value of the Saker Falcon for falconry;
- *Further aware* of the principle of sustainable use of wildlife;
- *Further aware* of the need of assessing the status of the population concerned to ascertain the potential of its sustainable use;
- *Recalling* Resolution 9.20 of the Convention on Migratory Species adopted at its ninth Conference of the Parties;
- The Specialist Meeting on the Conservation of the Saker Falcon convened in Abu-Dhabi on 5-7 April 2009;
- *Urges* the falconers' community of the countries utilising wild-caught Saker Falcons to assist in the delivery of a research programme, initially supported by Saudi Arabia, designed to re-evaluate vigorously the conservation status of the Saker Falcon across its Central Asian range.

The chairman then asked the audience if anybody had an objection to the content of this text and if it could be considered as reflecting the attitude of everyone. The contents of the text has been accepted by consensus as reflecting the opinion of the meeting, but **it is not a resolution** because there will be no resolution passed at this meeting.

EC BIRD DIRECTIVE 30TH ANNIVERSARY MEETING

Brussels, April 2009

The EU Directive (79/409/EEC) on the Conservation of Wild Birds was adopted on 2nd April 1979.
BirdLife International took the initiative to celebrate the 30th anniversary of the Bird Directive on the very day of its birthday, i.e. on 2 April 2009.
They offered for the occasion an excellent reception in Brussels.
I had the pleasure to represent the IAF.
The function was attended by some 100 persons, the atmosphere was warm and the walking-dinner excellent.
The event started with a speech delivered by Mr Stavros Dimas, Commissioner of the European Commission for the environment (the equivalent of the Minister of the environment for the whole EU). He underlined that the Bird Directive is the most successful achievement of the environmental policy of the European Union. Thirty years later, it is still as justified as in the beginning, he said, it is still a most efficient instrument for the protection of the 700 species of birds present in Europe out of the 10,000 ones of the whole world.
He quoted as a good example of cooperation between interested parties, the FACE/BirdLife agreement on sustainable hunting.
A message was then delivered under the form of a short film by Burkina Faso by which they call on the Europeans in order that they carefully protect 'their' birds in the hope to see them coming back in the next autumn. This message illustrates the intercontinental solidarity in the bird conservation.
As usual, such meetings are always a very good opportunity for showing to the circles of nature conservation that IAF takes interest. It's also good for meeting people. I introduced our association to the Commissioner.
This is a part of the policy of presence of IAF.

GENERAL MEETING OF THE EUROPEAN SUSTAINABLE USE SPECIALIST GROUP

London, 16 September 2009

The ESUSG is a specialist group of the IUCN, of which Robert Kenward is the President.
The meeting was attended by some 25 participants, amongst whom was Angus Middleton representing FACE.
Since the last general Meeting in Vienna (Austria) in 2007, ESUSG held three committee meetings, 15 other meetings and attended several workshops and international conferences.
ESUSG has been very active in relation with the working out of the European Charter of Sustainable Hunting of the Bern Convention and is currently working on a Charter on Angling.
ESUSG is actively involved, under the lead of its president, Robert Kenward, in what is considered as a major project in Europe, i.e. TESS Project, which is an international research project supported by the 7th Framework Programme of the European Commission. It aims to assist the integration of information about biodiversity and related environmental matters (**www.tess-project.eu**). It is to be noted that FACE is also a partner in that project.

European Charter on Sustainable Hunting
Angus Middleton (FACE) sets out FACE's perception of the Charter: it is an excellent document, especially its Preamble with 12 principles as well as its Guidelines. It has been much advertised that the Charter has been adopted, but now we must go to the next step, which is going to be difficult: there is a need for reporting back from the countries.
C. de Coune (IAF) said that the great merit of the Charter is that it exists and has been adopted by the Standing Committee of the Bern Convention, which must be viewed as an agreement to the fact that hunting is an activity that matches with the principles of sustainable use of natural resources. In other words, the conservation world has made public its acceptance of sustainable hunting.
Conclusions.
Such a meeting is a good opportunity to show that IAF takes interest in policies of biodiversity conservation and sustainable use of natural resources.
It is a part of IAF's policy of presence and visibility.

FEDERATION OF ASSOCIATIONS FOR HUNTING AND CONSERVATION OF THE EU (FACE) GENERAL MEETING

Brussels, 11 September 2009

The day before the General Meeting, FACE has offered a reception in its premises that had been remarkably renovated. The walking dinner was absolutely gorgeous. Hats off for the quality of the reception and the warm atmosphere. It was also a very good opportunity for making personal contacts, a mix of new faces and old acquaintances.

The IAF has been invited by FACE to attend its General Meeting as an observer, Christian de Coune represented our association.

The assembly was chaired by FACE's President, Baron Gilbert de Turkheim, assisted by FACE's new CEO, Angus Middleton.
The meeting was attended by some 50 persons.

Opening speech by the President.
FACE being recognised as representing hunting that respects nature maintains good relationship with nature conservation circles.
FACE has undergone an in depth reorganisation, the purpose being that everyone has been allotted his responsibilities and duties. He thanks all, especially Yves and Angus for the smooth transfer of power.
He stresses the need of intensifying the relationship between FACE and its members.

