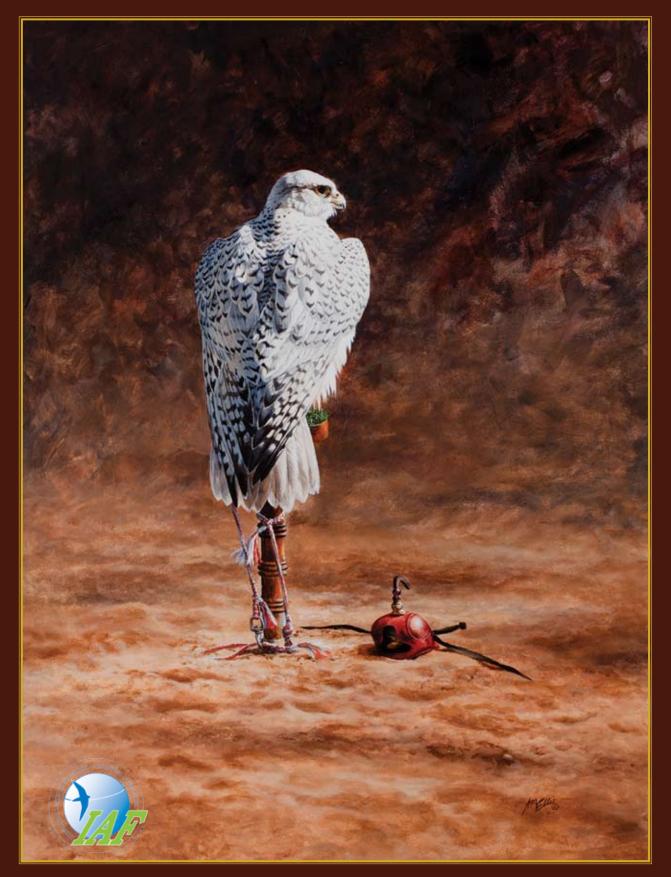
The International Journal of Falconry



2014

INTERNATIONAL ASSOCIATION FOR FALCONRY AND CONSERVATION OF BIRDS OF PREY

MEMBER OF IUCN

Frank Bond

1943 - 2013 PAST PRESIDENT IAF

By Ralph Rogers, IAF Vice President for the Americas

1943 was a lucky year for the world falconry community; and language. This place, the Bond Ranch, is now protected Frank Bond was born in Albuquerque New Mexico. He joined three other successful Frank Bonds already in that state; his father, grandfather, and great-grandfather were all Frank Bonds. Frank's family was well known in New Mexico with all generations prior to our Frank setting up a string hunting. of mercantiles serving the most rural of places. They were honest and forthright wool merchants who had an eye for business, and most importantly, could get along with anyone, friend or foe. If you visit the US Smithsonian Museum in Washington DC, you will see on the tail of the windmill in the prairie settler section, "Bond and Son Mercantile, 1890 Española, New Mexico". Young Frank learned well from his forefathers and practiced throughout his life the fundamental value of how to appreciate every human. It was his gift.

His house in Española is now a museum on the Register of Historic Places.

While attending school in Española, the family ranched on the Valle Caldera, 125,000 acres (51,000 hectare) high in the The 1960's through the 1970's was a time of transition for mountains and some of the most beautiful land in the United falconry in America. American falconers like Frank were States. He spent his summers maturing in and amongst the changing from possession of raptors, to developing skills of cowboys and vaqueros, learning the American Hispanic culture hunting American quarry with these raptors, especially with



by New Mexico and the US Government as a natural area... it has been the filming stage of 10 Hollywood movies, most recently "The Lone Ranger". Living in this beautiful place is where Frank developed his love for the natural world and

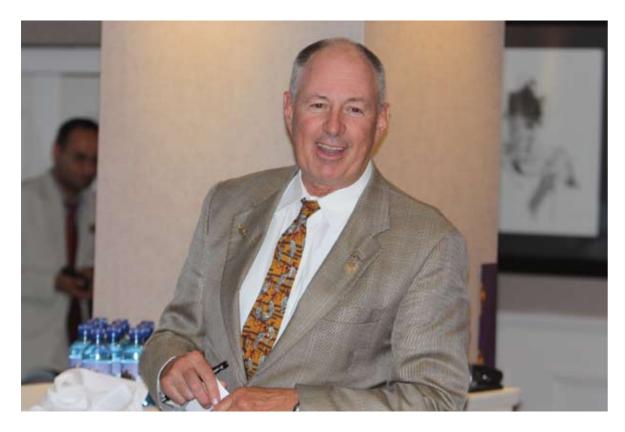
Falconry became lucky again because of an odd set of circumstances. Frank Bond was on the lacrosse team where he went to university, The Colorado College. There Frank's coach was Dr. Robert Stabler, a critically important falconer in US history. Frank was mentored by Stabler as he became involved in our sport. He was immediately successful and continued being mentored in Spain by Felix Rodriguez de la Fuente, an innovative and internationally famous falconer. During his time spent in Spain he completed his academic degree in Spanish language. Frank and Rodriguez de la Fuente remained close friends until Felix's death in Alaska. Frank always held Spain and the falconers there in a special place in his heart.



long-wings over the broad expanses of the American West. Frank was part of that transition and would join in various "camps" (grouse camp, duck camp, etc.). We tend to think of Frank as the attorney and falconry leader. He also had the skills of a truly master falconer...those skills were seldom exercised later in his life because he selflessly spent most of his time traveling and working in falconry's behalf. In the 70's, I saw his jerkin, Koshari, stoop from a dizzying height over a Montana sagebrush flat. When Koshari reappeared from the other end of a large flock of sage grouse, there were two grounded with broken wings and Koshari was plucking a third he bound to on the runout. In those days falconers were humble and quiet about their falconry; it would have embarrassed him for me to tell that story.

The close friends who shared these times with Frank were also involved in the transition of having raptors to hunting game, but we were becoming aware of the importance of a transition into political and conservation activities. While we were all learning to hunt together, Frank was forever our leader dealing with politics. The 1970's also forced us to deal with the legalization of falconry. In 1976, the Final Federal Environmental Assessment allowing regulated falconry throughout the United States was passed. Though young, Frank was a part of the NAFA leadership in that critical effort.

At the age of 27, Frank's dedication and reputation as a conservationist drew him together with Tom Cade, Bob Berry, and Jim Weaver to found the Peregrine fund. Frank donated some of the first anatums to breed in that environment and his birds constitute an important fraction of the genetics of peregrines we see in western America today. While the reestablishment of the peregrine was the work of many, all agree that the work of the Peregrine Fund was the most important aspect of that massively successful effort. Falconers today can enjoy a harvest of wild peregrines in the US ... and all who do, owe Frank (among others) thanks. It is sad to remember that he had drawn a permit for a peregrine in New Mexico this year. He was excited; actually, by Frank Bond standards, he was giddy. He had found a dozen active eyries when he developed an ominous pain in his side this summer...he came



so close.

Franks reputation as an honest "old style" politician was firmed by his two terms of service in the New Mexico legislature Immediately after his first year, he was given a high leadership position in his party. His reputation grew as an individual who could find common ground with political friend or foe. Frank could disagree completely with folks, and they admired him even more.

He ran for governor of the state twice as a Republican; New Mexico is traditionally a Democratic state. He narrowly lost both races, but gained huge respect from all candidates in both parties. This experience also gained him notoriety on the national level; this power base coupled with Frank's personality literally helped save US falconry from destruction caused by the over-regulation proposed by the Fish and Wildlife Service Enforcement following Operation Falcon.

The stories of what almost happened to falconry in the United States in the mid 1980's are legend...and, quite frankly, the look of falconry could be completely different here today if it hadn't been for Frank, and a handful of other NAFA members. Partially because of the doors Frank was able to open, the final regulations appeared as a blessing to falconers in this country, along with the words. "The US Fish and Wildlife Service finds falconry an honorable sport, its practitioners abide by the regulations and have a deep and sport of falconry."

By the late 1990's Frank had earned his Doctor of Jurisprudence, passed the Bar Exam, and had moved on to writers, Steve Bodio, wrote the following about Frank. devoting his efforts with the IAF. But not before helping to "Some of us will always miss that unassuming, hospitable, softfound: the P-Fund, the North American Grouse Partnership spoken friend, a fortunate man who always gave more than he (NAGP), testifying before the US Congress and securing the got, and one who spoke as easily and with as much interest to 1978 raptor exemption from the ESA (the only exemption his homeboys in Española as he did to international figures." of the ESA ever granted), and serving as long-term board Again from Bodeo: "Frank's contributions to conservation member of the Holistic Range Management Group. By 2012 and falconry are unmeasurable". he had served two terms as Vice-president of the IAF and Falconry has lost one of its greatest champions; we have all two terms as president. Even during his tenure as leadership lost a dear friend. 🗨

in the IAF he continued to serve as NAFA's General Counsel, IAF General Counsel, and NAGP's General Counsel.

Most NAFA presidents used Frank as the ultimate weapon. Having Frank attend a meeting with you in Washington DC was like taking a gun to a knife fight. You seldom needed the gun, but your opponents always knew it was there. In the late1990's, after years of working on a rewrite of the US falconry regulations and having them stalled in Washington DC, NAFA sent Frank and a small party to meet with the Department of Interior. We had an appointment with the Director of the US Fish and Wildlife Service

and his staff. Shortly after we sat down and shook hands, the Director thanked Frank for "getting him confirmed by the US Senate". Frank just smiled and said ... "it was nothing, I just made a few phone calls". Frank never really appreciated the power he had or the respect he garnered from everyone, whether a president of the US or a cowboy working for day wages.

Frank was an amazingly humble, gifted, and quiet man who always found the time to help and counsel anyone who requested aid. He was generous, honest, diligent, and disciplined. No matter who approached him, they left knowing Frank had listened closely to them and they felt appreciated. While this disease took Frank very quickly, in the end he always had time to speak with friends. Frank said that he didn't abiding regard for the resource. The USFWS supports the want to be remembered as just a falconer but that he was most proud of his work as a diplomat and his many friends.

One of Americas' preeminent conservation and falconry



Editors Foreword

Frank was my close friend and during his illness until his death we conversed almost daily by Facetime and we both felt the privilege of wonderful technology allowing us to speak face to face and share real time pictures of our lives. My daily flights in Norfolk were of great inspiration and interest, showing him my mews with hawks resting together on the screen in the mews, putting over fat crops at the end of a good day, simply sharing falconry transcending the doom laden atmosphere of his plight whilst bedridden in New Mexico. But even in that circumstance we managed a small party or two as other friends visited him and some stopped for a meal, rather disconcerted by some 'gallows humour' from Frank as he toasted 'the last supper'!

Probably nobody had a greater appreciation of the political aspects of falconry and conservation of birds of prey, almost uniquely he knew how to handle the diplomacy and practical regulatory approach in changing circumstances. His lifetime of commitment supported NAFA and American falconers, through the Peregrine Fund brought the restoration of the Peregrine in North America, through our work in many conferences he laid the groundwork which came to fruition

during his presidency of the IAF - with recognition by UNESCO of falconry as Intangible Cultural Heritage, his work in transforming IAF itself with new sponsorship and a new business plan now supported with funding for his successors to develop.

But more than all of that Frank was my friend as he was friend to many others. Indeed his political opponents all seem to recall his friendship more than their opposition. Over many years we enjoyed many adventures together sharing falconry in our homes as well as many other countries.

In this edition we recognise these are changing times but it is remarkable to reflect upon the success of IAF over recent years as successive Presidents have managed to enhance the reputation and credibility of falconry worldwide. Individuals still make their mark and recently here at home in the UK it was heartening to hear of my long time friend and past president of the BFC Roger Upton being awarded a prestigious award from UAE in recognition of his service over many years recognising the culture of Arab Falconry as well as his personal friendship with the father of the nation Sheikh Zayed bin Sultan Al Nahyan . Indeed like Frank, Roger Upton is known for his friendship and devotion to our sport. Confirming even more Roger's lifetime commitment to our way of life further official recognition came when Her Majesty the Queen of England bestowed an MBE in her birthday honours this year. Congratulations Roger, how much the reputation of falconry has changed in recent years. Following on from the same award in previous years to Jemima Parry-Jones and latterly Nick Fox falconry has indeed resumed credibility and respect in its achievements.

Now that IAF has launched its second magazine in the Newsletter the preparation of this edition of the Journal has been different. As IAF grows with members from all parts of the world the cultural and historic interest is ever greater. Today the way of life with which we are blessed ventures into new challenges as traditional hunting has provided the basic training techniques for many conservation programs and it

now does the same for new performance competitions and even racing! How to embrace what future ideas will bring will continue to challenge our values and concepts.

Of course at this time of year we are reminded of these changes in the success of breeding programs in many countries. New eyasses are sure to spark enthusiasm with the promise of so much enjoyment and so many exciting adventures. In need of a new semen donor my own tiercels will soon be into tame hack just as harvest starts and natures seasons move on. This will be the first season of work for my setter pup from last





summer with her mother having returned to the grouse moors of Northumberland as agricultural changes make her work in Norfolk difficult. Every day is another opportunity to be read through the ever changing kaleidoscope of mixed messages in our wonderful world of nature. Now all the 'buzz' seems to be about drones as the next training aid for serious longwingers, replacing the kite, the quadricopter can carry a lure aloft under instant control and be programmed to return to the falconers feet automatically in anything up to a 30mph wind.

For me, rather set in my ways at this time of life, I am just entering that wonderfully enjoyable period of tame hacking for my eyasses to learn all about the sky above and joys of flying in midday thermals whilst we can imagine Frank and Jim and many other friends still watching from their new dimension. Hey ho!

Anthony Crosswell, Editor UK 🗨

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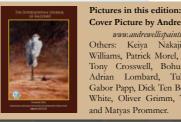
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Baoyong Zhang gives a history of the sport in his nativ country from the earliest records in 221BC during the Qin Dynasty



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IAF PRESIDENT'S MESSAGE 2014

By Adrian Lombard

The International Association for Falconry and the Conservation of Birds of Prey continues its aim to be the dynamic global advocacy and defence organization which represents Falconry and endeavours to be inclusive of all falconers. The past year has been one of the most effective and exciting years in the history of our organization.

The most dramatic achievement has been the signing in Abu Dhabi of the MoU with the Emirates Falconry Club, represented by HE Mohammed al Bowardi and HE Majid al Mansouri, on 29th April 2014. This MoU has confirmed the funding for the IAF Business Plan for the next five years and will allow the establishment of a permanent office with professional staff. It will allow the IAF to represent falconry as never before. We thank the Emirates Falconry Club, and specifically HH Mohammed bin Zayed Al Nahyan- Crown Prince of Abu Dhabi, for the faith that they have placed in our vision and the support which they have provided to World Falconry. This, as you shall see, will completely change our ability to represent falconry and also changes the standing of our organization.

The 45th Annual General Meeting of the Council of Delegates was held in Doha, Qatar, and was hosted by the Algannas Club of Qatar with sponsorship from Qatar Air and Katara Cultural Village. This was a very successful

event and we thank our hosts for the hospitality which they provided for our delegates and which allowed us to conduct our business with great success. The event included a Veterinary Conference which I shall discuss later. At this meeting, significant changes were made to our Constitution. A 4th Vice Presidency for the MENA Region was agreed to and this will help us to give better representation to this important falconry region. We also agreed to changes to allow a more equitable voting structure which will give a voice to almost all member organizations and encourage the representation of all falconers. We also made changes which allow "subscribership" of the IAF. This will give individuals and organizations a means and incentive to contribute financially to the IAF and to enjoy a closer association with our organization. We admitted a number of new members and the IAF now represents 90 falconry organizations from 67 nations, worldwide. Here, I must compliment our Vice President for Asia, Africa and Oceania, Bakyt Karnakbeyev, who has been instrumental in bringing in new Asian nations. The loss of Frank Bond has been a sad blow to our organization. Frank was a gifted and visionary leader of the IAF, serving first as Vice President for the Americas and then as President for 6 years. He was instrumental in developing the Business Plan and followed the progress of this plan to



the end. He was also a founder of The Peregrine Fund and a stalwart of NAFA. We will certainly miss his insight and wisdom, but he leaves a considerable legacy within the IAF. The Journal continues as our flagship publication but we realize that there is a need, not addressed by the Journal, to provide reports and news from within the IAF, as well as to publish reports provided by our member organizations. To this end, we produced the first new IAF Newsletter in January 2014. With the increasing workload and complexity of our publications, we have established the IAF Editorial Board which will be responsible for all IAF publications as well as sourcing advertizing and looking at issues of funding. Tony Crosswell will continue as Journal Editor, while Hillary White will take over the IAF Newsletter, assisted by Neil Davies and they will have an able team to support and advise them.

Following the 2013 AGM, the IAF, with financial support from a number of our European Member organizations, entered into a contract with the Dods Monitoring Agency. This Agency assists us by monitoring all the activity within the European Union Government and provides reports and data on issues of interest to us as well as political commentary. This information has proved invaluable to the management of the IAF but is daunting through its sheer volume. There has been some robust discussion within the group receiving the material and we have been able to act on issues of which we may otherwise have been unaware.

The work of the IAF can be broadly categorized into the support of Falconry as a Hunting Art, the promotion of Conservation and particularly the Conservation of Birds of Prey, the promotion of Falconry Culture – both tangible and intangible, and the promotion of Animal Welfare, specifically that of falconry raptors. I will consider each of these categories separately:

Falconry as a Hunting Art

I represented the IAF at the Annual General Meeting of the CIC in Milan and participated in the Global Summit of Hunters against Wildlife Crime. This was a valuable meeting as it allowed us to interact with other disciplines of hunters and seek common ground as well as addressing common interests and concerns. I wish to thank the President and Directorate of the CIC for encouraging our participation and for their hospitality. The Summit for Wildlife Crime was a valuable effort to address this current scourge. In conjunction with this, I released the IAF Statement on Wildlife Crime, in which we condemn crime but also recognize the value of legitimate sustainable use to conservation. Here I must also thank Patrizia Cimbario who facilitated my trip and organized for me to meet with a number of Italian falconers, conservationists and other hunters. Her efforts contributed significantly to the success of this conference.

Т h e Collaborative Partnership for Wildlife Management (CPW) held its meetinginconjunction with the CIC Meeting. I gave a presentation to this meeting with a view to gaining membership of this body for the IAF. A decision was made not to increase the membership number but to allow us to participate as a member of the CIC delegation and also invite us to participate in the CPW Forum which will be convened in the future. This association will give us access to the highest levels of global conservation.

FACE has appointed a new Secretary General, Filippo Segato, who replaces Angus Middleton. Angus was a good friend to Falconry and is now managing a conservation organization in Namibia. We wish him well. I was very pleased to have the opportunity to meet with Filippo in Milan. I am sure that we will continue to enjoy a close and mutually beneficial relationship with FACE and I welcome Filippo in his new post. FACE and the CIC are essential allies as we work to support and develop conservation measures which recognize the benefits of sustainable utilization and the very real role which is played by hunters in the preservation of the world's biodiversity.

We continue to support the access of falconers to a limited and controlled sustainable harvest of wild raptors where this is possible. In this respect we have provided our support to falconers in Ireland and in the United Kingdom. We watch issues related to the use of wild Golden Eagles in the USA and stand ready to lend our support if requested.

We are looking forward to holding the IAF AGM in Argentina next year and we believe that this will help to focus attention on the development of Falconry in Latin America. This should be a very memorable event and we encourage falconers and particularly member delegates to make plans to attend.

Conservation

The IAF has monitored the progress of the Invasive Alien Species (IAS) Legislation through the European Parliament, since participating in the Public Participation process and providing comment. This legislation has now been entered into law in the European Union. In association with this, the Council for Europe called for the development of a Code of Conduct for Hunting with respect to Invasive Alien Species by a working group including the Invasive Alien Species Group of IUCN, representatives of BirdLife and FACE. The section

refers to Falconry was brought to our notice by FACE. We managed to negotiate significant changes to the

which

text which are important for Falconry. Prof. Dr. Thomas Richter, Vice President for Europe, attended the Meeting of the Standing Committee of the Bern Convention, on behalf of the IAF, at which this was accepted. We have also developed a simple Code of Conduct for Falconers with respect to IAS which was accepted at our 2014 AGM and includes an on-line reporting system to record any free-living exotic or hybrid falconry raptors. Engagement with this by the falconry community is important.

The IAF, through our representative, Janusz Sielicki, have been active in the Saker Task Force of the Convention on Migratory Species (CMS) Raptors MoU. We have contributed to the development of the Saker Global Action Plan (GAP) and Janusz has contributed specifically by developing a system of population modeling for the Saker as a means to estimate the effect of utilization for falconry. He has also developed a protocol for the release of falconry birds. The Saker GAP has now been released in draft form and we have provided extensive comment on this. The Saker GAP includes a proposal for a number of flagship projects to address Saker Conservation Issues. One of these involves an innovative project to establish an on-line Portal which, using smart-phone technology, will open contact with the Gulf falcon hospitals, falcon trappers and regional falconers to monitor and estimate the usage of Saker Falcons in the Gulf region. The IAF is considering providing the funding and management for this project, as we believe that we are the only group with the contacts and credibility to undertake this. We also plan to be represented at the CMS CoP in Ecuador, by Janusz Sielicki. This meeting is important for us as the Saker GAP will be presented there. We plan to hold a side-event at this meeting addressing the issue of Falconry and Sustainable use.

The Raptors MoU has also called for National Strategic Action Plans for the conservation of raptors. The draft of the European Union Strategic Action Plan has been released and an IAF Working Group, with the assistance of Dr Robert Kenward of the IUCN SULi Group, has provided extensive comment on this document. The IAF have also contributed

to the Technical Advisory Group (TAG) of the Raptors MoU through the appointment of our Officer for Ex-Situ Conservation, Fernando Feas, to this TAG. Fernando is also currently active in Spain where he is contributing to programs involving the captive breeding for release of Bonelli's Eagles and Imperial Eagles.

The Illegal Trade in Wildlife is of international concern due to the potentially serious effects of this trade on biodiversity. The European Union called for Consultation on the EU approach against Wildlife Trafficking and the IAF provided a detailed response. Wildlife Crime is also of serious concern to Falconers. We have again been alerted to reports of theft of Bonelli's Eagles in Sicily. The illegal and unsustainable trade in Saker Falcons is cited as one the causes for the declining numbers of this species. Falconers need to address these issues as they are of real conservation concern. Similarly we cannot motivate for the justified down-listing of the Gyrfalcon and Peregrine Falcon at CITES unless we can demonstrate our ability to constrain illegal trade. The IAF is actively developing strategies to address this.

We look for conservation efforts to which we can lend our support. The project to restore the Tree-nesting Peregrine in Central Europe continues. We are looking to assist with a plan to re-establish the Peregrine Falcon in Malta and we are examining ways to promote Lanner Falcon conservation in the Mediterranean region. We learned that the antiinflammatory drug "Diclofenac", which has been responsible for the devastation of vultures in Southern Asia, had become available for veterinary use in Italy and Spain. We released a statement which opposes this and sent this statement to all European MEPs as well as to other groups, including the Federation of European Veterinarians, to raise awareness. We are planning to have a presence at the meeting of the Convention on Biodiversity (CBD) in Korea, with the assistance of Keiya Nakajima and will plan a side event at this conference promoting Falconry and Sustainable use. Keiya will also represent the IAF at the 26th International Ornithological Congress which is to be held in Tokyo in August where he will present a paper on behalf of the IAF: Rescue works for injured Japanese birds of prey with falconry technique and the track of recovered birds with GPS-TX

Culture

The IAF promoted the First World Falconry Day on 16th November 2013. This date was chosen coincide with the date on which Falconry was recognized as an Intangible Cultural Heritage of Humanity by UNESCO in 2010. This event will be promoted annually to encourage falconers to celebrate our Art and share this with their communities.

Dr Javier Caballos represented the IAF at the 1st European Conference of the UNESCO CBD Joint Project on Culture



Heritage; pioneer in both the sustainable use of natural resources and the conservation of biodiversity.

The IAF contributed limited sponsorship to support a conference held by the Center for Baltic and Scandinavian Archeology considering The Origin and Importance of Falconry until 1500 with an Emphasis on Northern Europe. The Conference was attended by Prof. Dr. Thomas Richter who presented a paper on modern falconry. This conference is of importance to us as countries within that region often use the claim that there is no heritage of falconry to prevent its practice. This conference clearly shows that such a heritage does exist.

The plan, proposed at the 2013 AGM to foster studies on A Cultural History of Falconry, both in Europe and the Middle East, ca. 1200 - 1800, goes ahead and is being closely followed by Frits Kleyn, IAF Officer for Tangible Culture. Plans are in process to hold a conference on this subject at NYU Abu established by International Wildlife Consultants. The Dhabi in 2015.

We were fortunate to have the company of Dr Awadh al Saleh at the AGM in Doha. This allowed us to hold a workshop on the mechanisms of Intangible Cultural Heritage Submission for UNESCO to interested delegates. Our Advisory Committee Chair, Dr Bohumil Straka, is responsible for matters relating to the UNESCO recognition within the IAF and is very knowledgeable on the issue. There are a number of nations which are preparing for submission and these include the Netherlands, Germany, Kazakhstan, Pakistan and Croatia.

and Biodiversity where he presented a paper - Falconry's We can expect further nations to be added to the submission over the next few years.

> With an increasing proportion of the world's population becoming urbanized, there is a separation between people and the natural world. This results in a loss of understanding of the processes of nature. Such a situation leads to fertile ground for the animal rights movement resulting in condemnation of hunting and the concept of sustainable use. The IAF believes that the answer to this lies in appropriate education of the general public and particularly children. This task has been taken on by the IAF Women's Working Group. The educational material produced by the Valkensward Museum has been made available to the IAF for translation and further development. We are looking at models for education such as that provided by the International Foundation for Houbara Conservation. We have also supported involvement with the Mongolian Artificial-Nest Project Schools Program, increasing numbers of women involved in Falconry, and Hunting generally, is a welcome development. They are able ambassadors for sustainable use and we have developed links with the Artemis Group which represents women hunters within the CIC.

> The Falconry Festival will be held in Abu Dhabi in December 2014. This is planned to be another magnificent gathering of the world's falconers. It will involve an opportunity to enjoy Arabian-style falconry at the "desert camp" followed by a festival and conference in Abu Dhabi city. The IAF will

have a presence the at Festival which promotes the Intangible Cultural Heritage of Falconry. It is a valuable opportunity to meet with falconers and to engage in the work of the IAF. We shall also contribute to the Conference which should provide a lasting benefit of the Festival. We would encourage the support of the Festival by all falconers.

Animal Welfare

It is the contention of the IAF that Falconers, as represented by the IAF, must be recognized as the experts in the welfare of Falconry raptors. To establish this end, we have undertaken a number of initiatives. The first has been to establish guidelines through the development of the General Welfare Paper which was accepted as a living document by the delegates at the 2014 AGM. Further work will follow on this document.

The second initiative was the holding of a Veterinary Conference in conjunction with the 2014 AGM in Doha, Qatar. In this regard we must thank the Algannas Club and the Souk Wafik Falcon Hospital for their vision and generosity. This conference was a considerable success and thanks must also go also to the participants as well as to Prof. Tom Richter, Gary Timbrell, Veronique Blontrok, Patrizia Cimberio and Zayed al Madeed. We thank Dr Neil Forbes for allowing the reproduction of his outstanding presentation in this Journal. This was the first undertaking of its kind by the IAF and, I hope, will lead to future similar events.

The activity of vociferous animal rights groups has been one of the issues monitored through the Dods Agency. We have been able to identify specific MEPs and activist groups who target hunting and who are opposed to sustainable use. We are monitoring an effort to establish "Companion Animal



Lists" within EU nations which will limit those animals which ordinary citizens may keep as pets. It is essential that the delegates of European Nations monitor this development within their country. It is also important to distinguish the difference between "Animal Rights" and "Animal Welfare" and similarly to recognise that the proponents of Animal Rights will claim a Conservation Agenda while placing rightsissues before conservation concerns.

The Future

There is much to be done; the IAF will continue its representation and promotion of Falconry at all appropriate forums. We stand ready to support our membership in the face of challenges. There are further plans to develop, mobilize and unite falconers. These plans include the establishment of the new Vice Presidency for the MENA region, support for the efforts of the African and Asian Falconry Federation group, consideration of a plan to establish a "Young Falconers" Group. Our plans for the next AGM in Argentina include the intention, led by Ralph Rogers - our Vice President for the Americas - to stimulate and develop Falconry within the Latin American Region.

Much of the focus of the leadership of the IAF in the coming months must be the establishment of the IAF Permanent Office. Once this office is established, the plans for the long term and sustainable funding of our organization must be addressed. This can be achieved through innovative funding initiatives and through utilizing a range of strategies. Without doubt, we cannot achieve this without the whole-hearted and generous support of the world's falconers.

I hope that I have shown in this report the enormous range of work that is being undertaken by the IAF in support of falconers. It is no empty claim that the IAF represents Falconers working for Falconers! This work is done by a dedicated group of volunteers and our thanks must go to them. Even with establishment of the permanent office, we will still depend on the selfless efforts of volunteers to do our work. What falconers, around the world, must decide is how much they value this organization and the work that is being performed on their behalf and whether they wish to contribute. This level of representation, given the relatively small number of falconers in a global context, is unprecedented. We are a vulnerable group with specialized requirements and our activities, often shrouded in mystery, are open to misunderstanding and criticism. We need and deserve dynamic, perceptive and innovative representation and that, in turn, must be supported. 🗨

FACE APPOINTS NEW SECRETARY GENERAL



EACE is an invaluable ally of the LAF within Europe and at international and regional conservation related conventions. We have enjoyed an excellent relationship with Yves Leccoq and with Angus Middleton, the previous Secretary General. Angus, himself a falconer, has left EACE to head a conservation organization in Namibia and we wish him and his family well for the future. Falconers and other hunters share many common interests, both in the support of hunting and in the realm of conservation and sustainable use. We look forward to developing a sound relationship with the new Secretary General and will do all in our power to support him in his new post.

Adrian Lombard.

The Federation of Associations for Hunting and Conservation of the EU (FACE) has appointed Filippo Segato as its new Secretary General following a publicly posted selection procedure that was launched in September 2013.

13 January 2014, Brussels - The FACE Recruitment Selection Committee is pleased to announce that Filippo Segato has been appointed as FACE's new Secretary General. Italian of origin and German-educated, Filippo has been working in Brussels since 2006 in EU advocacy for diverse groups and interests, with a strong foundation in



- Stort

communications. Filippo has a long history with hunting: EU affairs and diverse hunting experience across Europe and having passed his hunting licence in 1995, he volunteered for we are excited to welcome him into FACE and begin this new his local hunters' association and participated in a number chapter together for the future of European hunters. of game management projects, wildlife surveys and damages FACE President Gilbert de Turckheim expressed his high assessments. Filippo is an avid waterfowler, with a deep interest confidence in Filippo's appointment: "We are very pleased to in all hunting modes and game, and also founded the Italian welcome Filippo to FACE, he brings a unique expertise to French Pointer Kennel Club (Club Italiano Bracco Francese). the table, being not only very experienced in the workings of In regards to his new role, Mr Segato said, "I am delighted EU affairs and a passionate hunter but also having a deep to be joining FACE and would like to thank President de knowledge and understanding of communications which is Turckheim and the Membership for this unique opportunity. an essential skill to increase public acceptance for hunting and As stewards of our countryside and nature, hunters have a address the challenges posed by changing European societies direct stake in safeguarding Europe's wildlife and biodiversity and their attitudes towards nature and animals. I am certain for future generations. Hunting is one of the expressions of Filippo will give the 7 million hunters in Europe a convincing Europe's incommensurable cultural heritage. It testifies to the and widely heard and acknowledged voice." T





bond between man and nature. The future of hunting lies in strengthening this bond, acting responsibly and implementing sustainable policies. To be part of this as FACE's Secretary General is a great prospect which I am keen to take forwards with the FACE Secretariat in Brussels, working with FACE Members and partners across Europe to connect their expertise and experience to the EU."

With an MA in International Cultural Management obtained from Genoa State University, fluent in the three official languages of FACE, Filippo combines a breadth of professional



EXOTIC SPECIES AND HYBRIDS In Falconry

By Drof Matt Gage

Background

Falconry is a unique partnership between human and predatory bird that has a cultural history going back thousands of years. Within Falconry's deep heritage is a frequently recurring history of flying raptors outside their indigenous ranges. Exotic species were often gifted between nations. History and art report that Genghis Khan, for example, flew 500 white gyrfalcons on his campaigns in Asia, most of which were well outside the gyrfalcon's native range. More recently, and because of limitations on wild raptor availability (both imposed by falconers upon themselves as well as through legislation), captive breeding for falconry has seen an increase in the production of exotics and hybrids between closelyrelated species. Hybrids, in particular those between Falco species, have been bred on a relatively large scale for the last 40 years. Today, many falconers around the world choose to fly exotic or hybrid species. Despite this extensive history of movement and flying of exotics, no Falconry species or hybrid has become invasive (www.europe-aliens.org/speciesSearch. do, European Environment Agency 2012).

The exotic and hybrid issue

Even though many of our modern wild landscapes have been changed hugely by humans, mostly for agriculture, concerns

about exotics (species flown outside their natural ranges) and hybrids (inter-species crosses) in falconry have been occasionally raised by conservation or political organisations, or falconers. It is theorised that lost falconry birds could survive, and then establish themselves as Alien Invasive Species, or reproduce with wild raptors and thereby 'pollute' natural gene pools. The IAF is a falconry and conservation organisation, and we therefore hold a responsibility to wild raptors, and the habitats and ecosystems in which we fly our birds. We have therefore extensively reviewed the conservation risk and assessed the impact of exotics and hybrids from falconry, and have agreed a Position Statement and Code of Conduct. This position statement does not make judgements about the use of exotics or hybrids within falconry, which is a subjective debate for individual falconers to discuss; the statement is based upon an assessment of the evidence for, and risks of, damage to natural ecosystems from alien invasive raptors that could be occasionally lost from falconry. This Position Statement is subject to ongoing review by IAF scientists, officers and delegates, as any new evidence emerges.

Risks of alien introgression from falconry?

For aliens to invade, a number of challenging steps must be continually achieved: exotic falconry birds need to be lost to the wild, then survive and compete in an environment they are not adapted to, then reach breeding age, then find a suitable and compatible mate, then be reproductively viable, then successfully raise a brood, and then that brood must go on to complete the same cycle. What is the risk and evidence that this could happen from falconry birds?

At the heart of falconry is the ancient hunting partnership between human and bird, based upon a fundamental principle that the bird is trained to depend upon, and return to, its falconer. To this end, falconers show particular responsibility to the risks of alien invasion: they train their birds extremely carefully using techniques that have evolved over thousands of years, they invest heavily in the development and deployment of modern and reliable radio telemetry to further minimise



Consistencies in pure native landscapes? A gyr-peregrine female with an exotic pheasant in front of a domesticated dog in a landscape dominated by hybridised wheat

the risk of loss. Thus, the risk of alien invasion from Falconry starts from the premise that Falconers do not deliberately release their birds to the wild, and take every step to prevent loss.

Evidence of alien introgression from falconry?

This principle for minimising loss is supported by empirical evidence. In a published study by Fleming et al. (2011) analysing the loss of registered falcons and hybrids in the UK (where hybrids and exotics are widely flown, and had to be reported to a government registration scheme) shows that the latest data (in 2007) for rates of loss of falcon species or their hybrids are ~1% of birds flown per year. Moreover, there is clear evidence for declines from 1990, concording with improvements in radio telemetry. Falconers therefore primarily aim to prevent loss using careful training and modern radio telemetry and, on the basis of UK Falconers at least, lose a tiny proportion of the birds they fly (only a proportion of which will be exotics or hybrids).

What happens to those exotic or hybrid birds that are lost? Do they survive or go on to breed? Because these birds are generally not prepared for life in the wild and are rarely adapted to their alien environment, but instead trained to depend upon the falconer, evidence shows that survival and/or breeding attempts by exotics or hybrids are very rare incidents. Reports from birdwatchers across many regions in the UK collated in the paper by Fleming et al (2011) paint a picture for extremely infrequent occurrence. On average, about one reported exfalconry bird per regional bird report per year (only some of which will be exotic or hybrid). Some of the regional reports cover areas as large as Scotland. There is thus limited evidence from this analysis that accidentally lost falcons from falconry survive in the wild, and we urge similar analyses and investigations across wider geographical areas.

These analyses indicate that there is a low risk of loss on top of a low risk of wild survival, even in a country where (a) falconry has a long history and is quite widely practiced today, and (b) birdwatching and reporting intensity is relatively high. However, there remain anecdotal reports of occasional exotic survival and even breeding attempts in the wild in the UK, with two isolated examples of Harris' hawks attempting to breed in the UK and recorded in the British Trust for Ornithology's Bird Atlas 2007-2011 (along with quite a number of other exceptionals). It is important that any further breeding attempts by Harris' hawks (or any other ex-falconry bird) in the UK (or anywhere else) are monitored carefully, the background to their loss investigated, the context for their survival assessed, and the risk of their introgression or persistence managed. Because of isolated incidents like this, which will result from irresponsible ownership and flying without appropriate training or telemetry, IAF has instigated and unanimously voted in a Code of Conduct for its member



Free-hacking of falconry birds is now done in large and secure conditioning pens.

clubs when flying exotics. We also now run a reporting and recording scheme to make any issue more transparent and evidence-based.

Falco hybrids

Even though exotics and hybrids are invariably non-adapted, often sterile or subfertile, and any progeny produced will have to fight against sequential dilution by indigenous wild genotypes, concerns have been raised. In 2008, Birdlife International issued concerns about the use of Falco hybrids, and the risk of alien introgression in particular to wild saker falcons. A handful of incidents of hybrid falcons surviving and showing breeding attempts in the wild had been reported, and these events gained traction because of arguments that they could be the start of alien introgression. IAF has been collecting all evidence from bird reports and fellow Falconers of ex-falconry hybrids attempting to breed in the wild since 1995. We have 12 reports with scant to clear evidence of breeding attempts over the last 19 years, most of them unsuccessful, from records across the European Union and North America. Half of the records were in Germany, associated with large-scale hacking of eyass hybrids by big breeders who did not recover all their males: this practice has now ceased. We have attempted to establish the details of the case of a hybrid breeding with a wild saker in Europe, but no information has been supplied.

On the basis of this evidence (and even ignoring the obvious sequential genetic dilution that will ensue should any breeding attempt be successful), IAF concludes that this level of exfalconry hybrid breeding attempt, across 19 years and across such a wide geographical area, does not present any convincing risk of hybrid invasion. Most importantly, no hybrid breeding attempt or success has been reported in the last 7 years.

As a further assurance, Nittinger et al (2007) conducted a molecular genetics study of hierofalcons, part of which aimed to compare pre-hybrid (before 1970) wild saker genomes

versus those after hybrid use (post 1970). 22 historic saker specimens were compared with 60 contemporary specimens. There was no evidence of an increase in the very low rates of hybridization known from nature, and therefore no evidence for an increase in genetic signature from ex-falconry hybrid introgression.

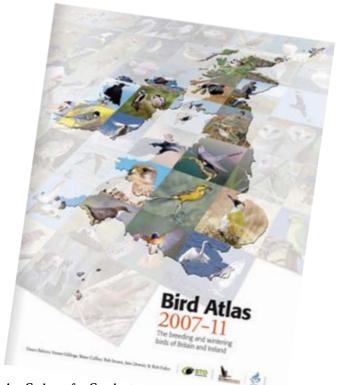
Summary

In summary, despite historical and widespread hybrid and exotic use in falconry, there is sound theoretical and empirical evidence that harmful genetic introgression to indigenous wild populations has NOT occurred, and nor is likely to occur under the current situation. In the meantime, significant damage to wild raptor populations continues as a result of habitat destruction, pollution, unsustainable use, persecution, and environmental degradation.