Outside the meeting hall
I had the opportunity of having a long and very friendly conversation with the representatives of Malta. I addressed the issue of the possibility of having a specific law on falconry in Malta. Maltese falconers will have full support of the Federation for Hunting and Conservation.

Conclusion
FACE and IAF have always maintained very good relationship and co-operation, but it is the first time that we are invited to the General Meeting. IAF is grateful to FACE for having been admitted to its General Meeting. It is good that the hunters' community sees the confirmation that falconry is recognised as a part of the hunters' community. To be remembered that the new CEO of FACE, Angus Middleton, is a falconer!
I must however recall that IAF had been invited at the meeting of FACE's committee in the early 90's in order to expose to the community of hunters the difficult situation of falconry in Denmark and to call on their solidarity in support of the attempts made to have falconry legalised.
Long life to the old IAF-FACE friendship!

By Patrick Morel and Matt Gage

Falconers Comment

Falconers often find themselves stuck between seemingly paradoxical situations of:
1. respecting, understanding and conserving wildlife, while
2. using or hunting that wildlife.

Of course, every human activity has, at some level, to exploit natural resources, so we welcome the re-establishment of conservation philosophies that are founded on sustainable use. In addition to the move toward sustainable use as a sensible approach to conserving natural resources, there is also a move towards 'evidence-based conservation', and away from protectionism. We also welcome this objective approach toward assessments of sustainability based upon simple good science, hopefully putting subjective assessments based on emotion or symbolism behind us.

We therefore welcome a peer-reviewed section in the IAF journal where research of relevance to falconry can be published. This first article by Gail Robertson and colleagues is a social science-based exploration of peoples' attitudes to the resumption of a wild harvest of raptors for falconry in the UK. When pesticides caused the decline of raptor populations, falconers started breeding raptors in captivity, and at present most of Western falconers rely on captive breeding for their supply. In the UK, there was a voluntary cessation of license applications during the 'pesticide era' of the 70's and 80's. We now see a huge recovery in many raptor populations, and some of that recovery has been directly aided and assisted by falconers and falconry knowledge. In many parts of the world, current raptor numbers have exceeded any historical records, and populations are saturated. Accordingly, UK falconers are beginning to think about the possibility to resume a carefully-managed take of a few wild hawks for falconry, firmly entrenched within principles of sustainable use and objective conservation evidence.

Wild take of falconry birds is still permitted in most parts of the world, including about half of the EU states. The European 'Bird Directive' allows permission to issue licenses for wild take, providing some conditions are met. In most of the other parts of the world (including the USA, Asia and Africa and Latin America) harvesting from nature has always been, and remains, a normal route to getting falconry birds. Harvesting of a small proportion of first-year birds (usually less than 5% of the annual productivity), which themselves anyway have very high natural mortality, is proven to have no, or negligible, effects on wild raptor populations.

In the study by Robertson et al., we see a generally negative opinion towards wild take from the general public, perhaps influenced by a burgeoning sentimentality toward the cuddlier side of wildlife. However, what is noticeable is that this opinion against wild take becomes much more positive, as the public receive some simple information about sustainable use. Education, education, education! We welcome the fact that the question remains on the research agenda for serious scientists, and encourage further exploration of wild use across all countries where the evidence shows that sustainability will be easily achieved. The IAF stands to defend and celebrate falconry freedoms across the world, while being committed to conservation activity and research into birds of prey. We therefore encourage all our members to engage with, and help, scientists who are conducting good conservation research, so that the balance between sustainable use and conservation can be struck properly. Wild take has always been the traditional source for falconry birds. The appreciation and intimate understanding of wild raptors is essential in order to trap and train, and often later release, our birds. These are essential arts within falconry's Intangible Cultural Heritage.

Suspended from ropes during a trapping in the US.

Wild -Take in the US

Last year falconers in the US were once again been able to harvest Peregrines from the wild following changes in the law. The event was marked by our President in a message as follows:

"Friends:
I share this announcement from Dan Cecchini, President of NAFA, that the first passage peregrines have been trapped on the beaches of North America in more than 35 years. Our friend Ralph Rogers, Vice President of the IAF, is on the beach in Texas where he too has a permit to take a passage peregrine, and will report his experience to the international falconry community. This is indeed an historic moment when after years in peril, the passage tundrius peregrine is now available to the practicing falconer.
As I have reported before, US falconers have been permitted to take eyass anatum peregrines from the wild for several years.
In my mind and heart as a falconer, we have regained the broad spectrum falconry experience, with this final milestone, now that we can harvest from the wild all North American raptors useful for falconry purposes.
I take this opportunity to thank all of those members in NAFA who have worked for decades to achieve this final goal. Please accept congratulations from the IAF.
Finally I attach a photo of falconers, Andrew Bullen and Shoshana Datlow, who both trapped tiercel passage peregrines. Both are well known in the US.
Best wishes,
Frank Bond

Far right: Tony Huston with wild taken eyass Peregrine under licence.

Right: Andrew Bullen and Shoshana Datlow.