Falconer Responsibility: a Code of Conduct

Despite all the evidence for a minimal risk of damaging introgression from ex-falconry exotics or hybrids, IAF remains mindful of its responsibilities to wild raptors and their habitats, and vigilant on this issue. Hybrids and exotics also remain an easy opportunity for those opposed to falconry to use by misinforming environmentalists that 'genetic pollution' is likely, so this is an important public relations issue to contain. IAF therefore expects all falconers who fly exotics or hybrids to follow a Code of Conduct to prevent exotics from ever becoming a problem. (Fortunately, the Code we expect is also congruent with the primary duty of care that all responsible Falconers apply to their birds through the prevention of loss to the wild.) Responsibility has already been taken by some falconry groups where previous risks of bird loss existed: free-hacking is now conducted in large, enclosed conditioning pens; telemetry technology and investment has risen to high levels and reached new bounds as a major industry within Falconry; the tradition for hacking back by some falconry cultures such as Arabia has ceased for non-indigenous species or hybrids.

Despite the generally low evidence for exotic loss and survival, the success of captive raptor breeding occasionally allows Falconry birds to get into irresponsible hands, and these can be subsequently lost because they are flown in inappropriate places by irresponsible people who have not applied appropriate care to training and management. The responsible Falconry community does not wish to tolerate



A Code of Conduct: irresponsible loss of Harris' hawks without telemetry has allowed two breeding attempts in the UK, reported in the British Trust for Ornithology's Bird Atlas 2007-2011

these incidents, because they are failures of the duty of care we have to our birds, and they can bring Falconry into disrepute through the hybrid-exotic issue.

Therefore, to further minimise any risk that exotic species or hybrids could potentially pose to wild raptors through alien invasion, and to maintain public relations, IAF requires that all members of affiliated Falconry Clubs should formally adopt this very simple Code of Conduct when their members fly exotic species or hybrids:

1. No hybrids or exotics should ever be deliberately released to the wild

2. Modern functioning telemetry should be used when any hybrid or exotic species is flown

IAF is keen to monitor any risk of alien introgression, so we urge the reporting of any examples of exotic species or hybrids, and this can be readily done through the exotics page of our website. We suggest that the bird should be known to be surviving in the wild for at least 7 days, and be recorded at least twice (to prevent reporting of any temporarily lost birds which will be recovered by their falconer). Please report any such incident to exotics@iaf.org, and an IAF scientist will email you back to request further information.

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The Live Jalconers

Five falconers, each one with a drink, Of sport and hawks, they each did think, Down thirsty throats smooth beer did sink. Embowered in 'The Rose and Crown', The more they drank, the more they thought Of hawks and dogs, their ancient sport; As yet more drinks the barmaid brought; On round oak table set them down,

With raised glass and cheerful voice Ted cried, "The Goshawk is my choice, Now bring more beer my buxom Joyce, More beer will get me talking. The Goshawk is the one for me She tries her best at all we see, Pheasant or rabbit, from fist or tree, The very best of hawking.

With you, my friends, to beat the fence, My gold-eyed Goshawk, keen but tense, When rabbits run from hedges dense, I know my Gos will have him. Yes, gallant Goshawk, you're my hawk, You ride my wrist wher'ere I walk; Enough, enough, I'll talk and talk -But what do you say, Jim?"

Another round of drinks was bought, Two beers a whisky and some port, And these were drunk before more thought Came forth in conversation. Then Jim declared, "What I love best, A cast of Merlins from the nest, With these you can forget the rest_ But they need dedication.

The Merlin though so very small, So brave should measure ten feet tall, So too, the lark, with shrilling call Endeavours to outfly him. A ringing flight in classic style Wind-drifting, I watch meanwhile Then run, sometimes more than a mile. Success to merlins, neat and trim."



Poem by Roger Upton, painting by Mark Upton

So much talking makes throats dry, But other drinks come by and by. Then Roger stood on table high To make his speech to all. "Dame Peregrine, I call the star. She flies so high, so fast, so far. Now Joyce, please come and fill my jar." It was his turn to call.

"Yes how the Peregrine brings us joy; The merlin, she is but a toy, A Gos may suit an eager boy: The Peregrine is the Queen. For waiting on at duck or game, For rook or gull she shows her fame, And yet so handsome, tame. So willing and so keen."

Jack then nobly took the floor, Said he, "I would want nothing more Than Sparrow Hawks. The best I saw Killed more than any other bird. For real sport she takes the prize, Although she be of tiny size. For real sport, use her, be wise. A Spar, you mark my word."

Now Bill had sat in silent thought, (Though of the drinks his share he'd bought.) What were his notions of the sport, The ancient sport of Hawking? Unsteadily he rose and said; While holding hands to aching head, With funny feet that felt like lead; "Oh please do stop this talking.

It does not matter which is best, So please do let the matter rest, For all these hawks have stood the test Of time, thoughout the ages. Let's drink the health of Falconry. And raise our glasses, one, two, three _ To Falconry, to Falconry, Our Ancient Occupation."

(With apologies to Patrick Chalmers) 🔍

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Falconry in China

在中国,鹰猎活动已经进行了2000多年,早在汉朝史书《史记》中就有关于秦朝(公元前 221年)鹰猎的记载。这项活动在随后经历了汉、晋、隋、唐、宋等朝代后 一直延续到今天。

It's been over 2000 years since falconry became popular in China. There was a very early record of Chinese falconry from Qin Dynasty (221 BC) in the book <Shi Ji>(Historical records). Then we find a growing interest in this sport during a long period of time: Han, Jin, Sui, Tang, Song, Yuan, Ming, Qing and today.

Words and images by Baoyong Zhang

活动相关的文章、字画、玉器等制作精美的 族的喜爱 艺术品,充分说明鹰猎文化在中国的历史文 当今,在中国的天津、北京、河北、河南、 化长河中占有着重要的位置。

There has always been articles, paintings and jade works of art related to Chinese falconry, which explains why this sport has been so popular and how important it is to the Chinese and their history.

鹰猎活动在宋、元、明、清朝这几个朝代更 是成为皇家贵族以及士大夫阶级重要的消遣 娱乐内容。

中国古代已经发展出一套完整的驯鹰术,它 Falconry especially played an important role as the Royal 涉及相鹰、驯鹰、放鹰、笼鹰以及医疗救护 family's entertainment during Song, Yuan, Ming and Qing 方面的所有科目。这些在前人不断的总结 Dynasty. 下,在各个历史时期都形成了文字资料得以 保存、尽管能留传至今的并不多、但是被保 留下的部分仍然有很高的研究价值。尤其当 中国处于经济与文化同时繁荣的鼎盛时代, 更有针对不同鹰种驯养方法的系统专著,从 小型个体到中大型个体,方法细节个不相



在悠久的中华文化历史中也有大量的与鹰猎 在民间鹰猎活动也广为流传,受到中国各民

山西、山东、甘肃、宁夏、辽宁、吉林、新 疆、云南等省市,依旧有秉承着中国传统鹰 猎文化和技术的鹰猎爱好者

Falconry was then accepted by more people, among Various ethnic groups in China.

Today, we still have many falconers from Tianjin, Beijing, Hebei, Henan, Shanxi, Shandong, Gansu, Ningxia, Liaoning, Jilin, Xinjiang, Yunnan etc.

医类似。



据鹰的状态做出训练时间和食量的调整。 鹰,此后进入日常放鹰的阶段,每天遛鹰, 喂轴,称重仍要继续。

The falconry of the goshawk is beginning on the date of falconer got it, with 7-14 day of training through several steps, including kaishi (feeding), chuanglian (manning, take to the crowd to acclimate a goshawk to living and working with humans), xiazhou, wrapped the indigestible fur, fiber, and other material in the meal of the bird to improve the peristaltic movements and make it have the sense of hunger, tiaoquan (the hungry hawk jumps from perch to falconer's hand when it hears the calling, liter meaning jumping to fist), jiaoyuan, calling the raptor from a distant place, and an'ying (hunting the first prey), and adjust the training time and food intake according to the state of the goshawk. When the training finished, the goshawks should be hacked in regular daily training, and several other activities shall be continuous every day, such as walk the hawk, feed the zhou (the indigestible fur, fiber, and other material in the meal of the bird) and weigh.

鹰猎者不仅要知道猎鹰出猎时的饥饱情况, 训练完成后,在野外捕捉第一只猎物叫做安 还须深谙它被人驯养以来的身体情况和精神 状态随时做出调整。鹰猎者从鹰的肢体语音 中得到信息,以此为依据做出判断,选择正 确的方式把鹰各方面的状态调整到最佳。(通过长年累月的经验积累,中国的古人总结 出了很多言简意赅,但又行之有效的特指词 汇.用一两个字就可以说明鹰隼的当前状 态)

> Falconer shall know the hunger state of the hawk before hunting and adjust it to the best according to the physical and mental condition, which was judged based on the unconscious body language of the bird. (Fortunately, the ancient Chinese summarized lots of simplified but effective terminology and vocabulary to explain the state of the raptor by using several words.)

> 从古至今,普通平民在秋冬季通过放鹰狩猎 获取猎物,改善生活水平。更富裕的人群把 鹰猎活动当成一种特有的生活方式和娱乐消 遣,鹰猎、隼猎、雕猎都在不同的地域环





境下得以流传和完善。在中国,从北到南, 从东到西,因地域环境和野生猎物资源的不 同.各种鹰隼都各自成为了当地的主流。

Since the ancient times, falconry was popular in lower social class to improve the quality of their life by hunting. However it's a status symbol and a specific way of life and entertainment of noble class, the falconry of hawks, falcon and eagles was spread and perfected in different places through the whole country under various geographic conditions and wild resources and all sorts of hawks became the mainstream of the local place.

在一些地区、仍然保持着秋季捕获亚成鹰 隼,春季将其放归自然的传统,这在某种程 度上也帮助了亚成个体能够顺利度过第一个 严苛的冬季,一些个体更有机会在野外存活 到成年,去繁衍后代。

In some place, the hawks are captured and trained in autumn and freed in spring, which helps the individual hawk survive the severe winter to adulthood and reproduce to some extent.



训鹰养鹰不仅是一种娱乐,它更是一门科 学,一门艺术。它能够给人们提供更多融入 自然的机会,放猎时人与鹰是一个整体,在 这个过程中,人帮助鹰来获得更多更好的捕 猎机会,鹰让人学会如何不断的发掘鹰自身 的潜能,并发挥到极致。鹰猎者要通过不断 的细心观察,反复思考并掌握其中规律,更 进一步的去了解自然,将其升华为智慧。

Falconry is not only an entertainment; it is a science and art, which provides plenty of opportunities for people to connect to nature. Through falconry, the people and the hawk are bound together, into which the hawk gets more opportunities for hunting and lets people learn how to explore the potential of the hawk and maximize it. The falconers need to observe carefully and think it over and again to grasp the rules, and further, turn them into wisdom.

现今中国政府出于对野生动物的保护,是禁 止私自捕获及驯养的,在一些少数民族聚集 的地区,当地政府为了保护少数民族的传统 民俗,允许他们进行鹰猎活动,相信经过中 国所有的鹰猎文化爱好者的努力及各国鹰猎 爱好者的帮助,在不久的将来中国鹰猎也会 走向合法的良性发展道路。

Today, as the Chinese government tries to protect wildlife, birds of prey are illegal to keep in captivity, although some places of China are allowed to continue falconry as the cultural heritage of ethnic minorities. We are hoping one day falconry will become legalized in China and we are going to work hard for this too!

Impressions of Falconry in China...



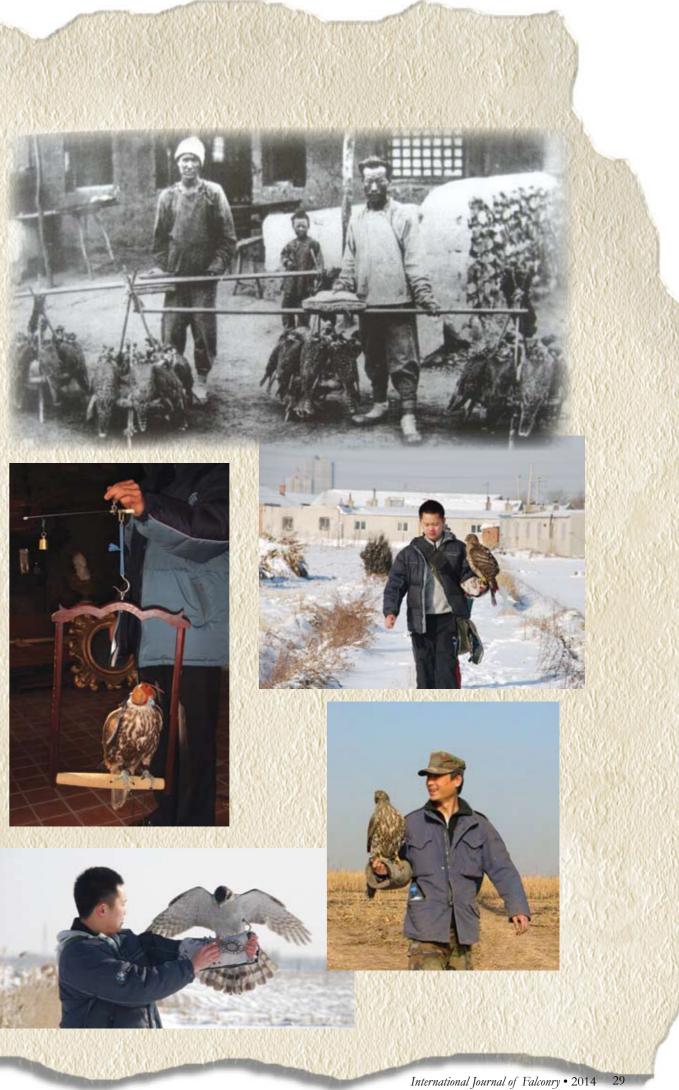




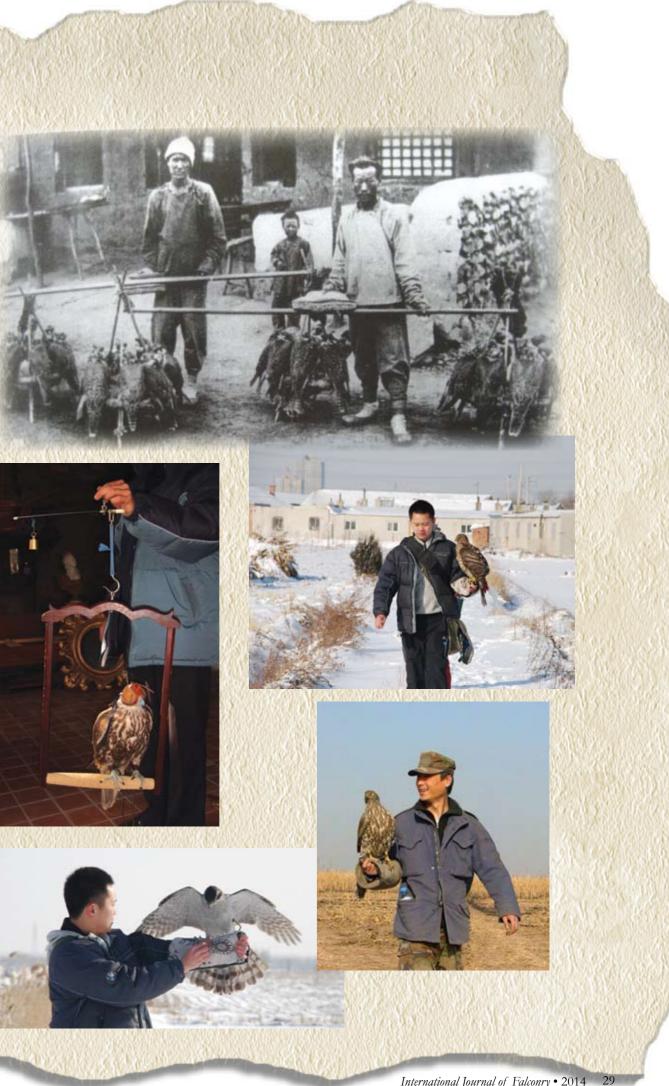












AN EXTRAORDINARY SCHOOL

By Davol Michal

There is an elementary school and kindergarten situated in the heart of the Stiavnica mountains, right under legendary Sitno (named after the famous astronomer and naturalist) which is predominately focused on hunting and forestry. This school is the only elementary school in the world where it is possible to study falconry. "The school subject, falconry, is officialy classificated, and thanks to this students are able to learn the basic knowledges about our environment. They will learn to move in the terrain, to think positively about the environment and to rationaly protect it" explains director of the school, Pavel Michal. The specialization of the

school influences students in their selection of high school with similar orientation on forestry, hunting, veterinary and falconry. "We lead our students to responsibility and teach





them to respect nature. We also lead our students to gain as much experience as possible, for example they should be able to give first aid to injured birds of prey, to heal them and then release them to nature again. They also learn how to identify birds of prey in the wild, how to promote falconry in public and how to pass our traditions from generation to generation" adds the director. "The school offers the opportunity to study falconry from four years of age. Our students of the seventh, eighth and ninth class are devoted to falconry for one hour per week. Younger students have an opportunity to visit our free time activity center which is focused on falconry and is placed next to the elementary school."

It is not easy for the director to keep the tradition of falconry on this school - "it is really difficult for us to obtain finance for keeping falconry in our school alive. But the successes of our students are enough as a satisfaction for our efforts."

They will see the world

Students of the elementary school of Maximilian Hell regularly organize exhibitions of their falconry art for the public or for other students from other elementary schools. They show to their audience how to perform falconry training and also present training of hunting dogs. The school has really rich experiences with presentations of falconry to the public. Director of the school Pavel Michal says "we have even welcomed the Norwegian and Swedish royal couple to ours school. We attended the celebrations of entry SR to EU in Brussels. We also represent Slovakia in abroad, we were

already in CzechRepublic, Poland, Italy, Hungary, Austria, Great Britain and Malta. Our students visited the meeting of the IAF in 2010 in Slovakia and sometime ago they also visited opening of exhibition Hunting and relax in our capital Bratislava".

Opportunities for students home and abroad

"Students of our school often keep practicing falconry even after leaving our school for example while study in Secondary Vocational School of Forestry in Banska Štiavnica, University of Technology in Zvolen or University of Veterinary Medicine in Košice. Falconry is also useful on airports, falconry farms or falconry courtyards. It is recently needed in Canada where birds of prey scare away other birds to protect harvest. It is also requested in Denmark, Italy, Germany, Austria, Switzerland and the USA. The language skills are an important condition. We know it and we support learning foreign languages" explains the director, and continues "pupils have available to ones from most modern multimedia classroom in Slovakia - a special language classroom and interactive whiteboards are in all classes in our school. We have introduced not only falconry as a subject but also another new subject - horse breeding and horse riding which we have began learning this academic year too in the school of Maximilian Hell in Štiavnicke Bane. Students learn care of horses and to ride a horse in our school area. They have two horses at present.

Love of a Lifetime

The young falconers governing slogan: "Falconry is love and then birds of prey will fly in the blue sky, falconry will live on, because love is everlasting".

The rich history of falconry in Slovakia only confirms how true this slogan is. Pavol Michal acknowledges that learning falconry has brought big responsibilities, needs plenty of time





and appropriate methods of communication. "this is pleased to, that these activities children having fun and is usefull for them. It is up to them to see their joy and love for that. I'm sure that this is the right way, to lead them to meaningful leisure time together with the living creatures and in the lap of nature" says the director and adds "but I think, that this would be impossibile without financial supporting from state."

Mgr. Pavel Michal – falconer and director the school too. He was born in 1976 and graduated from the College of Forestry in Banska Stiavnica and after he graduated Matej Bel University, pedagogic faculty - geography and biology in Banska Bystrica.

Our school is truly extraordinary and because it has participated in various celebrations and ceremonies where our skills and ability have recorded plenty of successes and admirations school have deserved attention. "If we would say about weaknesses our activities and negative impacts, I must to say about relationships 'State versus school'. These relationships are controversial and incomprehensible for me. Although the state has invited us to various ceremonies, which have been organized in our country and abroad too, and our state has been to prone of existence of the Falcon base in our

school, we lack the financial support.

This school is rather small and there are few pupils. Although the surroundings are beautiful this region is very poor to finance. School has a big problems with survival every year and I think, that this extraordinary activities will become history. We are modest and many of our activities we do without any support. Although we do it with love to this ancient art. is impossible do it without any financial support,"says the director. 🗨

INTERNATIONAL FUND FOR HOUBARA CONSERVATION

. Mahammed Saleh . Al Baidani

DIRECTOR GENERAL. INTERNATIONAL FUND FOR HOUBARA CONSERVATION



When he launched the programme to conserve the Houbara bustard, the late Sheikh Zayed bin Sultan Al Nahyan said: "It is important that we come together to secure the future for our children and the world they will inherit from us. It is truly said that we borrow from the world from our children and hold it in trust for them."

For many centuries the link between UAE residents, falcons and the Houbara has been at the heart of local culture. In harsher times in the past the Houbara provided much needed sustenance to the people who lived in the Arabian Peninsula. They used their skills to train falcons to hunt Houbara, which are not the raptors' natural prey. In modern times we are inured from the need to hunt for food, but it remains very much part of our culture; falconry remains, for many people, intrinsically linked to security, tying people together with wildlife and enforcing conservation programmes. If we allow the Houbara







to die, a part of this living heritage will die with it.

The relationship between the falcon and the Houbara has always been at the heart of Abu Dhabi's strategy to conserve both species. Part of IFHC's mission states: "Through restoring sustainable wild populations of Houbara, IFHC will future generations.'

One of the most important aspects of our conservation initiative is to communicate the importance of our mission to others. Public education is one of the major factors in helping people understand the significance of treating endangered species with care and respect, and ensuring we can all continue to see them in the wild.

Education has always been just as important in our work as our world-leading breeding and release programme. Like our approach to conservation, our approach to education is an holistic one. Whether through communicating with local populations across the range of the Houbara or informing local schoolchildren; making people aware of the facts provides a better chance of a prosperous future for birds and traditions alike.

Currently the programme incorporates Grades 5 and 9 in Abu Dhabi, which will be expanded to include Grade 6 in 2013/14. Our representatives give lectures and presentations, and Students receive information about the Houbara in terms of ecology and in respect of the bird's role in local culture. The session ends with students making presentations about what they have learnt. Our ultimate goal is to integrate the Houbara education programme into the UAE school national curriculum.



host information sessions at conferences and seminars in many parts of the world. As well as the educational information we deliver to the general public, IFHC biologists deliver presentations to the scientific community and publish peer-reviewed materials. We share information with other researchers to disseminate our research findings throughout the world.

IFHC's education programme is designed to educate and inform future generations about the Houbara as they will be the falconers and conservationists

of tomorrow. Therefore, it is vital that they understand how important it is to provide a sustainable future for the Houbara in order to preserve our heritage.

To address this issue, we have developed a successful school outreach programme combining inquiry learning and field secure the continuation of traditional Arabian falconry for visits to our facilities. The programme, with its focus on conservation efforts and the scientific understanding of the bird and its cultural significance, is being integrated across schools in Abu Dhabi in collaboration with Abu Dhabi Education Council (ADEC).

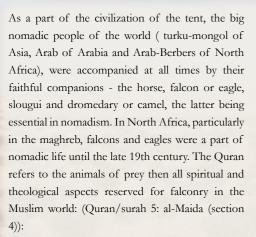
> The programme is built on Sheikh Zayed's vision for conservation. It positions IFHC as a guardian of culture and heritage while also focusing on the cutting-edge science used to develop an increasingly successful conservation project. It has a number of objectives: to educate people about the Houbara and its role in local heritage; to provide students of all ages with learning opportunities to support their requirements; contribute to national and cultural identity; and provide work experience and career development opportunities.

The Houbara programme is a reflection on Sheikh Zaved's desire to use "science knowledge and experience to ensure progress of our country and to turn these elements into durable cultural values for future generations." Our vision is not only to inform, but to spark the interest of the youth of today to pursue careers in science, technology and innovation in support of the Emirate's 2030 Vision. 🛫

NORTH AFRICA FALCONRY

By Chaouni Abdelhak

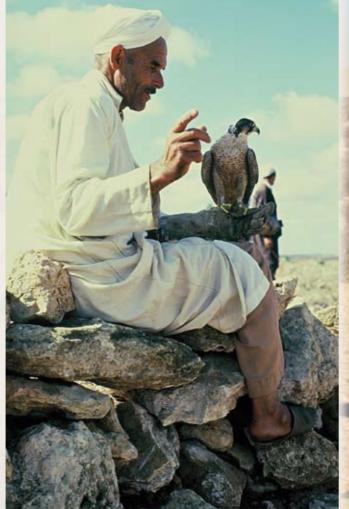
Although at the time of the pharaonic civilization the raptors (eagles and falcons) were deified and venerated (mummies of falcons, sarcophagi), falconry in North Africa has been practiced since the Arab conquest in the 8th century, when the first Arab conquerors sent falcons to their eastern leaders as gifts.



"They ask you, what is allowed to them. Say : 'allowed to you are all clean foods, and as to the animals of prey which you have trained as Allah has taught you, eat of what they have caught for you, and mention the name of Allah over it, and fear Allah ; verily Allah is swift in reckoning."

The division of property of nature is a right for every believer therefore and falconry is not just for noble people.

Falconry was practiced by the califes, sultans, emirs, dignitaries and passionate population generally both nomadic or semi nomadic. The eastern Arab falconry was spread in North Africa at the time of Umayyads (magherb, Andalusia), the Abbasids (Tunisia), the Mamluk dynasty (Egypt) and during the setting up of the Arab tribes of the east, Banou Hilal and Banou Soulaim (Libya, Tunisia, Algeria, Morocco). These tribes have perpetuated the



traditions of hunting while they were moving over because of climatic reasons, looking for pastures throughout the semi desert region in the north of Maghreb. They hunted game on horseback with falcons and eagles (especially in Morocco). The falconers of Maghreb hunted in general with the Barbary falcon, sometimes the peregrine falcon and also the sparrow hawk, especially in Tunisia. Often hunters were accompanied by the slougui, working with falcons hunting hare, especially in Morocco.

Being considered as cavalier people and as part of civilization of the tent, the nomadic population was favored by large spaces abounding in game. It was both a way of distraction, physical exercises and dietary diversification. Moroccan people excelled in eagle hunting, as an oriental author of 20th century, practice disappeared in the earliest of the 20th century. They hunted both in high and low flight rabbit, gazelle, houbara, partridge, ganga and karawane.

> Trade between the civilizations of the tent were permanent and already in eleventh century, hunting techniques with eagles in Asia and North Africa (particularly in Morocco) were similar. In Andalusia the praiseworthy of the falconry is evident in poems, proverbs, songs, manuscripts. The decorative art of the Pyxides and wooden boxes of Andalusia also reflects the passion for falconry. The falconers of the emirs in Alhambra (Granada) were housed in a reserved area (Al Baicin) near the castle.

> > The east current impregnated Spain in particular where the act of the great falconer (sahib al bayazira) had a big importance in the tenth century and where the court poets showed more than once that they were familiar with hunting methods of the time.(Cf: Juan Vernet, What is the culture get as duty to the Arab of Spain). Some Iberian treaties (Spanish and Portuguese) demonstrate this eastern impregnation. The Arab influence appears in the lexicon of Roman works: the "Book of hunting of Don Juan Manuel (1325)", the "Book of hunting birds" of Pero Lopez de Ayala.

The falconry has always tempered some strained relations between Muslim and Christian states, and throughout the second millennium the sultans of Morocco had diplomatic exchanges with the kings of Europe (France, England, Spain, Sweden, Holland, Denmark, Austria, Sardinia, Naples, Portugal). At the time of the Renaissance, the lure of the east intensified the exchanges between the two shores of the Mediterranean, especially between Sicily and North Africa including Tunisia.

The falconry around the Mediterranean was prosperous and well developed, giving rise to several exchanges both in practice, knowledge and diplomatic gifts (falcons, accessories). The hubs of Sicily and Andalusia were where exchanges were very strong.

The falcons and accessories were among the most popular gifts in diplomatic exchanges. Thus in the 16th century (1533) ,the king of France, François Ith had sent to the Wattasside Moroccan sultan Ahmed Ben Mohamed, various objects of falconry such as 30 gloves birds enriched with pearls, about six dozen of chaperones each adorned with pearls and other silk tassels. Many exchanges of falcons and accessories took place between the Prince of Orange of Netherlands and Moroccan sultans around the 17th century. Also the Alaouite sultan Mohamed Ben Abdellah received in 1789 from the King Frederick of Denmark some beautiful falcons. The Barbary falcon was very





appreciated by the majority of European courts.

At the end of the Middle ages, princes and masters of states (Este, Ferrar, Milan,) liked the oriental splendour. The falcons were included as royalties and taxes, some tribes of the Doukkala region (atlantic Morocco) gave falcons as annual fees to the Portuguese counters installed in some coastline between the 15th and 17th century. The Wattassid sultans and dignitaries of Maghreb in general, imported many falcons

from Europe in the 17th century.

The literature of falconry was quite prolific in North Africa. In Egypt Mohamed Ibn Mangli In 1370 lists in a treaty everything about the art and techniques of hunting in the desert at the 14th century, dedicated to sultan Mamluk Al Malek Al Ashraf (1362-1377).

The moroccan master falconer Al Figuigui recounted in his treatise (1579), the advantages and the techniques of hunting and also the treatments and diseases of birds of prey; this was a reference book for all Maghreb falconers.

A long chapter has been reserved for falconry in the book "The horses of the Sahara", prepared jointly by the Algerian emir Abdelkader and General Daumas in 1853 detailing all the aspects of hunting in general in the Algerian Sahara.

Some great falconers of Maghreb were distinguished at the international level: the Turkish bey Mohamed Lekbir of Eastern Algeria (1785), the caid Aissa Ben Omar (1863-1924) last aiglier of Maghreb and El Haj Said (Kwassem Doukkala/ Morocco) last master falconer who hunted on horseback died in 1976.

To enhance the moroccan falconry and evolve, El Haj Al Biyaz Smail (1921-2011) (son of secular master falconers), had created in 1983 the Moroccan Association of Al Noubala Falconers, and in order to climb it to an international standard, it had adhered to the IAF (International Association of falconry), his efforts and devotion supported to the Moroccan falconry were rewarded with crowning of UNESCO recognizing Moroccan falconry as world intangible heritage.

And how are enriching information in hunting scenes of orientalist sculptors and painters: Eugene Fromentin, Mariano Bertuchi, Edward Doigneau, Marcel Debut. 🔨



Les fauconniers sont les gardiens d'une tradition, d'un langage, de gestes et de valeurs qui ont mérité la reconnaissance universelle de l'Art de la Fauconnerie au titre de patrimoine culturel vivant de l'humanité par l'UNESCO.

L'ouvrage écrit par Patrick MOREL, ancien président de l'Association internationale de fauconnerie et considéré comme un des plus grands fauconniers au monde, aidé de spécialistes des différents types de chasse à vol, explique ce qu'est la fauconnerie : un extraordinaire mode de chasse, un art, une fascination, une passion et un mode de vie.

La fauconnerie est un ensemble de savoir-faire qui commence avec l'élevage ou la capture de l'oiseau, se poursuit avec la subtilité de l'affaitage et enfin s'exprime sur le terrain par la chasse à vol. Chaque phase demande une somme d'observations et de connaissances, une analyse du développement comportemental de l'oiseau et requiert une multitude de gestes et de détails pour atteindre la perfection de l'œuvre d'art.

L'ouvrage va permettre de découvrir un art peu connu à ceux qui voudraient le pratiquer, mais aussi aux chasseurs, écologistes et amoureux de la nature en général. Le livre donne un exposé très complet et vivant non seulement des meilleurs moyens de pratiquer la fauconnerie, mais révèle aussi pourquoi les fauconniers le font, les plaisirs qu'elle apporte et le patrimoine ancestral et glorieux dont les praticiens modernes s'inspirent.

Par rapport à beaucoup de traités pratiques, cet ouvrage se distingue parce qu'il exprime les joies essentielles du sport et surtout une philosophie, si difficile pour beaucoup à mettre en mots, qui démontre que l'art de la fauconnerie est un concept qui va bien au-delà de la chasse avec des rapaces.



By now most folks who have anything to do with falconry or raptor management will have heard of the falcon races that are hosted in some Arab countries. While they are not falconry and certainly not new, in recent years they have grown in popularity, incentivized ... if not sensationalized by the huge prize pools that are awarded at these events.

Words and photography by Mark Williams

The race events started over a decade ago and currently they are mostly held in the United Arab Emirates (UAE), Kuwait and Qatar. The richest and most prolific of these events are held in the UAE with prize pools of 15 million Dirhams (\$5m US) for each contest. They have evolved rapidly in recent years with three main categories, Telwha (flown to a swung Lure), flying to the balloon and lastly, flown to a model radio controlled (RC) aircraft pulling a wing lure around a course. There is also a less popular contest where a very fast pigeon is released followed shortly by a released falcon and the chase is followed by a parade of vehicles racing across the desert, although this is the least spectator friendly event unless you happen to be up for a bone rattling high speed chase across the desert. All contests measure the fitness and stamina of the falcon and while betting is not permitted in Muslim countries, racing is big business and falcon racing is fast becoming second highest paying prize pool next to horse racing with Camel racing coming in third.

The Origin

It is said that the origin of the races is the result of the Arab leadership's desire to retain their cultural heritage and practices. Falconry being one of the more well known was losing traction due to lack of available hunting. Hunting is now either illegal or very hard to do in many Arab countries in part due to over hunting. The increase in technology and equipment has replaced camels with large SUVs with high-performance shocks enabling them to reach deeper into the desert where game is found. Instead of wild peregrines and sakers we now see a trend towards large captive bred gyrs and gyr peregrine



Above: Swinging the lure and (right) race competitors

hybrids that has narrowed the odds in the predator's favour and add to this a lack of any wildlife conservation measures, all combine to a recipe for disaster. Recognizing this there has been great strides in captive breeding of prey species like houbara and some Arab country leaders have banned hunting altogether. Therefore only the privileged few who have the time and money are able to travel to nearby foreign countries to hawk; however these "safe" neighboring countries are dwindling with increasing Gulf unrest and so it is becoming harder each year to hunt with a falcon. This is believed to be why the falcon races were created, ... in order to provide a reason to continue owning and flying a falcon and ensure the continuation of the falconry heritage.

Different Race Disciplines

There are three main race events and birds initially compete to qualify for the events with the fastest birds moving forward. As mentioned the "Telwha" or lure swinging is the event most popular due to the ease of practice compared to the skill and expense in flying an RC airplane. The falcon is released from a designated point and called across a 400-meter flat sandy racetrack.

> It breaks a laser beam timer upon take off and arrival and the winner is designated by the fasted time. There is nothing subjective about this or any of the other races and



the timing devices are high tech.

The Balloon is straightforward and rate of climb is measured again by time and yet this requires a different set of muscle development and training than say a Telwha (lure) flown bird. Lastly there is the airplane and currently this event is a growing and evolving event. One race is defined where the falcon is taught to chase a feathered lure (usually dried

Houbara wings) pulled by a model aircraft around a designated course identified by five 20ft tall inflated red pillars that it has to navigate in the fastest time. Points (time) are deducted if it takes a short cut and cuts off the pillar in its efforts to keep up with the lure/plane. The other discipline is a two kilometer endurance race where the falcon is released beside an idling SUV that contains a driver and the pilot of the RC airplane. The plane takes off in front of the falcon and it is then unhooded and released taking immediate pursuit at which point the truck races off with driver and pilot navigating behind for a straight-line distance of 1 kilometer, usually an asphalt road made purposely for the event. At this 1 km point there is a red 20ft inflated pillar that the plane and falcon must fly around. Once again points are deducted if this is shortcut. The plane





The airplane racecourse

and truck then turns around and drives back down the 1km asphalt road and the

timer that was tripped at the start records the falcon crossing the line. As you can see the latter two disciplines require more skill flying the plane than the falcon but it is fun to watch and nerve racking to participate in.

Birds Used

There are several categories of bird species used comprising of gyrs and sakers that are often combined as one group, followed by shaheens (pure peregrines) and then gyr hybrids and each category separated by the sex of the species. Once these categories are flown at the various race events the winners are pen-ultimately combined so it becomes fastest hybrid male or female or the fastest gyr male or female etc. These each have a top prize of a high end SUV and large cash prizes that usually go from 1st down to 15th place awarded in decreasing prize amounts. Ultimately there is a "super final" race where there is an all comers race. Traditionally these have been won by female gyr peregrines and can have a top prize of 1 million Dirhams.





Releasing the balloon

Sheikh and Private Categories

Since it was recognized early on that

sheikhs had an unfair (unlimited resource) advantage

the race events are further categorized whereby sheikhs compete amongst themselves and individual entries are kept separate for all categories ...at least up until the end with the super finals.

Prizes

The value of prizes depend upon who is hosting but just like the races themselves, there seems to be some rivalry of who provides the biggest payout. Last year was the richest total contest payout to date and several millions of Dirhams of prizes were awarded at each of the several events hosted. I attended falcon races in Qatar while attending the IAF (International Association of Falconry) as well as closer to home in the UAE where I attended the Dubai and Abu Dhabi Falcon Races. In the UAE especially, it seemed that just as one race event ended the other started and supported by the same generous prize pools.

Of particular note was one individual in the UAE who in 2013/2014 race season had won at least 26 vehicles (valued

at 9.4 million dirhams and over two million dirhams in cash prizes, (combined prize of approx. \$3.1m US). Understandably this is becoming a big business for some and is creating so much appeal to the competitors. This ultimately creates greater demand for captive bred falcons from numerous breeders from around the world. My observations have shown that the European breeders have the stronghold on that market. Some of the best falcon breeders have in turn been bought out by competitive participants or at the very least entered contractual agreements sell all birds to one buyer and strictly not to supply anyone else.

Camaraderie and Teamanship

For all the competitiveness that goes on it is striking how respectful and outwardly supportive falconers are of each other at the races and the camaraderie demonstrated was unexpected to me. Some of the top participants like Khalifa Mujren and his brothers along with Mustafa Buhmeid to name a few are true gentlemen. I would recommend anyone visiting the UAE during the months of December to March to take in the falcon races at least once ...or better still bring your falcon and try your chances at competing!

Dave and the Bog

Until I moved to the State of Massachusetts, my idea of a bog was an area of wetland, sometimes under water, or a swamp. Swamps are mostly shallow stagnate water replete with aquatic obligate vegetation such as cattails, rushes and sedges. By Bill Johnston Bogs here are where cranberries are grown. They can be several acres, or many. But, all are constructed in much the same way. A stream running down the center is diverted into ditches radiating out and around the bog. These ditches and the main channel almost always contain water. Dams and berms control the bog water level. Thus the cranberries, which are grown on the higher ground within the bog can be submerged, or left high and dry. Cranberries are grown and do best in poor soil composed primarily of sand with some organic material and clay. They are harvested by flooding the bog and floating the berries to the surface. Bogs can also be flooded to help control insect pests and weeds. Since the structure is primarily sand, constant maintenance is required. Anything that threatens the integrity of the berms and ditches such as muskrats and ducks must be controlled. Particularly good news for falconers as they are generally welcome to hunt the puddle ducks that dabble in the ditches and weaken the berms. On Cape Cod, where we hunt, most of the bogs are in close proximity to populated areas with homes, business and people walking their dogs around the bogs themselves. Thus they are not suitable for gun hunting, more good news for falconers.

I have hunted ducks with longwings on inland streams and ponds, coastal salt marshes along with prairie potholes and stock tanks.

Although not always the easiest, cranberry bogs offer some advantages. There is no tide to contend with, as is the case in the salt marsh. Inland waters freeze in January and are often intersected by large ponds and woodlands. Small ponds and prairie potholes are good if there are ducks. Sounds redundant, but the area in Nebraska where I have a seasonal home does not always have non-pumped surface water when the northern ducks migrate through. Dry ponds means the ducks just keep on going. Also, once the ponds freeze, it's the same scenario, the

ducks keep on going. I have seen hundreds of ducks on small water one day, and then none the following after a nighttime freeze. Although with warm days the water





may thaw, I have yet to see the ducks return. I suppose that once on the wing they continue their journey south.

Despite many years as a falconer and a Massachusetts resident for the last 30, I had only rarely flown the bogs. The 100mile drive, lack of property owner contacts and primary focus on hunting prairie chickens in Nebraska meant that the bogs were largely ignored. Ironically, I did venture to areas in the near vicinity to hunt the salt marshes.