An examination of attitudes towards taking birds of prey from the wild for the purposes of falconry in the UK

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Abstract
There has been increased discussion among UK falconers regarding resumption of taking birds of prey from the wild under an existing legal provision for falconry purposes. It has been claimed that this would (1) help mitigate human-raptor conflicts, (2) increase stakeholder interest in wild raptors as a conservable wild resource, and (3) provide a purer form of sport than is currently provided by captive-bred hawks. This study compared the attitudes of members of various stakeholder groups and members of the public towards taking birds of prey from the wild for falconry in the UK and the effect of demographic factors and information provision on attitudes. Data were gathered using questionnaires distributed on internet forums and in a door-to-door survey.
To examine the effect of information on responses, questionnaires were distributed with two levels of information. The most significant factors affecting attitude towards a wild take were stakeholder group, information provision and general attitude towards wildlife and the environment. Respondents who were falconers were significantly more likely to be in favour of a wild take. The public, pigeon fanciers, bird watchers and wildlife enthusiasts exhibited negative attitudes towards resumption, but respondents who were provided with more information on the topic had more positive attitudes towards taking birds of prey from the wild. Those with more positive attitudes regarding bird of prey control were likely to respond positively to the issue of a wild take. The results suggest that it would be premature to resume licence applications to take birds of prey from the wild for falconry in the UK owing to lack of support from the majority of stakeholder groups and members of the public. However, objective analyses (such as population viability models) could provide important information for reducing conflict between different stakeholders.

Introduction
Recently, some falconers have postulated resumption of granting licences for taking birds of prey from the wild for falconry purposes as some species now have large self-sustaining populations and can come into conflict with human interests (Kimmel, 2006). Legalised wild take for falconry occurs around the world, with further increases in allowances granted recently in the US after evidence on the sustainability of such harvests for some species (Millsap and Allen, 2006). In the UK, falconry subsists almost entirely upon captive-bred birds from successful captive-breeding businesses. However, the wild-caught first year hawk is perceived as being stronger, faster and more experienced than a captive-bred youngster, making it a better prospect for experienced falconers (Mavrogordato, 1960), and a wild harvest would allay concerns from some falconers that captive gene pools are inbred or non-local. Legal provision for wild take of raptors exists in the UK under a licensing system administered by DEFRA.
When pesticides caused raptor populations to reduce dramatically in the 1970's and 1980's, British falconers adopted a voluntary cessation of licence applications. Now that population sizes of traditional falconry species (sparrowhawk (Accipiter nisus) and peregrine (Falco peregrinus)) have returned to acceptable levels in the UK (Crick and Ratcliffe, 1995; Newton and Wyllie, 1992; Baker et al., 2006) falconers and other stakeholders are exploring the opportunity for a resumption of a carefully-managed wild take.
The conflicts caused by the increase in some raptor populations especially affect shooting and pigeon racing (Park et al., 2008; Henderson et al., 2004). A UK survey carried out in 2004 suggested that approximately one third of a million people take part in lowland game shooting and 50,000 participate in grouse shooting (Public and Corporate Economic Consultants, 2006). Raptors can have a significant effect on grouse numbers; moors with hen harriers (Circus cyaneus) produce on average 17% fewer grouse than those without harriers (Redpath, 1991).
In recent years, pigeon fanciers have resumed lobbying for a reduction in bird of prey protection; the current number of pigeon fanciers involved in pigeon racing in the UK is an estimated 60,000 (RPRA). With peregrine and sparrowhawk pairs numbering 1,402 and 41,000 respectively (Baker et al., 2006), pigeon fanciers claim their sport is now unfeasible due to the number of birds lost to avian predation (Henderson et al., 2004). Taking birds of prey from the wild could potentially resolve conflicts with gamekeepers and pigeon fanciers by removing raptors from sensitive areas.
One important issue undermining bird of prey protection and management in the UK is lack of communication and understanding between key stakeholder groups. Bird protectionist organisations, for example, hold drastically different opinions towards bird of prey management compared with pigeon fanciers and gamekeepers. Public opinion can have a big effect on Government policy (Page and Shapiro, 1983), so we conducted this study to examine perceptions from different stakeholders towards taking birds of prey from the wild for falconry.
Factors affecting attitudes such as demographic variables, underlying attitudes to nature, the amount of information provided to participants and mode of data collection were compared to examine which of these had the greatest effect on attitude. Having determined general attitudes held by members of different groups, and the factors influencing them, we consider the likely impact on stakeholder relations of the resumption of licensing for a wild take.