Due to a family health issue and a precipitous decline in grouse numbers, last year and this found me staying home. What to do with the falcons? Fortunately my friend Dave Peltier supplied the answer. One of five boys, Dave grew up exploring the woods near his home and observing the wildlife and their habits. It wasn't long before he acquired a .22 caliber rifle and began participating in the natural world of predator and prey. Primarily rabbits and squirrels, he also trapped furbearers. Somewhere along the way, he took up taxidermy, became good at it and made it his profession.

As with most US falconers, Dave started out flying Red Tailed Hawks. He was also a breeder of Beagle Hounds, so rabbit hawking was the most obvious choice of quarry. He still flies red tails at bunnies and squirrels, but his real passion, one that he excels at is flying his two North American Goshawks.

Massachusetts is not renowned as the falconry capital of the country. Locating quarry and suitable places to hunt are often difficult. That being said, Dave lives in or near some of the best hawking venues in the state. Not sure when Dave began to hunt the bogs, but I suspect that it was early in his falconry career. He also put significant time into the salt marsh, but as the time and tide were always a consideration, the bogs became a more important component of his hawking routine. Flying the bogs with a goshawk requires a different strategy than with a longwing. Whereas stealth is essential with the former, once the falcon is in the air, over the intended target, it's not as critical. Dave is a practiced eye when spotting ducks lurking in the trenches. I suppose that he owns binoculars, however, I have yet to see him use them.

We drive around the edges of the bog and where access allows across as well, looking for ducks. When they are spotted, if the location is hawkable, Dave backs his truck out of sight, parks and

retrieves his bird from a giant hood in back. Then in a slow steady crouch, with goshawk straining on tiptoes to see, he sneaks as close as he can to the unsuspecting quarry. If he can get within 30-35 feet before being spotted, the gos has a good chance of catching one. Once they flush the goshawk is off of the fist in a flash. As much as I try, I have never seen a lapse in time between the flush and the launch. They seem to occur



simultaneously. In typical accipiter fashion the gos rapidly closes on its intended target, comes up and under, turns over and binds to the duck. Dave is on his way before the pair fall to earth. As is often the case, the duck will try to pull the goshawk into the water, if it can. That's when Dave has to come to the rescue because his birds don't let go. It could very well mean a drowned goshawk, or more often a wet and cold bird and falconer. The whole flight, albeit short is very dramatic. Dave enjoys a high success ratio, but as is the case with most falconry the unexpected often happens and the flight ends with the ducks clearing off and heading for the horizon. Dave is good at his

craft. He starts hunting as soon as the season allows, generally by mid October. He continues on, rain or shine, or in his case, his favorite snow, until the end of February. Five days a week, often six. While active in the IAF, I had the good fortune to travel to many AGMs in a number of countries. In all I was always impressed not only with the hospitality of our hosts, but also with the high quality of the falconry that I saw. Particularly with goshawks in Europe and the UK. Until I met Dave, or more specifically saw him with his goshawks, I thought that the expertise in goshawk management was an UK/European phenomenon alone. Dave's birds are immune to almost any distraction in the field and quite use to being handled, feet, breast, keel, crop and back. In order to achieve multiple kills, they also readily transfer for a quail leg.

My female Canadian anatum whacked a black duck over the main channel of the salt marsh. Although she had a good pitch, the duck, one of several hundred in a mixed flock that got up, was too near the edge and so both slid down the steep mud bank into the frigid January water. The field rushed to assist, but too late, she was forced to let go and swim to shore. As she was on the opposite side we were forced to wait until she came to us. A good gorge on the lure and fist and she was retired for the day. Several days later and for the better part of a week, she would hit and release, or blink at the last moment before impact. A reaction, I suspect from her unfortunate earlier experience.

My six times intermewed female gyr x saker needed a kill. The season would be closed in a couple of days and she had been repeatedly cheated by bog mallards that refused to flush over land, or blasted away when she was out of position.



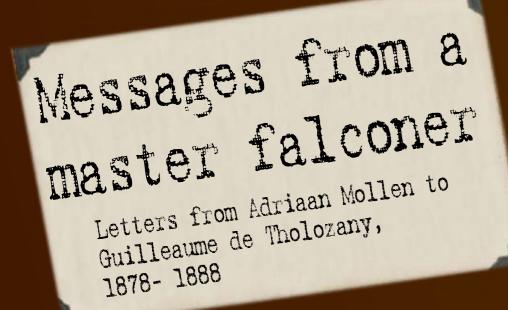
Frustrated by ducks that bailed in or ratted out, the falcon and the falconer desperately craved success.

We found a small group of mallards feeding in a narrow ditch on the perimeter of the bog. Dave and Joe went around to the other end, while the rest of the field staved with me. I planned to push the ducks out over the bog from our side while Dave and Joe rushed them from their end, a pincer movement. The nearest open water was the main channel, some 500 feet out over the cranberries. The hybrid was cast off and came overhead at a utilitarian pitch. We rushed the ducks and executed a reluctant flush. True to form, the ducks did not panic. Instead, they did the predictable; they made for the safety of the open water of the main channel. The falcon made her move and rocketed down just as the ducks cleared the edge of the ditch and made for bigger water. These were mallards accustomed to people and never taking leave of their composure. Instead of a slashing blow from above, the big hybrid came down vertically then leveled off directly behind the fleeing ducks. She had the momentum; they had the advantage of sanctuary mere feet ahead. I'm not sure where in the flock the drake that she chose was, but just as in baseball they both slid the last yard together, into the drink. This time, however, the falcon was safe and the duck was out! She, unlike the peregrine, did not let go. Unfortunately these old legs wouldn't get me over the first ditch and across the cranberries in time to fetch them out. Fortunately, Joe, Dave's apprentice, with much younger legs and fleet of foot made a heroic jump over the ditch and sprint across the berry patch to execute a save. By the time I drove around the bog to reach the site, all was well in hand. I thanked Joe and sat back to watch a very

contented falcon, white breast flecked in crimson enjoy her well-earned meal.

Although I lament the mallards as not playing fair, not leaving the water straight away, providing the falcon and spectators with high drama, I respect their resourcefulness. Never losing their nerve, with a strong will to survive, they often escape or the flight turns into a rat hunt. My admiration for them is undiminished, as a species they have turned man's activities, altered habitat and disruption into an advantage, expanding their population while other species suffer diminished numbers.

I am grateful to Dave Peltier for inviting me to share in his favorite hawking spots. He has provided me with endless hours of good falconry and good company. As the season winds down for another year and the waterfowl begin their trek north, or start pairing up, I have time to reflect on what a magnificent avocation we are all so privileged to enjoy.



By Patrick Paillat and Dick ten Bosch

Introduction

Adriaan Mollen (1816-1895)

It is a well known fact that for centuries falconers from Valkenswaard in Brabant and from neighbouring Arendonk in the Kempen moved out to be employed at royal courts and noble estates all over Europe. Adriaan Mollen was one of the very last in that ancient tradition. Although his son Karel would continue the family business, we can safely conclude that in the Netherlands professional falconry in the employment of an international wealthy upper class, ended with Adriaan Mollen.

Born in Valkenswaard, he began his career in falconry at a young age when as a 14 year old boy he went with Jan Bots to France to the falconry establishment of the Baron d'Offemont. Jan Bots was a master falconer belonging to a family that had produced falconers for generations. A

few years later in 1833 Adriaan accompanied his master to England where at the request of Lord Berners, they entered the service of the Falconry Club. When, upon the death of Lord Berners, the club was dissolved, Adriaan had firmly established his reputation among some of its more prominent members like the Duke of Leeds, Stuart-Wortley and Clough Newcome. This would serve him well later.

In 1838 Jan Bots and Adriaan Mollen went their separate ways. Adriaan travelled to Austria to enter the service as falconer of Prince Trautmansdorff in Oberwaldsdorff near Vienna. However, around that time the Royal Loo Hawking Club was founded in the Netherlands where Jan Bots needed help and he had a preference for Adriaan, his former assistant. Frans van den Heuvel, the former falconer of the King of France, and a person of authority in the sport, wrote to Mollen from the Netherlands on July 10, 1840, as follows:

Dear Sir and friend,

The senior falconer at court, Tindal from the Hague, has in the presence of Messrs. Newcome, d'Offemont and Stuart-Wortley, instructed me to inform you that they would like to have you as falconer and that, not only for one or two years, but for your entire life, they want to provide you with a good existence. You should inform your current master, the Prince Trautmannsdorff, because Tindal and the other gentlemen do not want anything which is not in full agreement with the wishes and the pleasure of the Prince. You do understand me, they do not want to displease the Prince in any way. In case the Prince would be against releasing you from his service, you must ask him on behalf of the gentlemen if he would not find pleasure to come to Het Loo for the next season with his falconer to fly at heron for him and the others. This season we caught 113 herons at Het Loo and the birds did well. We lost one gyr. The gyr falcon caught several herons but started to moult early. I request you to answer this letter quickly. I have to send your answer to Tindal... Please make sure to keep all this secret for Peels and the whole of Valkenswaard as I would not like to be known as the author of this...Please write an answer soonest. I remain, your dedicated friend,

Francis van den Heuvel

Above: Adriaan Mollen and left, Adriaan's passport with the many stamps of his travels

G.A. Baron Tindal (1805-1880) was one of the king's adjutants at court. Peels is probably the professional falconer Jan Peels senior, in England better known as John Pells, who would become one of four assistant falconers serving under Jan Bots and Adriaan Mollen, the two head falconers at Het Loo.

Adriaan's request to be released from employment was granted and consequently, only 25 years old, next to Jan Bots his former mentor, he became head falconer of the Royal Loo Hawking Club at an annual salary of 800 guilders.

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Adriaan Mollen and other professional falconers played a crucial role during the meetings of the club at Het Loo. Thanks to them the high flight at heron was performed with a perfection that

could not be repeated in later years. In fact this type of falconry, which had existed also at the royal court of France and the imperial court in Vienna in previous centuries, would disappear forever. In 1855, after fifteen glorious years, it was all over and the era of the Royal Loo Falconry Club, the last appearance of courtly falconry in Europe, had come to an end. The promises made to Adriaan at his recruitment were not forgotten and he was granted a pension of 400 guilders annually.

Being a free man again, Adriaan filled his remaining days with trapping falcons for the English clubs and for an international wealthy clientele. In addition, he provided falconry supplies like hoods, bells, jesses etc. and lots of advice. His son Karel would take over the business which with time would shrink to insignificance as, because of world wars, social changes and taxation, Europe's elite gradually lost most of their properties in the country side and abandoned falconry. Father and son Mollen were also bee-keepers and repairers of watches and clocks.

Guillaume de Tholozany de la Sesquiere, 1856 -1902

Guillaume de Tholozany belonged to an aristocratic family from the Languedoc where the family possessed several estates in the Tarn area: in Rabastens, Le Verdier and Larroque to name some locations. The family name Tholozany is a reference to the city of Toulouse as place of origin where Tholozany's found employment as *capitouls* (municipal officers) and *parlementaires* (judges in the court of justice) and in other legal professions. The majority of the letters to Guillaume de Tholozany, are addressed to *Chateau de Larroque, Tarn and Garonne*. In combination with the additional instruction for the French postal services: *par Puycelai* or alternatively *par Bruniquel*, the nearby village of Larroque must have been the destination.

In Larroque de Tholozany family owned a hunting lodge, nowadays called the Chateau de la Vere, dating from the 18th century.. The village and the lodge, where Guillaume would have resided, are situated at the foot of large rock outcrop near a stream and are surrounded by large trees. De Tholozany must have flown his birds on the surrounding fields. From the first letters it is obvious that he took up falconry recently and was still rather uninformed about the sport. He did not



employ a falconer and probably relied on friends and suppliers collapsed and vines were growing inside the house. Family for advice

A person living in the vicinity with whom he was in contacted regarding hunting and falconry, was Count Alphonse de Toulouse-Lautrec, a well known falconer, horseman and hunter and father of the painter. We have obtained two letters written by the count to Guillaume de Tholozany (Mon cher Tholozany...) about falconry and hunting and includes some advice as well. He returns a hood for a hobby and mentions flying his goshawk near Montauban. He advises de Tholozany not to spend too much time on hobbies but, provided they are not too expensive, 10 francs would be reasonable, to order some merlins from Mollen. Also Lord Lilford in England is mentioned with whom the count is in contact. He also informs young de Tholozany having invited a Mr. de la Rue to come with his cormorants before the cold weather has arrived. Fishing with cormorants must have been one of the many hunting activities of the count. Mr. de la Rue, Inspecteur des Forêts, was also a client of the Mollens and therefore must also have been a falconer as well.

I visited Larroque in April 2014 and spoke with the current owner of the lodge who mentioned plans to convert the lodge in a chambres d'hotes, a small hotel. When he bought the property, he remembers having found a falconry room in the house which he dismantled. The objects from the room, initially stored in carton boxes, were later discarded. Three sisters de Tholozany, daughters of maitre de Tholozany, a notary, continued living in the big house until the year 2000 when the last of them died. The proprietaire mentioned that at that time the lodge was in a very bad state of repair. When the last male Tholozany had died, his daughters out of reverence decided not to use his room anymore and to leave it intact. When many decades later the new owner had taken over the property, the roof of the room had partly

correspondence of many centuries stored in the attic, badly affected by humidity, was burned in the garden. Sad stories abound in all directions it seems. I also paid a brief visit to the Rabastens branch of the Tholozany family where the family continues to occupy a mansion in the old town center situated right opposite the cathedral. Madame Patricia de Tholozany remembers her relative from Larroque and also his interest in falconry. She was surprised to hear that some old letters had emerged. As one of the very last of her line, she offered to answer any queries. Hopefully she will be able to provide us with a portrait of Guillaume.

The correspondence

Almost ten years lay between the first letter of August 20, 1878, and the final one of 10 February, 1888. Adriaan Mollen wrote thirty one letters to Guillaume de Tholozany and we can safely presume that an even larger number, of which no traces remain, was written by de Tholozany. Adriaan Mollen was in his final years, busy serving his international falconry customers with birds and supplies. Guillaume the Tolozany was 22 years old when he wrote his first letter. At that time, probably when staying in Larroque, he must have taken up falconry. Although most of the letters went to this address, some were received in Toulouse and Castres, evidence that he was not in Larroque all the time. We do not know if the letters, all in the French language, were composed by Mollen personally and whether the perfect handwriting is his own. The use of the French language, although not perfect, is always clearly understandable and business-like. Thorough attention is paid to financial issues. Delayed payments for deliveries are not accepted and even when a few francs are missing these are pursued relentlessly until payment in full is a fact.

Letters and excerpts thereof from Adriaan Mollen to Guillaume de Tholozany

Valkenswaard, August 20, 1878: Monsieur Guillaume de Tholozany, Castres

Monsieur.

I received your letter by which you inquired about the price of various falcons. As an answer to this letter I have the bonor to write you as follows: for several years I have been trapping falcons for certain English gentlemen. As soon as I have caught the agreed number, a falconer of one of these gentlemen comes over to collect them. I have never sent trained falcons for transport unaccompanied. The price is not always the same and depends on the circumstances: the quality of the falcons, the time it took me to trap them etc. In case you wish me to trap falcons for you, please let me know the desired number. In the meantime I want to advise you not to wait too long with answering me as every year I receive orders which I cannot fulfill as they were received too late. The hoods for a female goshawk and the Dutch bells which were ordered by the Count de Toulouse, I will send to him in a few days time. I will write to the count when I send them and also how I want to be paid.

Believing to have satisfied your inquiries, with respect, Monsieur de Tholozany, your dedicated servant, A. Mollen

It is clear from Mollen's letters that money matters are handled with great care and that his British clientele are very important for him and receive preferential treatment.

Monsieur de Tholozany au Chateau de Larroque par Puycelcy

Monsieur.

Vallensweard, 10 Feb. 1000.

Monnier,

de

contact are

I received your letter of 5 October. In answer to your letter, I have the honor to write you as follows: For 15 days we have been fully occupied with trapping falcons. Until now we have been very lucky and we already have eight magnificent falcons. All the falcons are for the English clubs. The trapping will last another four or five weeks and as you will understand, I have so much to do with trapping falcons and taking care of them, that is it impossible for me to fulfill your order. If you would have the kindness to wait until the falcons have been shipped to England, I will send you what you have ordered, with the exception of the bells for the hobbies. The bells will either be so small that they will not sound very much, or they will be so big that they will be too heavy for these small falcons.

As soon as I send my shipment to you, I will provide you with a specification of your order. I will send the shipment to the address which you have given me. Kindly send me a postal payment order /a s.c. Mandat de Poste. DtB/ at the post office in Eindhoven (Holland). By sending me the money like this I can assure you that it will reach me. Please be so kind to write to me if I can wait five or six weeks before fulfilling your order.

With respect, Monsieur de Tholozany,

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your dedicated servant

reports the following:

you with falconer gloves.

A. Mollen (signature)

In his letter of 23 November 1878 Mollen ships four hoods, four swivels and four bells to his French client and the bill for this equipment amounts to 22 francs and 10 centimes. About the annual trapping of falcons Mollen

This year's trapping of falcons is finished. We have caught twenty falcons and two magnificent goshawks. These hunting birds which were for the English clubs, have already been shipped to England.

On 11 January 1879 Mollen writes de Tholozany as follows:

Today, 11 January I have send by post a small packet to your address. This package contains: two hoods for sparrow hawks, two hoods for goshawks. The total amounts to the sum of 10 francs. I regret that it is impossible to provide

On May 4, 1880 Mollen sends de Tholozany two types of hoods for tiercel peregrines. Also bells are shipped. The bill amounts to 16 francs and 20 centimes, 3 francs postage included. Apparently de Tholozany has send a request for young merlins because Mollen writes to him:

There are no young merlins here because these birds don't build their nests in our regions. When the English order merlins from us, we trap them in autumn at the same time as the falcons. In case you would like to have some of those birds please write us how many, but please write as quickly as possible

In most cases when Mollen mentions falcons or tiercels in his letters without any further specifications, respectively female and male peregrines are meant.

On June 18, 1880 Mollen ships to de Tholozany hoods for a falcon, for a tiercel and for a goshawk at a total cost of 5 francs 10 centimes, including 1.50 francs postage. Again Mollen, worried about monies owed to him, adds detailed payment and shipping instructions

Despite his earlier statement that merlins and falcons could only be delivered in autumn, in November, Mollen has the following good news to report on July 3, 1880:

Although the time for trapping falcons, which is in November, has not vet come. I was able to take for you a merlin and a tiercel falcon, both from this year. Today I made some inquiries with the station master here and it is possible that a [the letter could not be decifered here. DtB7 of great speed could arrive at the station of Bruniquel in Tarn and Garonne, in three days, to which I received a positive answer. When the falcons are well fed when shipped, they could well endure a travel of three days. I can assure you that the falcons will arrive in good condition at the station indicated. In that case I ignore possible obstacles at the customs in Jemont (France). In the mean time you could make some inquiries there and leave a clear instruction to let the falcons pass immediately. We will advise you some days in advance of the exact time when the birds were shipped, in order for you to be ready to receive them as soon as they arrive at the station of destination. The price of the falcon tiercel is 75 francs, and 25 francs for the merlin. I hope with this letter to have satisfied your demands.

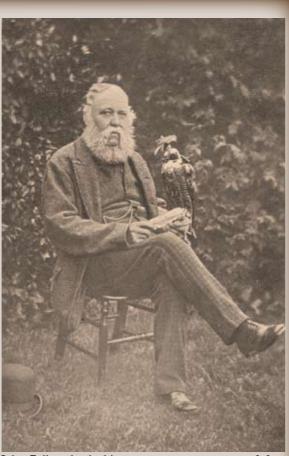
Taking the liberty to recommend myself to your favor, I have the honor to be, Monsieur, your dedicated servant A. Mollen

On November 9, 1880, Mollen again writes to de Tholozany about a tiercel falcon and a merlin. It is unlikely that these are the same birds as those mentioned in his letter of five months earlier, in June, although nothing is certain:

I have the honor to answer you as follows: The falcon tiercel is already tame, and jumps on the hand and has made so much progress that he can be trained with a pigeon in the room (Perhaps the so called 'falcon room' is meant here which existed in Mollen's house and where he kept the falcons before they could be delivered to his clients] with which we started recently. In any case both the tiercel and the merlin are trained and can be expedited. Regarding transport, a good opportunity



Het Loo Palace where meetings of the Royal Loo Hawking Club took place



John Pells, who in his younger years was one of four assistant falconers to Adriaan Mollen

has presented itself: a few days ago I received a letter from a certain Mr. Paul Gervais from Rosoy en Multien (Oise) who wrote to me that he has the intention to come to Valkenswaard around mid November, accompanied by his falconer. He intends to stay some eight days. If you would write to Mr. Gervais, would he not be so kind to instruct his falconer to take charge of the tiercel and the merlin and, once arrived in Rosnoy, to send them to your address by railroad. I don't think that he would refuse you this. Without any doubt this kind of transport is preferable to any other as in this way the distance is shorter and the birds will be better supervised, better taken care of and better fed.

Paul Gervais, mentioned in the above letter, was a well known falconer in France at the time, who had a falconry establishment in Rosov en Multien (Oise). With his golden eagle, Auguste, Gervais reportedly took foxes.

Finally, on November 25, 1880, the two birds could be sent by train. From his letter it is obvious that Mollen was relieved. Furthermore, while the tiercel was waiting to be transported, it had been trained to some degree. This might explain that the price was increased to 87 francs while the price of the merlin, which as we know will tame almost without any efforts, remained the same.

nine in the morning and the station master has told me that the birds will arrive at Bruniquel, Friday evening the latest. As you have written to me, the birds will be sent under good conditions. However in case some mishap occurs during the voyage, which we hope it will not, it will have to be for your account. I hope that you do not misunderstand this message in a negative sense. The tiercel is taking pigeons at five meters distance while the merlin jumps on the hand from a distance of a meter. We are convinced that you will be satisfied with them. The price of the tiercel is 87 francs and of the merlin 25 francs.

Although the birds finally arrived in good order, the financial side of the transaction, despite all the detailed instructions provided, was not. As Mollen wrote to his French client in December 1880, the amount received was three guilders short and the mandate was not signed by the director of the Post Office ! The blame for these mishaps was immediately placed with the employees of the post office. In any case the money order, the so called Mandat au Bureau de Poste, was returned We received the amount of your mandate which is only 50 guilders as unacceptable.

Mollen writes to his client again on 23 December 1880. Some practical instructions are provided with regard to the tiercel which are so basic that the conclusion seems justified that de Tholozany must have taken up the sport an excellent work. recently. The money matters are still not in order. The book by Schlegel, which is mentioned in the final sentence A. Mollen must be the Traite de Fauconnerie, which was published in the

Partementer, le 4 Janois 1865. Monfin 9. de Thalayand Monfair de ma con

The train containing the shipment leaves Valkenswaard at Netherlands some 30 years earlier. Mollen must have known this book well as he is even depicted in some of the illustrations, in particular in the hunting scenes on the fields of Hoog Soeren, near het Loo .:

Valkenswaard, 23 December '80 Monsieur G. de Tholozany, Chateau Larroque

Monsieur,

I received your letter of December 14. While it pleases me to hear that the merlin is good, it annoys me greatly to hear that you have some problems with hooding the tiercel. It is not possible to give you the necessary advice in this respect while the training through exercising has not been completed. The only advice which I can give you is the following: start carrying the tiercel on the fist without a hood, first indoors and afterwards outside and feed him from time to time little pieces of meat by hand; in this way he will gradually become so at ease that you will be able to place a hood on him without much effort.

33 cents in stead of 53 guilders. I cannot understand how that is possible. We are sending you by mail two bells for merlins, which cost 2.40 guilders, thus at a modest price. With regard to the book by Schlegel which I know well, I can assure you that it is

I have the honor to be your dedicated servant

Again in his letter of January 29, 1881, written to de Tholozany, money matters play an important part. A small shipment of falconry equipment needs to be paid and the deficit of the mandat of the previous year, three whole guilders, still remains unpaid. However, also this time some practical falconry instructions are added for the inexperienced de Tholozany. Some irritation is apparent:

You asked me how the hood should be held in the hand when placing it. I cannot provide you with this information as it does not lend itself to be described. Only by imitating somebody else,



can one become educated on this point.

Letter of 12 May 1881. After the usual financial issues have been dealt with, Mollen provides again advice to his French client, somewhat reluctantly in rather short sentences :

Regarding your questions, I have the honor to write you as follows. It is very well possible to train falcons for hunting mappies and partridges. Also with goshawks I have often taken partridge. At night the falcons should be without hoods in order to allow them to throw up the pellet, as you have well observed. In order to train a falcon for hunting one must make it fly and thereafter get it accustomed to the hood. Once that is done, one must train it to fly for catching prey and following that they are immediately capable of hunting. Trained falcons can from time to time be placed on blocks in the open air, but always without hoods. When going hunting a travelling hood should be placed.

On June the 15th, 1881, contact is made again. Receipt of payments is confirmed in the usual sentences. Again some advice is given in answer to the continuing questions from his French client. Surprisingly hack flying is mentioned by Mollen, which therefore as a technique of training captive bred falcons, must have been been used much earlier than the 20th century:

As to the questions asked by you, I have the honor to write you as follows. It is absolutely necessary that the falcons can fly outside until they are capable of catching their own food. This is what the English falconers call "flying at hack". Thereafter, the birds are made to the hood, after which the training begins where you can place the bird on a perch or on a block, with or without a hood, as you wish as it is all the same. You will no doubt understand that experienced falcons are un-hooded more often and longer than other falcons, but it is not advisable to take them out hunting without a hood

Valkenswaard, 12 Nbre 1881

Monsieur G. de Tholozany, Chateau de Larroque

Monsieur.

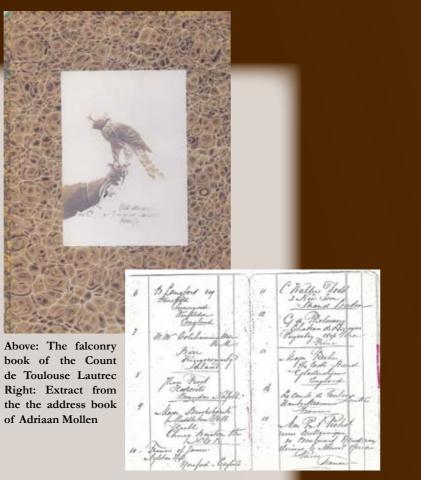
I received your letter of November 7. I have the honor to answer you that we have not been able to catch a single merlin. The hunt has not been good. We have only been able to trap fifteen falcons. The season for trapping is now closed.

The total of my accounts for the jesses etc. is 13 francs. Kindly send us this sum by means of a Mandat de Poste.

Please accept, Monsieur, the expression of my feelings of esteem Your dedicated Servant

A. Mollen

With his letter of April 8, 1882, Mollen answers in short precise sentences some more questions from his French client:



1. Generally brancher goshawks are preferred over passagers *[i.e.* hagards. DtB] because these are easier to tame than the latter category.

2. For the hunt on partridge both goshawks and tiercels may be used, however tiercels are preferable.

3. With regard to feeding, one has to start with giving the birds food which is alive. However later it is no longer necessary as the birds are only fed pigeons.

I advise you to make sure that the birds are comfortable on the fist. It is for that reason that a bird looking for place to sit will return to the hunter.

In a letter of November 9, the French falconer Mr. Gervais is mentioned again:

I have just received your letter. However, for several days Mr. Gervais has no longer been in Valkenswaard. This is not important as I can help you anyway. The merlins will be shipped on the 13th at nine in the morning and I will address them to you at the railway station of Bruniquel, Tarn-et-Garonne. You will also find in the basket the jesses as requested by you. As to the bells, the merlins will have those attached to their feet. You asked my advice whether merlins should be hooded. This is not at all necessary. They can very well be introduced to come to the fist.

The invoice of the above shipment follows on December 4,

t	Two merlins	Francs 60
ı	Various (postage, jesses etc. etc.	Francs 13
	Total	Francs 73

Valkenswaard, December 28, 1882

I have just received your mandate [payment DtB] and I am happy to learn that the two merlins which I have send to you, are well. The only thing you have to do to prevent that the merlins start carrying is to obtain a little dead bird which you attach a sufficiently long thread. When one of your merlins will have taken Please accept dear Sir, the assurance of my highest esteem. prey you slowly approach it until a few feet distance and throw the Your dedicated servant, dead bird at it. Thereafter you circle around the merlin in a way that when you pull the thread, the bird, which is busy... [several sentences text are missing here DtB]... to take his feet from this second prey and in this way you will reach a good result.

Valkenswaard, February 4, 1883

I am pleased to hear that the merlins are still in good health. As regards to your question it is difficult to answer. To do this correctly it will be necessary for me to see the birds personally in order to form an opinion about their character but as this is not possible I will tell you two things:

1. As you have observed your merlins take only a few birds as most escape. It is necessary that the merlins are in a good condition. When they are too lean, they change their hunting nature. Little birds are the best food for merlins. Feed them daily with little birds and you will see that they will soon become ambitious again.

2. You have to let your merlins fly each day. From time to time you can take a little bird (e.g. a lark) attached to a thread. The merlins must always be hungry and you can let them take this lark.

By continuing in this way for some time I can assure you that the merlins will fly with good results.

On May 1, 1883, Mollen advises de Tholozany having shipped the falconry equipment as ordered for a total amount of francs 20,70. He ads the following:

If you want to trap some old falcons you could find a method for that in Schlegel's book. [i.e. The Traite de Fauconnerie. DtB] I believe that you have this book.

Two years later, on October 7, 1885, Mollen advised: We have the honor to write you that we have taken a female merlin. We have started catching hunting birds. We will send you the merlin in the beginning of the month of November.

Later that month, on October 29, 1885, Mollen sends the following letter:

Monsieur G. de Tholozany, Chateau de Larroque

Monsieur.

In reply to your letter, I have the honor to write you that the Acknowledgments: weather is very bad for taking merlins. We have a strong wind Many thanks to Jacques van Gerven for his contributions and much rain and therefore these birds now do not fly in these and assistance 🐨 areas.

We should have taken several merlins, but at this moment we do not even have a single one. That is why we advise you to take a falcon or a tiercel. We will send you this bird in the month of November. We will write to you when we send the falcon to your address.

A.Mollen

On December 1, 1885 Mollen advises that a tiercel can be delivered. However the bird was caught so late in the season that it has not been made to the hood. A week later, on December 8, 1885 de Tholozany is informed that the bird will be sent at the end of the month. Two weeks after that, on the 21st, he is told that the bird will be send by rail road and that it will arrive in Toulouse on the 28th or 29th of December. The price is 80 francs and the bird has been trained to jump to the fist. We will try to get it trained sufficiently so that pigeon can be fed. However the story does not end here as things are not in order with the tiercel. On January 4, 1886, Mollen writes:

It makes me angry that your falcon has not arrived in the same good condition as the first one. We have send it the same way. As to a way to repair the feathers you should put them in boiling water and thereafter they will no longer be bent. Additionally, you will receive some imping needles.

I hope that you will have a lot of pleasure with your bird.

In August 1886 Mollen sends de Tholozany the order of that year: 4 Indian bells, 4 swivels, 4 leashes and 4 pairs of jesses. All in all for 19.90 francs

The final letter written to de Tholozany dates from 10 February 1888. The tiercel has lice and also is no longer sufficiently aggressive to take prey. Mollen advises:

Monsieur.

The illness of your bird surprises me. I have never found it in my birds. Feathers are often broken when birds have a lot of vermin thus it is necessary that it is exterminated. The cause of this disorder could be fighting with wild falcons. The moult will resolve the problem. It also seems to me that he does not want to put up a fight anymore. He has been fed too long and has thereby forgotten the effort it takes to catch a preyI send you my thanks for the mandate.

I have the honor to be your dedicated servant A. Mollen

From the Tsarist Era Through the Modern Day

By Dmitry Vinogradov

Noble birds of prey, such as falcons and goshawks, have been living and hunting with humans for centuries. In Russia, falconry gained prominence as a sport during the reign of Tsar Alexei Mikhailovich, the father of Peter the Great. These days, falcons and other raptors have more important roles to play, including scaring crows away from jet engines at airports.



Handing gyrfalcons to the Moscow Kremlin Governor for service

In the Kolomenskove estate museum on the outskirts of Moscow, visitors can find out about the history of falconry and its present day usage.

Keeping falcons fit

Vladimir Skripkin release their birds to fly every day: Regular exercise is crucial to a raptor's fitness, to prevent it from losing its flying skills and its muscles from deteriorating. With the Kolomenskoye's raptors have their hunting instincts hood and jess straps removed, longwings are free to take off.

"It's springtime now, and with its hormones raging, a bird might fly away," Fyodorov says. The Kolomenskoye Park's falcons rarely leave for good. But they occasionally end up on the other side of the river or in a residential neighborhood close by, and the falconers have to track them and bring them Kolomenskoye's expert falconers Viktor Fyodorov and back home. "Every bird has its own personality, just like a person or a dog," Fyodorov says. "One bird may be very calm, while another is temperamental and moody."

suppressed. But nature manifests itself every now and then,



Kolomenskoye falconers Vladimir Skripkin, left, and Viktor Fyodorov

and it has been known for them to target a duck from a local Skripkin, 38, is a neophyte, by contrast. He used to work as pond, or even a cat from a nearby residential block.

falcons. Their trainers are always at odds with dog owners walking their pets here. Falcons are afraid of dogs, and this fear may sometimes prevent them from returning home after the birds.

Fyodorov is watching one of his falcons soaring in the sky. It Lada had a bizarre experience recently. A robin she was chasing beak open. Time to call it back. The falconer reaches for his bag and takes out mouse flesh – a well-deserved meal for the "The falcon's visibility range is two kilometers," he explains. properly until it has cleaned the droppings off. "And the raptor knows that this has some food attached to it." Some birds descend immediately. Others take their time, Sharp talons pretending for a while not to see, but then do a sudden dive- Falconry is a beautiful and complex process, Fyodorov tells bomb to land right on the bait.

prevent weight loss in the bird. But neither should a bird be hungry enough to return home.

Surviving a "biological weapon" attack

In Kolomenskoye, visitors can get some idea of what falconry must have been like back in the tsarist era. A former royal estate, it was one of the main sites where Russian tsars



The lure

practiced falconry.

The local raptor sanctuary is home to 11 tame birds, including saker falcons, several varieties of goshawks, and an eagle owl. Fyodorov and Skripkin are the two falconers in charge.

Fyodorov, 50, an engineer by training, is a well-seasoned trainer; birds have been his passion from an early age. "I often climbed trees and could stay up there for days just to take a picture [of a bird] or to record [its] voice," he recalls. "I'd even go to the toilet in a jar so as not to have to climb down." These days, Fyodorov is often invited as an expert to international exhibitions and to hunting sessions in Europe and the United Arab Emirates.

an engineer, but one year ago, while walking on the street, he Living in a park environment is not a bed of roses for the bumped into a friend with a raven and ended up falling in love with the birds. This led to him changing his engineering job for something he loved. His favorite bird is the buteo Lada. Being the smallest variety of goshawks, the buteos are also the an outing But small dogs may themselves become a target for easiest to handle, so startup trainers often try their hand at a buteo before taking on a larger raptor.

has been out long enough. Now it is slowing down, with its deployed its secret weapon, excrement, to get away. Curiously, this kind of "biological" weapon works without fail. And it's not about squeamishness. It is just that enemy excrement acts bird. He fastens the meat onto a lure and tosses it in the air. like glue on the plumage, preventing the raptor from flying

the sanctuary's visitors. Russian tsars habitually went hunting Weighing is another important ritual to perform after the accompanied by a large retinue, complete with hounds and longwing has been out and about. Care should be taken to mounted chasseurs. All the men had a raptor sitting on their shoulder or forearm. Dogs are the first to track down quarry overweight, because a raptor that eats too much may not feel - say, a partridge. But the bird is usually not in a hurry to lift off, and will only take to the air when startled by drumming. A falcon sent in pursuit soars up into the skies and glides, waiting for the right moment to attack.

> "It is a spectacular thing to see," Fyodorov says with enthusiasm.

> On spotting a bird or a hare on the ground, the falcon will swoop down rapidly (the peregrine falcon, for instance, can dive at speeds of up to 80 meters per second) and tears into its prey with its talons. The steep descent and the sharp talons, especially the one on the thumb-like back toe, often leave quarry torn to pieces.

A hunting bird is no hunting dog, though. It will not bring the game to its owner. Nor will it precipitate back home. It will simply fly away from the scene, leaving the game for the hounds to pick up.

After the hunt, tame falcons are usually found by their owners thanks to the small bells attached to the birds' legs. These days, many hunters use tracking devices for that purpose, while in



Church of St. Tryphon

the East, rich falcon owners might use a helicopter to spot their birds from the air.

Patron saint of falconry

The Slavs practiced falconry from their early days. During the reign of Ivan I, also known as Ivan Kalita, the court acquired a special agency to administer all related issues. This fact alone testifies to the seriousness of the prevailing attitude to falconry. Moreover, post-Kalita royal wills would mention the agency in a separate line.

Birds of prey, especially gyrfalcons, were highly prized in Russia. Legend has it that on losing his favorite gyrfalcon during a hunting session, Ivan the Terrible threatened the court falconer Trifon Patrikeyev with execution unless the bird was found within three days. And so Trifon set out to eve. search for the bird. He spent the following three days looking, but to no avail. Resigning himself to his fate, he went to bed and dreamed of his patron saint, who had a gyrfalcon on his shoulder. He handed the bird over to him, saying "Here's your

falcon." The next morning, the falconer found the lost bird on a tree branch nearby. The overjoyed Patrikevev then had a church built in his saint's honour. Constructed more than 500 years ago, this small stone church in northern Moscow is still with us today. In the Soviet era, it housed a children's clinic, and was thus saved from destruction.

In Russian icons, St Tryphon is often represented with a falcon and is particularly revered by hunters.

Indulging in favorite pastimes

In Russia, interest in falconry reached its peak under Alexei Mikhailovich, Peter the Great's father. Tsar Alexei had a collection of 3,000 falcons and hawks. Why so many? First of all, it was a matter of prestige. Secondly, each raptor specialized in a particular type of quarry - birds, hare, etc. According to historical sources, it was Alexei Mikhailovich's teacher, Boris Morozov, who developed the young crown prince's interest in falconry, along with influencing him in many other ways. Alexei Mikhailovich took great pride in his falcon collection and zealously protected it from curious onlookers. In a rare

gesture of honor, he once let a Saxony envoy see several of his birds. In those days, there was little trust of Europeans in Russia, especially for practicing Catholics. So even highranking European envoys were not normally allowed to see the Russian Court's women and birds, for fear of their evil

But the conversation with the Saxon diplomat must have inspired Alexei so much that he ended up showing him some of his most beautiful birds and even allowed him to make a sketch of them.



St. Tryphon the Martyr with a falcon



Vladimir Skripkin and his favorite buteo, Lada

Falcons were seen as an important diplomacy tool at that time. fellow monarchs. It was a precious present to receive.

Persia's Shah Abbas II negotiated with the Russian Crown to allow Russian merchants to sell birds of prey to foreigners. And Tsar Alexei, with his keen interest in various sciences, got personally involved in the compilation of a compendium of falconry regulations.

Ministry that dealt with falconry during Alexei Mikhailovich's reign. The tsar's gyrfalcons - his favorite species - were all dressed with regal sumptuousness. Here is how a contemporary Austrian diplomat described them: "The gyrfalcons wore white hoods made from splendid fabric and had long golden large rubies on its right leg."

Birds of prey for the Russian Court were sourced mainly from the country's north, including Siberia and the Arkhangelsk Province. Their transportation to Moscow was carefully



Viktor Fyodorov with a hawk

regulated. Special felt-lined boxes were provided to cushion The Russian tsar would send falcons East and West, as gifts to the journey. Tax collectors in escort were prescribed to take the utmost care of the birds in their charge, giving them regular meals and preventing the coachmen from riding too fast on bumpy roads.

To feed the tsar's large bird collection, the serfs were obliged to pay what was known as the pigeon tax. Each peasant household would give two pigeons, which would be brought There was a special department within the Secret Services to a loft and then offered as food to the Court's falcons.

> VIP treatment was given to the falconers as well – theirs was seen as a prestigious job, and one not without risk.