Methods
We gathered data on attitudes towards taking birds of prey from the wild for falconry and general attitudes towards raptors and the environment using self-administered questionnaires. We distributed questionnaires to members of each stakeholder group (bird watchers, falconers, field sports participants, pigeon fanciers, wildlife enthusiasts, members of the public) and compared responses. To examine the effect of increased information on respondents' attitudes, we distributed two types of questionnaire to members of each stakeholder group: one providing more information including a small explanation of what falconry is and some arguments for and against taking birds from the wild and the other only including a brief description of falconry (questionnaires available online in Robertson, 2009).
Questionnaires had two sections: one with questions on attitudes regarding falconry and wild birds of prey and towards the environment in general, and the second with questions on a range of demographic information. Within this first section was the main question of interest ('It is acceptable to take birds of prey from the wild for falconry purposes'). The main question was followed by nine statements aimed to assess the respondent's attitudes towards falconry, wild birds of prey and control of species detrimental to human activities. A Likert scale with five options was offered for each statement: Strongly disagree, Disagree, Neutral, Agree and Strongly agree. The demographic questions requested gender, age, area brought up in, area of current residence, occupation, awareness of falconry and whether or not the respondent was a member of a falconry, field sport, pigeon racing or conservation club or organisation.
Questionnaires were made available on internet forums specific to each stakeholder group from 14th May until 29th June 2009. Sample sizes were maximised by leaving the questionnaire on each forum for more than one month and periodically encouraging people using the forum to complete it. Sample sizes of more than 20 for each forum were considered adequate (De Vaus, 2002). New forums were added if there was a lack of interest or if the questionnaire was removed. Internet

forums were used owing to the difficulty of locating large samples of each stakeholder group and the results were not expected to represent the UK population as a whole, but provide an informative insight into attitudes.

We also distributed questionnaires in Sunningdale and Cheapside, Berkshire using a door-to-door drop and collect method. Questionnaires were delivered personally between 10am and 5pm on Saturday 30th and Sunday 31st May. Questionnaires were handed out in the morning and we asked each potential respondent to complete it and leave it on the doorstep to be collected in the afternoon (White et al., 2003; Walker, 1976). We gave respondents who were at home a short introduction, advised them how to complete the questionnaire and asked them to leave it for collection. If no one was home, we tried the house again in the afternoon and asked occupants to complete the questionnaire immediately.

Statistical Analysis

A Principal Component Analysis was used to create a score describing attitudes towards birds of prey and the environment based upon responses to the nine attitudinal statements.

The effects of each explanatory variable on respondents' answers to the main question were explored using graphical plots and univariate analyses. Significant variables were identified using Chi squared tests.

A binomial logistic model was then constructed with the dependent variable being whether or not respondents felt that birds of prey should be taken from the wild for falconry purposes. The dependent variable was coded as 0 for disagree/strongly disagree and 1 for agree/strongly agree. Neutral responses (n=125) were disregarded in order to enable the factors distinguishing positive from negative responses to be explored, leaving a sample size of 521. If any variable was not identified as significant by univariate analyses, it was not included in the multivariate model (these variables were area currently living in and area brought up in). Appropriate tests were used to check for significant correlations between explanatory variables and only one of any highly correlated ($p<0.05$) variables was used in the model. Mode of collection and awareness of falconry were highly correlated with attitude score and stakeholder group respectively, hence were not included in the model. The main effects were entered along with their 2-way interactions.

Non-significant 2-way interactions and main effects were deleted from the full model in a stepwise procedure. Model simplification continued until the minimum adequate model was obtained, which was when the further removal of any explanatory variable would result in a significant change in model fit. The fit of the model was checked at each stage by examination of a plot of the binned residuals and the value of the Area Under a ROC curve (Gelman and Hill, 2007; Hand and Till, 2001).

Results

Although the response rate for the internet survey could not be determined, the completion rate once the questionnaire had been started was high (95%). Of the 117 questionnaires distributed using the door-to-door drop and collect method, 96 were returned on the day of distribution or later by post. This gave a high response rate of 82%. The completion rate was 100% for door-to-door surveys.

54% of all respondents strongly disagreed or disagreed with taking birds of prey from the wild for falconry while 29% of respondents agreed or strongly agreed (n=654; Fig 1). Chi squared tests showed stakeholder group, gender, age, club membership, awareness of falconry, occupation, information provision and mode of collection to explain a significant amount of variation in attitudes towards taking birds of prey from the wild (Table 1).

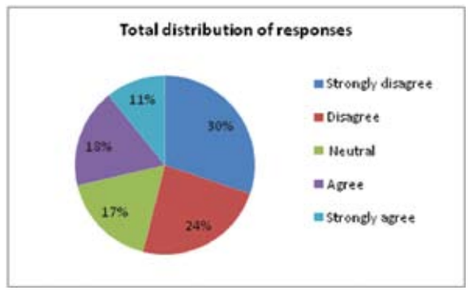

Fig 1: Pie chart showing total distribution of responses to the main question

Table 1: shows results of Chi squared tests of explanatory variables against response to the main question and ratio of percentage strongly disagreeing and disagreeing with the main question against respondents strongly agreeing and agreeing. Area brought up in and area currently living (bold) in were not found to be significant.