Modern-Day Responsibilities

Alexei Mikhailovich's son and successor, Peter I, had other ropes on their left legs. The best one had a golden ring with fish to fry. Too busy warring the Swedes, the Turks and the Persians, he had little time for falconry. The royal falcon collection diminished over time, partly due to natural reasons, namely the birds' relatively short life span. As for the falconers, Peter reasoned that the upkeep of the 300-member staff employed by his father was somewhat of an extravagance, and had them transferred to his "toy" regiments.

> Yet the old craft of falconry lives on in Russia, and is even used by the modern-day Russian state. In the Kremlin, there is a special Federal Guard Service unit that employs falcons, for example. Their responsibilities include scaring off crows and keeping the pigeon population down.

> Falcon units exist at some Russian airports as well, including Moscow's Domodedovo. Goshawks are kept there to scare off smaller birds - so as to prevent them from ending up in a jet turbine or hitting a plane's cockpit window.

Sparrowhank Ireland and the

By Hilary White

It would be disingenuous to say that Ireland fell into a love affair with the sparrowhawk because it appealed to something in our nature. The truth is that the story of the sparrowhawk in Irish falconry is one of having to make do with what was to hand and accidentally becoming quite good at it in the process.

In a 1991 review of Liam Ó Broin's treatise The Sparrowhawk: A Manual for Hawking, Ronald Stevens, an adopted Irish falconry guru by that stage, commented that "in the Ireland of today, sparrowhawks surpass all others in popularity".

Stevens was providing insight into his country of residence. During the late 70s, 80s and much of the 90s, Ireland was a falconry anomaly; a small country forced by various factors into one of the most challenging strands of hunting with hawks.

In an Irish Hawking Club journal of the same year, Michael Comyns reviews Ó Broin's book and phrases it as "a curious situation". "The hawk reputed to be the most difficult to train, keep healthy and to fly with consistent success is the very one with which we are most familiar," he said. However, he goes on to say: "It reflects no mere national chauvinism to say that in all probability, we, the present members of the Irish Hawking Club, are collectively the world's best authority on the use of this species for falconry." He seeks to qualify the opinion by saying that overseas IHC members report that they "do not see spars flown with the same easy confidence

elsewhere, or to such killing effect". We now know that countries such as Turkey have far more established and standardised spar-hawking cultures. But where Western Europe is concerned, there is something to be said for the statement. There are a few reasons why. During the 1970s and 80s, many Irish people lived on a shoestring. Unemployment and emigration were facts of daily life and the country was borrowing up to the hilt. The sparrowhawk was not only a

obtained under licence, it was also an inexpensive form of falconry that didn't necessarily require a car, a dog, ferrets, access to game birds or specialised equipment (many hawked without telemetry for years). Almost wherever a wild spar can be seen to hunt, so too can your own hawking be carried. The little accipiter gained a kind of everyman appeal.

In those days, the land and game for large longwings had been developed only by a handful from the Stevens/Morris school, and even then it proved difficult for them to get a full season on the scant pockets of grouse around the country. Magpies were a worthy quarry for the Irish tiercels but one can be confident the spar men were catching more slip-for-slip. (Ó Broin always said if you sent two men out into the wilderness, one with a peregrine, the other with a spar, the peregrine man would starvel).

Also, a ban on avian imports had been in place under the guise of an agricultural health precaution. Importing a hawk wasn't an option. It was not until the early 1990s that exotics began to appear at fieldmeets. Soon, these were being bred on the island, but the spar would remain a staple for a number of years to come.



plentiful species that could be Irish Hawking Club Spar Meet 1982



Hawking Club's October 1999 newsletter showing images from a recent spar meet

were there'd be someone nearby who also had one going. Birds could be crèche-reared together, bushes could be beaten for one another and lost hawks could have more than one lure being swung for them. Sparhawking is hugely gregarious. Making noise, rustling bushes and alternating slips are all part of the fun. There is none of the hushed choreography of game hawking, nor the tippy-toe murmuring when a ferret is underground. This is gun-slinging falconry at its fastest, loosest and most boisterous.

Thus the 80s and 90s were a golden age of Irish sparhawking. A look back through IHC journals would lead one to believe that spars alone were being hawked with seriously - articles about imprinting spars, hoods and hooding for spars and training. In 1986, Ó Broin wrote an article entitled Safari In Leitrim. It makes for inspiring reading. Setting off with hawks, dogs and tents, a small band of men drove up to the northwest. Over a weekend, they hawked all of each day across the hedgerows, riverbanks and bogs. By nightfall, they sat around the campfire, drinking whisky, playing poker and thinking up mischief to set upon one another. Amid the painterly descriptions, Ó Broin conveys a sense of another era, a band of brothers and their hawks traversing the wilds and bonding over the hunt. It is hard to imagine something as organic with the larger raptor. "We didn't go to hotels and B&Bs," recalls Ó Broin, "because we weren't able to afford it. But also there was that attitude that we wanted to wake up in the morning death-defying plunges into cover or the twists and turns over with the hawk by the end of the sleeping bag."

Journals from the following years see articles on flying spars over decoys, instructions on throwing, training spaniels for sparhawking and reports of other "safari-style" hunts. The



Hilary White

equipment maker Ben Long comments that "most of the Irish Hawking Club seem to be in the lucky position of flying only spars".

With the publication of The Sparrowhawk: A Manual For Hawking in 1992, the expertise was crystallised in print and augmented by Ó Broin's knack for innovation, Another advantage was sociability. If you had a spar, chances draughtsmanship and explanation. It was the first falconry treatise by an Irishman since Bill Rutledge's Falconry For Beginners (a handbook published by the BFC in 1949. Edmund Mahony's Falcons And Foxhounds (1984) had an overview chapter on falconry) and more than made up for the dearth.

> In his report of the Irish Hawking Club's 2001 Spar Meet, Gary Timbrell remarks: "The sparrowhawk is symbolic of Irish falconry and the sparrowhawk field meet has become symbolic of the Irish Hawking Club. After a weekend's hawking such as this it is easy to see why."

> It wasn't to last with the same fervour. In the 2004 journal, Rowland Eustace penned Urban Cowboys, an article that seemed to mark a sea-change. He spoke of his local hunting ground being "chewed up" by the rampant development of Celtic Tiger era. This was a game changer for those of us in the south Dublin area. Where once we were able to have fine sport on quiet weekend mornings in industrial estates or plots of wasteland, there was now concrete.

> As Ireland grew richer, falconers were lured away from spars by "big" hawks, especially Harris hawks but with circumstances as economically fraught as they are at the time of writing, it remains to be seen if we gravitate back to the humble spar.

> Let's hope we do. The training, hunting and keeping of a spar is a challenge every falconer should experience. An afternoon hunting with friends and hawks is singularly satisfying. The open land. The speed, guile and strength on show before your eyes. That special connection with a predator borne of the wild not far from your home. All this is the very DNA of falconry itself. T

News from Mairobi

Words by Simon Thomsett • Photos Adrian Lombard

The terrorist attack in Nairobi has left us all in confusion. None know their objectives, but one thing is certain. There has been a show of national unity that has allowed all of us to feel a sense of patriotism. In the last few months I have had much to do. First I have committed myself to moving to Soysambu Conservancy. At the Little Owl Sanctuary, run by Sarah Higgins I have been busy tending to four free flying hawks and doing multiple operations to save the wing of an eagle owl and the leg of a

sparrowhawk. There are

now some 40 birds and it could grow forcing big changes upon both of us. We had a visitation from Prof' John Cooper and his wife Margaret, both very much involved in raptor work, the former a vet the latter versed in law with respect to raptor care in the UK. It was a testing period as the basic to do with wildlife remains absent. Thus for them to present a series of lectures on raptor rehab (on 3rd July 2013) opens a can of worms that could have devastating consequences unless very cautiously worded. Thankfully although KWS stated the legal difficulties of public participation, at the same time all acknowledged the value we collectively have contributed. It highlighted the inconsistencies prevalent in conservation policy in Kenya where legislation and government resources do not meet the facts on the ground. It brought to light levels of ignorance in the understanding of raptors by our veterinary departments that must be improved. We were repeatedly reminded that raptors were a nuisance (in eating chickens), and were disease vectors (in anthrax...which they are not). It ended on a positive note; the need to know more, and Prof Cooper gave us no excuse as he reminded us all that Kenya was one of the first countries in the world to take on raptor medicine. If only bureaucracy gave us a chance! Not coincidently I fell victim to recurrent exotic disease that may be a Lyme disease type as I fretted and stressed over the outcome of the above. I took the period of enforced "go slow" to recover and focus on treating the hawks and owls at Naivasha. As if to illustrate the point, KWS

As it to illustrate the point, KWS from Nakuru bought in four baby Barn Owls. Unfortunately they had contracted severe enteritis and one by one they died, leaving only one. Usually they are very simple to raise, but one day of sliding around in a box covered in minced meat and a cold damp night may have begun a series of gut infections. Few who do not care for the very sick know the anguish and sense of overbearing responsibility of tending to critically ill patients. I found myself driving to Nairobi, then to Nakuru so as to pop in to help Sarah give them their injections.

A couple of years ago I helped out in doing a documentary in Zambia for Tigress Productions. I was the "expert" vulture man that on occasion was asked a few questions on camera. But my main forte was in dashing about off-screen helping putting in cameras and such. It was something I did as a boy when helping out my father when he did wildlife films. I was asked to help out again for an upcoming documentary on the rains and how it resuscitates a dying eco-system in drought. I shall be off overland in a car next week. That required that I release what I could and this includes a very neat and exceptionally well behaved male Black Sparrowhawk, one of three rescued nestlings whose nest tree was felled. It is often the case that I must release star performers and birds on which I have spent so much time and I confess this time I felt as though I was losing an important asset as well as a companion.

With what I hope to earn I shall plough it all into building a raptor centre at Soysambu. It'll be an extension of Sarah's



Little Owl Sanctuary that focuses on the free flying and release of raptors that were first treated at her centre in Naivasha. Naivasha is now built up with a huge human population making little but the immediate shoreline a suitable place for wildlife. Now that the lake has risen that strip of land has submerged and it is not possible to exercise most of the raptors, which in less than a few seconds can be on adjacent properties.

Both Sarah and I have realised that the birds and our objectives will outlive us (some live longer than elephants and many are much rarer!) and there must be a long term plan. The last decade has seen the absolute minimum of financial support for wildlife conservation. Formerly it was not that impossible to scratch along getting the odd donation or grant, but today that is not the case. Perhaps if we formed a long term plan with a trust and a board we would get surety asked for by some funders. It had to come one day.

The plan is to meet the demand. Sarah has an ideal location and already existent farm buildings that could be turned into huge captive breeding facilities worthy of condors. There are offices and rooms perfectly suited to state of the art veterinary facilities that could revolutionise veterinary care of raptors and the study of their diseases. All it needs is a little imagination and support.For my part I do terribly miss my former bush life and must return. My move to Soysambu took a few stages. First was gaining familiarity with the land through Juliet Barnes and Kat Combes. I was only partly familiar with it previously and very anxious to know more. Birds of prey and especially the migrants tend to gravitate towards the Rift Valley lakes. Soysambu Conservancy fringes ³/₄ of the lake and is alone in the entire Rift (from Israel to Mozambique) in being mostly under private ownership.

The other lakes are either public land, multiple privately owned or protected making it difficult if not impossible to conduct research or conservation management. Here I was free to wander about, climb trees and cliffs and learn. Such accessibility allows flexibility and frees one from the enormously inhibiting, though well meant, restrictions imposed by our national parks and reserves.

As predicted the lake shore is visited every year by overwintering raptors such as Lesser and Greater Spotted Eagles, three species of Harriers, six species of small migrant falcons, two species of large falcons (the Saker and the Russian Peregrine), and virtually all the others. Here too is a curious

cross over point between species found in West and North Africa converge to meet their eastern counterparts.

The Grey Kestrel and the Fox Kestrel as well as the rare Mountain kestrel occur there and in adjacent Lake Nakuru. It is also rich in vultures which are today uncommon in much of Kenya.It remains to be seen what else is there, and that will be recorded in time. Perhaps I can invite the various interested NGOs whose focus is on the research and conservation of migrant raptors and help set up a field base for their long term studies. Such a programme is vitally important and although widely understood as such the very protection that shrouds nationally protected lands works to oppose and profit from it and effectively turns such concepts away.

To financially profit from critically needed research is to actively discourage it and we should consider the reverse... paying people to come and research and thus conserve. It was what I used to do in the days when I had financial backing and I have every intention of making sure it happens again. I have chosen a little glade in the forests, some seven km away from the lake shore. In a quiet moment one would imagine wood nymphs among the myriad butterflies and birds that inhabit this odd forest patch. But the permanent residence of some 70 buffalo and a nightly visitation by the leopard bring one back to a good reality. I have every intention of integrating the ructures with the surroundings and its animals. The rule is that no-one should see it when overhead or within 50 metres of it and that no tree or animal is displaced. I just have to befriend the leopard, who a few weeks back sat within 15 metres watching me cook my dinner on a camp fire. Some 400m to the east is a hill overlooking lakes and distant mountains and a small patch of the Mau Forest on Eburru. Here I aim to once again fly and release eagles, hawks, falcons, buzzards and owls and to regain the ability to focus others on specific areas of concern that I feel needed. I will for the first time have to consider donation paying guests or visitors so as to keep the objectives alive and selfsustainable. In the past I used to pay for visitors to come and get exposure, but now that must change. 🔫



In spite of the cloudy sometimes drizzling weather today I had a productive morning photographing prairie falcons and got one step closer to getting my goal of parents feeding young. I am sure if I had time I'd have got it today but unfortunately I had an 11am appointment.

I stopped off to check in on the Great Horned Owls and the young have fledged but are staying close to the nest site. Mom had just fed them when I arrived on what looks like an America robin but so few remains were left it is hard to tell. Took a few images and I then headed off to the prairie falcons. I noticed the Ferrugenous hawk is still sitting tight and suspect the young are small so left them be.

Upon arrival to the prairie eyrie I was really pleased to find no parent at home. This makes for an unobtrusive arrival and easier blend into the scenery and since this was the first time here with a blind I was not sure how they'd take it. I deliberately waited until the chicks were old enough to thermoregulate so if Mom had to leave they would not come to any harm.

As it was my timing was perfect. I popped up my blind in seconds and had my camera ready not much longer after. My view and perspective on this eyrie is pretty good and almost eye level. I used my 1DX and 600mm for both the static shots on a tripod and also the "in flight" shots I used it hand held



Prairie Falcons

a france of the second

By Mark Williams

with only a few shots taken using the 300mm that was on my MK4.

The male arrived without a sound and I was frankly not paying attention when he did. I looked up, saw him, carefully took a few shots but he was very alert. As soon as I tried to get a portrait image and began to rotate the lens to make it he bolted. Note to self, use more camo netting around window to hide movement. The four chicks looked content and fed and just sat there admiring their view.

Afterwards as I stepped out of the blind and packed up to leave both parents showed up. The male is always the more aggressive and he did a stellar job of driving me away. I grabbed a few shots of him in his direct attack stoops at me and some turned out OK in spite of the light. As I was leaving I turned my back on him and he clocked me right on the top of my head. He'd been trying to do it the entire time I stepped from the blind. Felt like a rock fell on my head from above. Scared the crap out of me too as I really was not expecting it. Can't say it is the first or will be the last, just never nice when it happens.

So aside from the pictures I brought home a lump on my head and left some of my pride back there at the nest site. I might make one more trip if the sun comes out this week.

IAF AT SALBUURUN EAGLE FESTIVAL 2013

By Gary Timbrell

The Setting

The festival 'Salbuurun' is held in September in Cholpon Ata, a large village by the side of Lake Issy Kul in north eastern Kyrgyzstan, not far from its border with China. It is surrounded by beautiful snow-capped mountains, but the lake is warm enough for swimming. This is without any shadow of doubt the most beautiful place I have ever seen. The village boasts a former soviet sanatorium where we stayed. It is set in pleasant wooded grounds with orchards and a beach and is adjacent to the Park of Religions where the events took place in a large central grassed area with a purpose built conference centre, churches, a concert hall and traditional yurts and statuary reflecting Kyrgyz culture. It is easily capable of hosting a full IAF Council of Delegates Meeting without any changes and we hope someday to be invited. The Kyrgyz falconers would organize an IAF Meeting in some considerable style.

The park is used for the presentation of the eagles and the taigan dogs in processions and static groups. At the moment the event is definitely not geared towards tourism and commerce and there is no flying display. It is for the hunters to meet together, talk and show their tradition to each other and to whoever wishes to see it. There is no charge for anything, even the concert. There were perhaps 50 or so tourists milling around, but the vast majority there were either participants in the event or invited delegates.

There was an IAF flag flying outside the Conference Hall and delegates, mostly from central Asia, attending that part of the event wore badges that had both the Salbuurun and the IAF logos.

Delegates

24 people attended the formal meeting which was conducted in the Kyrgyz language. A translator was provided for English speakers and for Arabic. VP of IAF Bakyt Karnakbayev attended, I was there as secretary. There was a Qatari delegation, AC Member Zayed Al Maadeed and president and vice presidents of Algannas, Ali Al-Menshadi and Mohammed Al-Menhadi. Uzbekistan - two delegates, Georgia - one, the Kyrgyz Minister for Sport + one official and two academics from the Turkish Academy for National Sports and Games, an ancient Master of Eagles from Kazakhstan and another from Kirgizia. The other people were all Kyrgyz hunters except for Dr. Denis Keen, an ethnographer from California (Stanford) who did his dissertation on Central Asian Eagle Bürkütchülyk Traditions and is currently teaching in Almaty.

Minutes

The festival 'Salbuurun' is held in September in Cholpon Ata, a large village by the side of Lake Issy Kul in north eastern Kyrgyzstan, not far from its border with China. It is surrounded masters. I took the following notes:

> Introductions and greetings from State Bodies: traditional activities were not encouraged during soviet times. Now they are encouraged by both the government and the federation. The government is delighted the Salbuurun Federation joined LAF and counts on LAF support to develop a high level of international cooperation. Development is assured and research into traditional Kyrgyz sports will shortly be published in a major book in which Salbuurun bas an bonoured place.

> Guests briefly spoke words of encouragement. Bakyt said that people who lose their language and their culture lose themselves and spoke of the brotherbood of the Central Asian republics and his hope they would all fully participate in IAF.

> I spoke of the brotherhood of the falconer. LAF has over 60 countries, but we all speak the same language and preserve and share the knowledge of falconers; we are all pupils and we are all teachers. Kyrgyzstan has shown a great example in the way its hunters engage with its government to assure good legislation and future for the eagle hunters. LAF hopes to work closely with Salbuurun.

> Zayed encouraged engagement with UNESCO and spoke on the value of the cultural elements. He encouraged participation in LAF and in AAFF. Speaking on behalf of Algannas he assured of Qatari help towards UNESCO extension and said that legal falconry must be encouraged and non legal practices discouraged.

> Turkish academics encouraged festivals like this to become full cultural programmes, avoiding touristic elements; the original Olympics included cultural elements. Practical knowledge must be preserved and spread, theory on its own is not enough. Living culture is a part of the spiritual development of a nation.





Abylkbak Tyrlybayev, Eagle master from Kazakhstan and teacher of many great falconers spoke of nomadic peoples, eagles and their training and the similarities between Kazakh and Kirgiz methods. He lamented the difficulties and obstacles in modern living that lead us away from our ancestors and said we need to revive our cultural inheritance. Salbuurun has begun this process and Almaz is its leader. Issy Kul can become a world centre for this renewal.

Mahamatisak Nazubor, LAF delegate for Uzbekistan, said, "I am at home. I am happy in Issy Kul. I did not know of such beautiful places. In history this is a great moment for Almaz and for Kyrgyzstan. This event should be held every year and will be renowned throughout the world." There were some gifts exchanged and the meeting was closed by Almaz.

The Festival

In the afternoon we were lined up and presented to the 22 bürkütchülyk and their eagles, 7 falcons and one gos, all hunting fit. Also 30 taigan wolf hunting dogs. We gave brief interviews for Kirgiz National Television and the Qatari Ambassador drove over from the capital to meet his delegation on the show grounds. In the evening there was a concert of traditional music in the spectacular concert hall whose back wall opens behind the musicians to show the sunset over Lake Issy Kul and the snow-capped peaks beyond.