Variable	Level	Ratio of percentage disagreement: agreement	χ^2	Df	p-value	Sample size
Gender	Male	1.5:1	33.81	4	8.16e-07	516
	Female	4:1				188
Group	Birdwatchers	8:1	241.25	24	<2.2e-16	103
	Falconers	1:2.3				91
	Field Sports Participants	1:1				110
	Pigeon Fanciers	1:1				164
	Public Internet	4.5:1				189
	Wildlife Enthusiasts	16.8:1				56
	Door to door	3.1:1				119
Age	16-24	1.7:1	34.88	20	0.021	117
	25-30	2:1				58
	31-40	1.4:1				134
	41-50	1.7:1				160
	51-60	1.9:1				135
	60+	2.8:1				103
Area brought up	Rural	1.7:1	10.95	12	0.533	235
	Semi-rural	1.8:1				253
	Urban	2:1				116
	Suburban	2:1				103
Area currently living in	Rural	1.7:1	9.95	12	0.620	231
	Semi-rural	1.7:1				276
	Urban	2.4:1				94
	Suburban	2.6:1				108
Club membership	Yes	1.5:1	28.24	4	1.114e-05	368
	No	2.5:1				331
Awareness of falconry	Participate and fully aware	0.6:1	132.93	12	<2.2e-16	108
	Fully aware, do not participate	2.4:1				144
	Have participated, not fully aware	1.5:1				61
	Heard of falconry	2.8:1				389
Information Provision	More	1.7:1	11.38	4	0.023	386
	Less	2.2:1				326
Mode of collection	Internet	1.7:1	51.85	4	1.482e-10	593
	Non-internet	3.4:1				119
Occupation	Biologists and Students	2.3:1	46.27	16	8.838e-05	124
	Professionals	2.4:1				198
	Non-professionals	1.3:1				134
	High Interest	0.7:1				206
	Retired	2.6:1				48

A Principal Component Analysis was used to create an attitude score based on the nine attitudinal questions. A positive attitude score represents a positive view towards controlling birds of prey due to their detrimental effects on business and leisure enterprises and a negative attitude score corresponds to a negative view towards controlling birds and prey and a positive view towards the complete protection of raptors.

One-way ANOVAs showed that most explanatory variables explained significant variation in attitude scores except area brought up in, area currently living in and information provision (Table 2).

There were clear differences in mean attitude score between stakeholder groups (Fig 3). Scores were highest for pigeon fanciers and field sports participants and lowest for bird watchers and wildlife enthusiasts while falconers and members of the public had intermediate scores (Fig 3). The most significant variables explaining variation in attitude scores were gender, stakeholder group, club membership, mode of collection and occupation (Table 2).

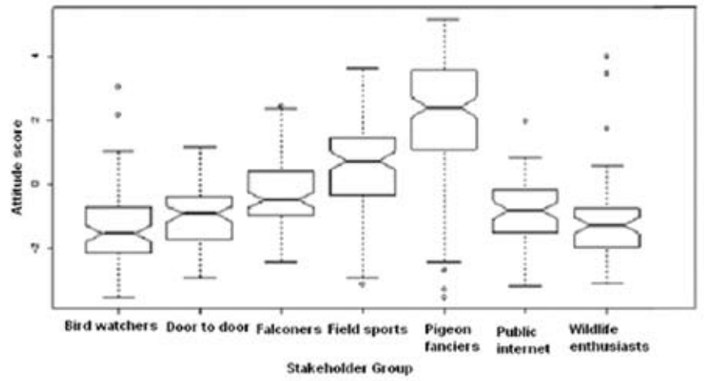

Fig 3: Box plots showing distribution of Attitude score depending on stakeholder group and mode of collection. A positive Attitude score equates to positive feelings towards controlling birds of prey and negative feelings towards protection of birds of prey and the environment more generally (Fig 2).

In the binomial logistic model, attitude score, stakeholder group and information provision were significant. Repeating the model using different baseline groups revealed falconers' responses to be significantly different from those of other groups and to be most supportive of a wild take. Pigeon fanciers' responses to the main question were significantly negative compared with falconers' as were responses from bird watchers and wildlife enthusiasts and members of the public (Table 3). Hence while falconers were mostly in favour of a wild take, other stakeholder groups held more negative views (Fig 4). Respondents with a positive attitude score (i.e. those more in favour of bird of prey control than protection) were more likely to agree with taking birds of prey from the wild for falconry. Respondents provided with more information had a more positive attitude towards taking birds of prey from the wild than those provided with less information. Examination of the binned residuals suggested that the model adequately met the model assumptions, and the model produced a suitably curved ROC curve and gave a respectable AUC value of 0.84, representing a good degree of accuracy. Hence, the model appears to fit the data reasonably well.

Discussion

This study has highlighted the vastly different views towards taking birds of prey from the wild held by different stakeholder groups. The increase in some raptor species in the UK has resulted in conflict with

Table 2: Table displaying mean, standard deviation and ANOVA p-value for each explanatory variable tested against Attitude score. Asterisks symbolise degree of significance. High interest occupations included those who work in pigeon fancying, falconry, game keeping or wildlife management, Professional occupations included those working as lawyers, teachers, accountants etc and Non-professional occupations included those working as labourers, skilled workers and unskilled workers etc.

Variable	Level	Mean	Standard Deviation	Df	p-value
Gender	Male	0.296	1.914	1	1.124e-12 ***
	Female	-0.872	1.403		
Group	Birdwatchers	-1.368	1.205	7	2.2e-16 ***
	Falconers	-0.274	1.009		
	Field Sports Participants	0.568	1.381		
	Pigeon Fanciers	2.112	1.829		
	Public Internet	-0.972	1.061		
	Wildlife Enthusiasts	-1.117	1.374		
	Door to door	-0.994	0.905		
Age	16-24	-0.569	1.430	5	0.024*
	25-30	0.224	1.643		
	31-40	0.208	1.752		
	41-50	0.123	1.929		
	51-60	-0.041	2.01		
	60+	-0.003	2.168		
Area brought up	Rural	0.097	1.918	3	0.11
	Semi-rural	0.105	1.887		
	Urban	-0.23	1.783		
	Suburban	-0.347	1.729		
Area currently living in	Rural	0.085	1.975	12	0.620
	Semi-rural	0.028	1.81		
	Urban	0.041	0.041		
	Suburban	-0.421	2.105		
Club membership	Yes	0.579	2.022	1	2.2e-16 ***
	No	-0.679	1.403		
Awareness of falconry	Participate and fully aware	-0.142	1.217	3	0.037 *
	Fully aware, do not participate	0.407	2.181		
	Have participated, not fully aware	-0.131	1.412		
	Heard of falconry	-0.124	1.93		
Information Provision	More	0.05	1.932	1	0.314
	Less	-0.101	1.777		
Mode of collection	Internet	0.182	1.945	1	1.316e-9 ***
	Non-internet	-1.001	0.889		
Occupation	Biologists and Students	-0.716	1.265	4	1.861e-11 ***
	Professionals	-0.348	1.585		
	Non-professionals	0.645	2.123		
	High Interest	0.602	1.692		
	Retired	-0.2	2.058		

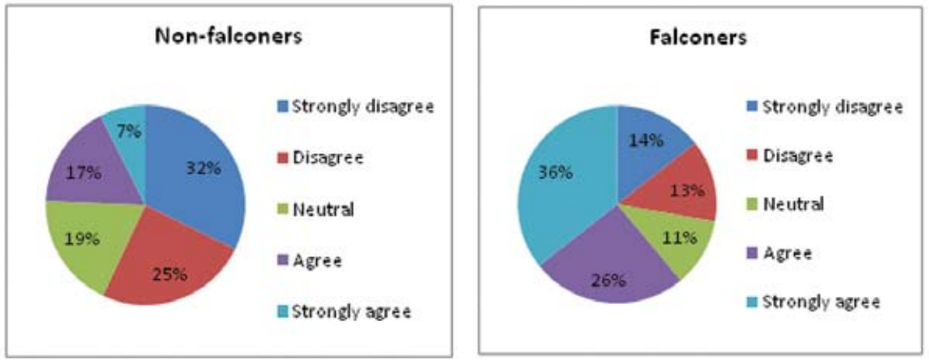

Fig 4: Pie charts illustrating variation in responses to the main question between falconers and non-falconers

Coefficients	Estimate	Standard error	Pr(>|z|)
(Intercept)	1.896	1.092	0.083.
Gender Male	-1.075	1.12	0.34
Attitude score	0.613	0.096	1.57e-10***
Information More	0.676	0.24	0.005**
Group Bird watchers and Wildlife enthusiasts	-3.577	1.177	0.002**
Group Public	-3.29	1.125	0.003**
Group Fieldsports participants	-2.897	1.83	0.113
Group Pigeonfanciers	-5.826	1.636	0.0004***
Gender Male: Group Bird watchers and wildlife enthusiasts	0.404	1.292	0.754
Gender Male: Group Public	1.657	1.202	0.168
Gender Male: Group Fieldsports participants	1.521	1.867	0.415
Gender Male: Group Pigeonfanciers	3.217	1.636	0.05*

Table 3: The minimum adequate model for the degree to which people are more or less likely to agree with taking birds of prey from the wild for falconry (estimate), dependent on their demographic and attitudinal status. The estimates for each factor level are given in comparison to the baseline, which is 'Falconers' for Group. Significant levels and variables are highlighted in bold.

humans (Park et al., 2008; Henderson et al., 2004; UK Raptor Working Group, 2000). The reintroduction of issuing licences for a wild take for falconry has been suggested as a method of resolving conflicts without resorting to lethal methods of control (Gage, 2006). However, a serious conflict exists between stakeholder groups. Bird conservationist groups call for increased protection of birds of prey while pigeon fanciers and gamekeepers complain of unacceptable levels of predation (Galbraith et al., 2003; Henderson et al., 2004). These divisions are well represented in the results of the questionnaires, as well as in the controversy that surrounded the questionnaire on some of the internet forums (see Robertson, 2009 Appendix 4 for some of the comments posted).

Respondents supplied with a greater amount of information in the questionnaire had more positive attitudes towards taking birds of prey from the wild than those supplied with less information, suggesting a lack of understanding among stakeholders opposed to wild take. Information provided in questionnaires significantly affected responses to the main question, but had no effect on responses to the attitudinal questions. Perhaps respondents had preconceived conceptions regarding the attitudinal questions which were not affected by the information provided, while little was known about taking birds from the wild, resulting in greater differences in attitude between respondents with more and less information. While efforts were made to ensure the information was unbiased, few precautions can be taken to control how a respondent absorbs information, which can have a significant effect on attitudes and behaviour (Hyman and Sheatley, 1947; Ni et al., 1999). In general, taking the whole sample into account, attitudes towards taking birds of prey from the wild for falconry were negative.

If falconers wish to resume this activity, they will have to prove it has no effect on wild bird of prey populations, as has recently been accepted for some species in the US (Millsap and Allen, 2006), and succeed in changing the attitudes of the majority of the public and stakeholder groups.

Traditionally, birds taken from the wild for falconry are first-year birds which are released back into the wild after one hunting season (Epstein, 1943). In many countries such as the US, South Africa and Arabia a wild take for falconry is permitted. An examination of harvest rates in 1988 showed that falconry had a negligible effect on wild raptor populations in the US (Millsap and Allen, 2006). Millsap and Allen (2006) suggested that while the effects of harvesting vary between species, a harvest of up to 5% of the total population of more common species appears to be sustainable, and potential conservation benefits have been identified as a result of a regulated wild take (Kenward & Gage 2008). In 2003-2004, harvest rates were below the recommended thresholds. Hence, it was concluded that a wild take for falconry had no significant effect on raptor populations in the US. This has been observed in other countries. In the 1960's, Cade (1968) estimated that approximately 25%-50% of Iceland's annual gyr falcon (Falco rusticolus) production was exported for falconry with no overall consequences for the breeding population. Similarly, Blood (1968) reported that the harvest of 12 eyas peregrines from the Queen Charlotte Islands did not affect the island's breeding population.

There is, however, concern that harvesting wild birds for falconry in some parts of the world is responsible for a decline in populations. Middle Eastern falconers are prepared to pay high prices for wild caught sakers (Ming and Ying, 2007; Galushin, 2004). The total scale of the trade is not known, but from 1992-1998, 947 sakers were confiscated and 2000 poachers arrested. Laws are poorly enforced with penalties for trappers light and profits high (Li et al., 2000). In the UK, by contrast, raptor-protection laws are more heavily enforced, so wild take would be directly regulated. However, the number of people keeping hawks and owls has increased in the UK since the 1980's to an estimated 25,000 in 2007 (Kenward and Gage, 2008; BFC, 2007).

Conclusion

Public opinion can greatly influence government policy (Davis et al., 1970; Page and Shapiro, 1983) hence it would be unwise to resume the current legal

provision for wild take without efforts to change public support. The strongest effects on public support for the policy that we found were information provision and underlying attitudes to birds of prey and the environment; the former is easier to address than the latter through education and the provision of objective analyses. If resumption of a wild take is to be accepted by the public and the government, our study suggests that this will depend upon the prior dissemination of accurate unbiased information in a way that can reach as many people as possible.

First, however, any information gaps need to be addressed. With this in mind, and based upon the mixed experience of the demographic effects of wild take on populations of birds of prey reported above, we recommend that a population viability model be used to measure the effect that different harvest rates would have on common species of birds of prey in the UK. These objective analyses would allow fair consideration of whether a wild take would have any measurable effect on wild raptor abundance, and thereby reduce conflict between stakeholders.

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Obituary

Lou Woyce
25 May 2009

Yesterday one of the really great American falconers, Lou Woyce, died after battling many ailments. Many of you may not have known him but he was one of the early passage peregrine trappers, and he annually participated in the long standing (more than 35 years) Peregrine surveys on Assategue Island. He contributed to American falconry in many ways.

To have known Lou was to have known a man of enthusiasm for all things falconry, passage peregrine trapping, and all those things of spirit that make us what we are.

He was a wonderful mentor and friend.

He was a great falconer, trapper and man.

I knew he wasn't well, but I did not know he was getting to the end.

We had a wonderful relationship. Over the years, he gave me hoods and other things. I never did get one of his blocks even though he wanted to make me one.

Once at a NAFA meet in Kansas I had great little Anatum tiercel who flew very high. Lou was out with me one day, I put the tiercel up, and he went out of sight of binoculars. Lou mentioned several times that that flight redefined "up out of sight" for him. I accepted it as a compliment from a great man.

He flew from us, but behind he leaves us with his great spirit. I will miss him. Please spread his memory throughout the world. He deserves our respect for the life he lived as a devoted falconer.

A memorial service will be held for him on Assategue Island this fall where his ashes will be spread while the great Arctic Peregrine migration will be passing overhead to take those ashes with them along their journey so that
the life cycle may be continued.

Frank M. Bond, President

Geospatial Pioneer Award

H.E Majid Al Mansouri, Secretary General of Environment Agency – Abu Dhabi (EAD), has won the Geospatial Pioneer Award for his valuable contributions to geospatial technologies and pioneering work in the field of Environmental Analysis and Management for the past 15 years.

The ceremony took place at Map Middle East 2010 and the sixth edition of the Annual Middle East Conference and Exhibition on Geospatial Information Technology and Applications, which was held at the Abu Dhabi National Exhibition Centre from March 22-24, 2010.

Al Mansouri was recognized as one of the pioneers in the field of environmental analysis and management. He was praised for his tremendous vision and his innovative ideas of making the region a better place to live has given geospatial technologies a vital place in environmental management.

He was also praised for his competent and dynamic leadership of EAD where he directed the Agency to use geospatial technologies for many years in multiple ways since its inception. He was also recognized for having led farsighted initiatives to establish Spatial Data Infrastructure and Environmental Information Systems and a Regional Knowledge Network in Abu Dhabi, which not only helps in conserving the environment but also aids in addressing future needs of environment and society.

EAD supported the organization of the three-day conference and exhibition, which is being organised by GIS Development Pvt. Ltd. in cooperation with Space Reconnaissance Centre, UAE. This annual event is an international platform designed to bring together the geospatial community to encourage geospatial related ties and collaborations at national, regional and global levels for the overall growth of geospatial industry in the region.

Through its participation in Map Middle East, EAD was able to interact with other government entities that use GIS and learn about their data holdings. The Agency's exhibition booth displayed several GIS-enabled applications. The applications included the Abu Dhabi Soil Information System (ADSIS), Geoportal and Air Quality System.

EAD also co-hosted a one day symposium on environmental management related to geospatial information. The symposium was attended by several speakers from various international organizations, together with specialists from the Agency.

CHASA Presidents Award

At a recent meeting of CHASA (Confederation on Hunting Associations of South Africa) it was unanimously decided that Dr Adrian Lombard will receive the President's award for his contributions to Falconry in South Africa.

Dr Adrian Lombard, a Medical Doctor by profession, has had a keen interest in raptors and Falconry since early childhood. Growing up in Zimbabwe he was a founder member of the Zimbabwe Falconry Club and briefly served as the Secretary in the early 1970's. After completing his studies, he moved to Cape Town in 1980. Falconry was banned in the Cape at that stage. He, however, joined the Cape Falconry Club (CFC) when it was established in 1993 and was instrumental in developing the Falconry Policy for the Western Cape that is now been accepted, with minor modifications, in the Northern Cape and Free State and has been proposed as a national policy. He became the Secretary of the Cape Falconry Club in 1995. He held this position until he became Chairman in 2003. He resigned as Chairman in 2007 and has been a Committee member since then. He has represented the CFC at South African Falconry Association (SAFA) since 1998.

In more recent years he has liaised with many of the Provincial Conservation Authorities on Falconry issues. In 2008, at the International Falconry Meet held at Thaba Nchu, he, as the South African Falconry Association (SAFA) representative, established the National Falconry Communicating Group, which is a group composed of representatives of all Provincial Nature Conservation Authorities, all provincial Falconry Clubs and of the Department of Environmental Affairs and Tourism. This is a group that is informed on Falconry issues and which can communicate via e-mail.

He became Secretary to South African Falconry Association (SAFA) in 2002 and conceived and edited the annual SAFA Magazine, Mews Views, since 2003. He has represented SAFA at the Birds of Prey Working Group of the Endangered Wild Life Trust since 2004. He has represented SAFA at the International Association for Falconry and the Conservation of Birds of Prey (IAF) since 2004.

Unofficially, he has presented a contribution on behalf of the Zimbabwean Falconry Club at the inaugural meeting of the Birds of Prey Working Group in 2003, and has reported on behalf of the Zimbabwean Falconry Club to the IAF, each year from 2004.

Dr Lombard facilitated the establishment of SAFA as a Full Member of the International Association for Falconry and the Conservation of Birds of prey (IAF) in 2004 when he attended the IAF AGM in Abu Dhabi. At that meeting he represented South Africa and was a member of the Working group that formulated the IAF Position Statement on the Saker Falcon. He subsequently represented South Africa at the following IAF Meetings:

Opocno, Czech Republic, 2005.
Kearney, Nebraska, USA, 2006.
Thaba Nchu, Free State Province, South Africa, 2008.
Wokefield near Reading, UK, 2009.

He was elected to serve as a Member of the Advisory Committee to the IAF in 2006 and was then appointed to the Board of the IAF to serve as Executive Secretary in 2007.

In 2008, he, as a member of the SAFA ExCo, organized the 2008 IAF AGM in conjunction with the SAFA Annual Field Meet at Thaba Nchu, South Africa. At this event we hosted over 30 delegates from 21 Nations.

In his role as IAF Secretary, he has extensive contact with falconers and falconry organizations, conservation organizations and hunting organizations word-wide. This includes organizations such as the Archives of Falconry and FACE.

In 2005, he represented South Africa, and presented on the Southern African Heritage of Falconry at the conference on the Heritage of Falconry in Abu Dhabi. This conference was the initiation of the establishment of Falconry as a World Cultural Heritage Activity with UNESCO and was attended by the Director for Cultural Heritage of UNESCO.

In 2005 he was asked to head the Pan-African Working Group of the IAF and initiated the formation of the African Union of Falconry.

His aims are to cement the position of Falconry as a respected and legitimate hunting discipline in South Africa and to gain recognition for, and to promote, the invaluable role of Falconers in Conservation. He seeks to increase awareness and appreciation for the essential role played by sustainable utilization in the conservation of South Africa's Natural Heritage.

Scenes from the 2009 IAF AGM















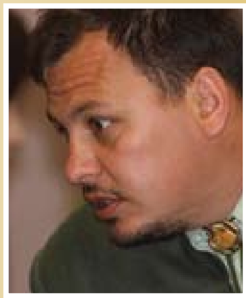







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