Events of the second day took place in the hippodrome where, from a stand, we watched a very exciting game of ulak tartysh - dead goat polo (Google it to watch a match). Other national





sports like archery at the gallop were also shown to us.

Welfare Issues

Formerly this part of the festival also included a tethered wolf used to test the bravery of the eagles. This has now gone completely due to concerns from European falconers who had seen a YouTube film and the wolf was placed in Almaty zoo. Not having the wolf at their festival is a great step by Salbuurun to move towards international acceptance of central Asian Falconry and Eagle Festivals.

The eagles, falcons, hawks, dogs and horses were all in immaculate condition; each eagle was attended by its handler at the weathering and remained calm and unhooded. I do not believe there are any animal welfare issues at this festival.

Future IAF Meeting?

Recommended strongly. They are ready now. It was evident that UNESCO recognition in other countries has stimulated government interest viz. ministers and academics present. An IAF Meeting would further encourage government participation and cement the future of Kirgiz falconry. This country is ready to go for a UNESCO extension, all the requirements are there, it is the duty of IAF with its Advisory NGO status to do what it can to assist.

Caveat

Although the festival is definitely not a tourist trap, there is a danger that it could become one in the future. For the time being the emphasis is on the Kirgizians enjoying the opportunity for a gathering to share their tradition with each other. If tourists want to attend they can, but the festival is not an entertainment created for them. As the festival grows it should be advised to develop the participation of the "master" eagle men who answer questions and pass on their knowledge. Putting them on the official schedule as giving workshops or discussion groups would be an excellent way to avoid a touristic direction. These great efforts by our brother the master falconer, Almaz Akunov, leader of the Salburuun falconers of Kyrgizstan is greatly to be commended.

WORKSHOP REPORT: ORIGIN AND **IMPORTANCE OF** FALCONRY UNTIL 1500 AD WITH AN EMPHASIS **ON NORTHERN EUROPE**

CENTRE FOR BALTIC AND SCANDINAVIAN ARCHAEOLOGY (ZBSA), SCHLESWIG/NORTHERN Germany, March 5th to 7th 2014



Seal of the Danish king Knud IV (late 11th century; after M. Andersen/G. Tegnér, Middelalderlige seglstamper i Norden [Roskilde 2002] 129).

By Oliver Grimm and Ulrich. Schmölcke

Hunting with trained birds of prey is a very elaborate hunting technique that was possibly invented by the Eurasian Nomads, and from the Steppe area it spread to the east, south and west. A broad analysis of the historical traces of this kind of hunting would have to rely upon an entire series of sources that only a multitude of researchers (including actual falconers) could manage. In the absence of any recent attempt to that effect, this has been the goal of the workshop in Schleswig.

Workshop structure

During the workshop, almost 30 scholars from 11 countries including actual falconers and scientists - met in Schleswig. All lecturers sent manuscripts in the English language before the actual meeting, while in Schleswig there was only limited time to present an abstract (15 minutes), followed by a discussion of the same length. For organisational and financial reasons and in order to create a lively communicative atmosphere, the workshop had to be restricted to the actual lecturers.

Workshop Key Questions

Several key questions have been discussed by the workshop participants: the first one about the origin of falconry, the second about the proper way of identifying the bones of trained birds of prey, the third about falconry vs. bird symbolism (how to separate one from the other) and the fourth and final one about nomenclature (field, place and personal names) in relation to birds of prey and falconry.

Falconry in Action

The workshop introduction to practical falconry, present day falconers and falconry organisations plus the UNESCO world heritage title was provided by four lecturers, who painted a very colourful and impressive picture of this kind of hunting (T. Richter, E. Hagen, H.-A. Hewicker, J. Shergalin).

A film about falconry, shown in the workshop cinema, also belonged to this section (see below).

Scientific approaches: Natural Sciences and Methodology, **Cross-Sections and Case Studies**

Firstly, there were contributions on the Natural Sciences and methodological matters related to premodern falconry (zoology: F. E. Zachos, archaeozoology: W. Prummel, isotope analysis: introduction by U. Schmölcke, supplemented by an un-lectured abstract by the biologist A. Gamauf). Secondly, there were case studies about:

• the way of life and hunting of Eurasian Nomads from an archaeological angle (L. Yablonsky), plus an introduction to the archaeological finds from Xanten and Moravsky Jan in central Europe, which have ties with the Eurasian Nomads and, possibly, falconry (O. Grimm)

• areas that are, so far, little known in terms of premodern falconry (A. B. Gotfredsen: Denmark; A. Girininkas and L. Daugnora: East Baltic area; A. V. Zinoviev: Russia)

• falconry, bird catching, bird trade and the role of birds of prey as alliance gifts in premodern Norway (R. Orten Lie, I. Særheim)

Thirdly, there were cross-sections through different scientific



A look into the workshop cinema (© ZBSA)



Workshop opening by PD Dr. Berit Eriksen, research director of the ZBSA (© ZBSA)

fields belonging to the Humanities:

· Archaeology/Archaeozoology (M. Vretemark on Swedish burials and settlements; U. Schmölcke on central European burials; O. Grimm on selected central and northern European settlements)

• Historical sources (B. Van den Abeele on didactic literature, M. Giese with an overview on historical evidence in central Europe and England)

• Literature studies (L. Carstens: Saga literature; S. Obermaier: German medieval literature; B. Van den Abeele: Old French literature)

• Art history (S. Oehrl and Å. Ahrland on sources of the North, V. Henkelmann on central Europe and K. Chrubasik Władisław II. Jagiełło in Cracow)

• Name analysis (R. Nedoma on personal names pre 1000 in Germanic areas; J. Udolph on field, place and personal names post 1000 in Slavonic and Germanic languages)



Multi media workshop cinema

Multi Media Workshop Cinema

After some rehearsals in autumn and early winter, a room in one of the workshop hotels had been set up as a little cinema for 30 spectators. At the second workshop evening, this cinema was used in a multi media fashion. First, there were two Skype lectures from the United States of America: A. Akasoy's (New York) on early Arabian and L. Wallace's (Pittsburg) on early Chinese falconry. These important contributions were about areas that are meant to play an important role when discussing early historic falconry. Secondly, a film by the falconer K.-H. Gersmann, who sadly was absent during the workshop, was shown. This movie, made in Canada exclusively for the workshop, provided a very good picture of a bird's education on the famous early 15th century tomb of the Polish king in falconry and its actual hunting. Thirdly, a surprise lecture was given by L. Yablonsky on the excavation of a majestic burial mound (kurgan) in Russia that yielded a very impressive woman's burial from the Scythian/Sarmatian period of time (Eurasian Nomads). Finally, the three-dimensional internet

reconstruction of the early 15th century tomb of the aforementioned Polish king Władisław II. Jagiełło was viewed and discussed.

Some concluding remarks based on the workshop lectures and discussions

While there is good reason to ascribe the invention of falconry to the Eurasian steppe due to the open landscape that was ideal for this kind of hunting, no conclusive evidence seems to have come to light so far to strengthen any assumption to that effect. However, falconry was already well-established in parts of China in the very first centuries AD (possibly transmitted via Eurasian Nomads who lived further to the north), whereas it came to central and northern Europe later, i.e. around the middle of the first millennium AD. Owing to the multitude of archaeo(zoo)logical finds and other evidence, falconry was well-known in large parts of Europe only few centuries later. With a perspective of this kind, the famous falconry book of Frederick II (1194-1250) surely remains a masterpiece that also reflects intense contacts with Arabia, but the falconry tradition in Europe was much more deep-rooted. Generally, the source situation regarding premodern falconry is much denser for the period post 1000 than it was before, since from then onwards historical, literary, art-historical and name evidence overlap, supplemented by archaeological evidence, the latter of which has lost the dominant position it held earlier on. However, there are very crucial questions to pose whether the written accounts, literary descriptions, depictions or names with a reference to (trained) birds of prey/falconry really reflect former reality in the form of actual hunting or just a bare stereotype. In many cases, one may in fact doubt the historical core of a supposed hunting scene but, on a more general level, symbolism could only work when people understood the actual symbol and when it had a counterpart in reality. The number of falconry motives alone does underline a certain importance of this hunting practice even if the majority of these motives reflect pure stereotype.

Preparation for the book

Even though the workshop included as many as c. 30 lectures, premodern falconry inside and

Workshop and Book Sponsors



Deutscher Falkenorden (DFO)



International Association for Falconry and Conservation of Birds of Prey





Game Conservancy Deutschland



(Cultural Division, CIC/Hungary and CIC/German Delegation)

in particular outside Europe was approached only in a loose way. In order to get a better impression of the overall scope of premodern falconry, this topic shall be dealt with in a much more systematic way in the book that may yield 70–75 articles from authors of c. 20 countries. In its title, this book will refer to "premodern falconry and bird symbolism" since very often it is difficult to separate one from the other. The overall book is estimated to be printed in late 2015 with as many as 1000–1200 pages in two volumes, including many colour photographs, and it is meant to lay foundations for future research into falconry history.

Workshop and Book Sponsors

Fortunately, the workshop and book have found a number of sponsors among falconry and hunting organisations:

- International Association for Falconry (IAF)
- International Council for Game and Wildlife Preservation (CIC): Cultural
- Division/Hungary and German Delegation
- Game Conservancy Deutschland
- Deutscher Falkenorden (DFO)
- Falconry Heritage Trust (Wales)

In fact, the workshop has been covered by external funds to a substantial degree. When it comes to the book, however, the printing and language corrections by native English speakers will be quite expensive. Therefore, additional book sponsors are more than welcome!



All Thailand Falconry Festival 20













ROGER UPTON, UAE AWARD

By Mark Upton

When Roger Upton first caught a BOAC plane to travel to Abu Dhabi via Bahrain in 1965, I suspect neither he or his hosts, would have ever suspected how the country would change. He arrived on the desert Island, to a romantic vision of Arab life. In those days Abu Dhabi town consisted of large fort and brasti houses. Little changed from the 1950 when Wilfred Thesieger completed his famous crossing of the Empty Quarter in the 1950's. Oil had already been found and the first revenues were just beginning to improve life for the population and Roger met a happy and friendly people.

Roger had been invited on this adventure after being asked to take two Abu Dhabi Sheikhs hawking by the British Foreign Office. He entertained them at his home in Wiltshire and took them out partridge hawking on the local Marlborough Downs. They had a good day and with the common interest in falconry they became friends and Sheikh Said bin Shakbut, the son of the then ruler of Abu Dhabi kindly invited Roger to come to Abu Dhabi for some houbara hawking. Roger thanked him for the invitation, little thinking that it would ever come about. Some months later he got a call from Abu

When Roger Upton first caught a BOAC plane to travel to
Abu Dhabi via Bahrain in 1965, I suspect neither he or his
hosts, would have ever suspected how the country wouldDhabi saying they were organizing a ticket for him and off he
went. The beginning of a life of traveling with the Arabs and
sharing their hawking.

On arriving in Abu Dhabi Sheikh Said organized a hunting trip for him and he set off in an open topped Land Rover with some falconers, several peregrines and sakers and plenty of stores. In those days there wasn't a bridge between the island and the mainland and you had to wait for low tide to cross. They set off hunting, catching houbara and hares where the present day international airport is and camping out at night, working their way into the empty quarter, towards Al Ain and Buraimi. There were no roads and they made their own way meandering though the desert following there quarry species. After a few days hunting they arrived at the oasis of Buraimi where Roger was taken to see Sheikh Shakbuts younger brother, Sheikh Zavid bin Sultan, the Governor of Buraimi. Sheikh Zavid was a very keen falconer and Roger spent several days with him looking at their hawks and talking about falconry, wildlife, the desert and the changes that were coming with oil. They then carried on hunting before returning to



One of Roger's many paintings



Roger at home with his award

Abu Dhabi and home after nine weeks, to a wife and baby son whom he had told he would be away for a fortnight.

The following year Sheikh Zavid visited the UK and came to see Roger at Marlborough. Shortly after returning to Abu Dhabi he became ruler and started to develop the country using the oil revenues to great effect to improve the lives of his people. Sheikh Zayid was also very interested in preserving the traditions of his people and falconry and would spend much time with Roger on his visits discussing what could be done to aid falconry and conservation. Roger would travel to Abu Dhabi most winters to take part in the hunting trips and travel with the Sheikhs who were now beginning to travel further afield in the search of good hunting ground for houbara. Sheikh Zavid asked Roger if he would organize a conference where falconers, conservationists and wildlife experts could come together to discuss the problems with falconry, wild falcon and quarry populations and what could be done to preserve and improve the sport and conservation issues. This was done with the organization of the 1976 Falconry and Conservation Conference held in Abu Dhabi.

Through his friends in Abu Dhabi and his interest in Arab falconry Roger began to travel all the middle east, visiting other countries falconers, trappers and dealers and gained an unique insight into their sport. There are differences to which falcons are preferred, training methods, trapping, variations in

equipment and falconry language throughout the Middle East and Roger wanted to see and document it all before some of the methods disappeared. He eventually wrote a book on the subject which is now considered the best and most detailed book on arab falconry. Abu Dhabi have since reprinted it in Arabic and English because it was felt to be such an important volume and unique volume for Arab falconers.

Roger remained firm friends with Sheikh Zayid all his life and has continued, until recently because of his health, to travel to Abu Dhabi as a friend of the families and the falconers there. In recognition of this Abu Dhabi and HH Sheikh Mohammad bin Zayid kindly presented him the Abu Dhabi Award, their highest civilian award.

In March of this year I travelled out to Abu Dhabi to represent Roger at a magnificent award ceremony at the Emirates Palace. (Roger was unfortunately too unwell to attend.) The seven award winners and their families were hosted with traditional Arab hospitality and there were many dignitaries, past award winners and guests present. Also present were HE Mohamad al Bowardi and HH Majid al Mansouri, who was representing the IAF. Before each award was presented a presentation including a film was shown about their achievements and why Abu Dhabi was honoring them in this way. I was moved by the pieces shown about my father and the great respect in which he is still held in the country.

Releasing ex-falconry birds as a conservation and sustainable use action: best practice guidelines

By Janusz Sielicki

In 2010 falconry was declared Intangible Cultural Heritage of Humanity by UNESCO. The traditional approach to wild-use of birds of prey is an important part of this heritage and an incentive to conserve them. CMS Raptors MoU, IUCN and IAF support the sustainable use of falcons for falconry, which includes a frequent tradition of releasing birds after the hunting season, thus borrowing them from nature. Traditional falconry in Asian and North African countries is based on using and then often releasing passage falcons, especially Sakers. Bearing in mind the changes that have occurred, over recent years, in the practice of falconry, these guidelines are intended to help falconers support natural populations of falcons. The decision whether or not to release a falcon can be based on the answers to a few simple questions.

Releases of falconry birds also offer an opportunity to repopulate areas where the species has been extirpated or significantly diminished. In coordination with national and local authorities, implementation of such projects taking into consideration suitability of existing habitat, prey availability, potential raptor-human conflict and education/outreach efforts with local communities can be explored. Retaining such birds can also create new opportunities, for use in breeding, education and science.

The general aim is to guide the release of falcons from Asia and North Africa back to nature in the best way for natural populations and when such release is appropriate. In future, the guide can be extrapolated to other regions, species and traditions. The decision tree (algorithm) helps to decide about each individual bird, after which there are some simple practical guidelines for releasing birds.

Releases will be most beneficial for wild populations if: 1. The release process is as natural as possible.

2. Sakers, Peregrines, Barbary falcons, Lanners and eventually other regional species are released in their natural range only, giving birds from wild populations the chance to return to their place of origin.

3. Birds caught on migration are released during spring migration and ideally close to where they were caught, while birds obtained in breeding areas are released close to the place of origin.

4. Birds obtained by captive breeding are released only if their origin is known and then into populations or migration routes from which their stock originated.

5. All birds are examined by vets before release and only falcons that are fit and not carrying any disease are released, preferably marked with rings and/or microchips; this is a key role for falcon hospitals.

6. Methods of release give birds a maximum chance of survival and return to natural populations, if they are released after being fed, of course with their jesses removed, and without being frightened away, in an area where there is a prey for them; possible improvements include hacking aviaries if it is useful to de-habituate them from people before release and providing them with food at the place of release until they start hunting.

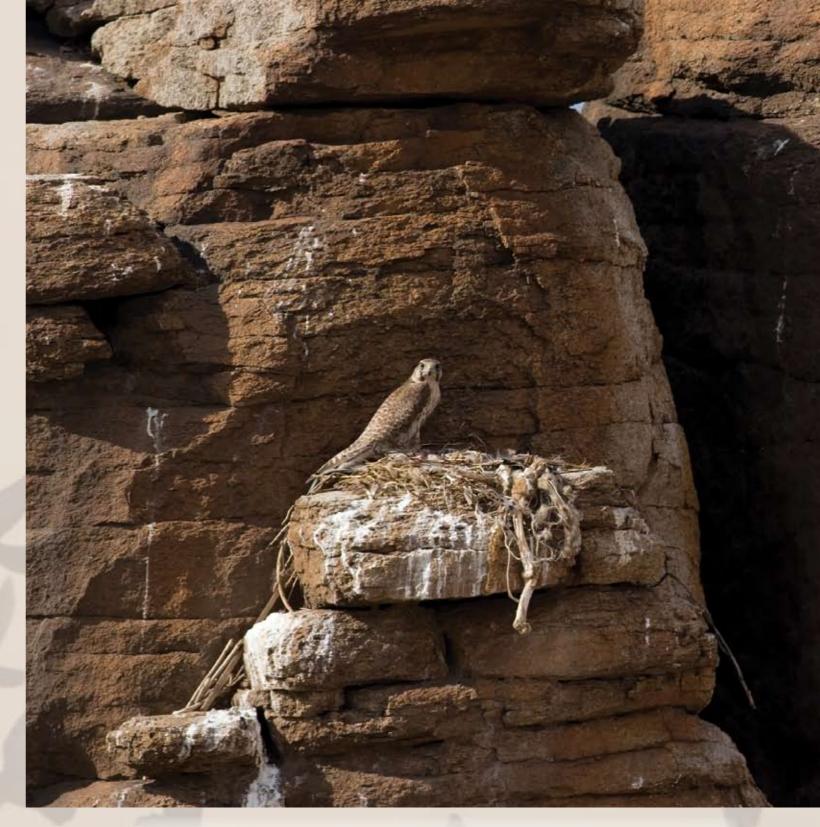
7. Hybrids, or falcons imprinted on humans, unable to hunt, unfit or carrying diseases dangerous for wild populations are not released under any circumstances.

Detailed decision-tree described in question format for individual falconers and is available from IAF Conservation Officer.

Individual release guide

If you are planning to release the bird yourself, the following procedure may help:

Whether to release: First check the decision tree for each falcon, to discover if it is suitable for release.



the bird is best released during spring migration in the same area where it was caught. If the bird was caught or taken from nest in its breeding area, the best release may be in spring in the hood and quietly withdrawing; (2) in an area with many the general area where it was caught or taken from nest. **Pre-release:** Release is best with a bird in high condition and well fed. While feeding it up for few days, it may be kept in as large as possible a flight cage. Visit a falconry clinic or vet to check health and fit a ring or other marker; a small tail-mount radio-tag increases release safety and information.

Releasing: A safe place for release is important, with low risk of attack by predators. Two workable release approaches,

Where to release: If the bird was caught during migration, among many possibilities, are: (1) to feed the bird to a maximum level the previous evening, then cut off the jesses and put it on a safe perch an hour before dawn, removing safe overnight perch opportunities, to feed the bird and then release it before sunset to find its own perch. Release is best done very smoothly, without scaring the bird.

> After release: Ideally, monitor the bird in the release area for 2-3 days. If you see it looking weak, you can feed it by leaving a dead prey nearby an hour before dawn, with fur or feathers plucked and opened to expose meat. A bird will usually start to live independently with success after making 1-2 kills.

RAPTOR NUTRITION: WHAT WE FEED THEM. WHAT GOES WRONG. HOW WE DEAL WITH IT.

At the Fifth Qatar Internation Falcon and Hunting Festival this year, a series of talks were given at a conference for 'Veterinary Medicine for Falconry into the 21st Century'. A collaboration between the International Association for Falconry and Conservation of Birds of Prey and The Qatari Society of Algannas, the four day conference featured a number of top speakers. Here we present the 'Falcon Nutrition Masterclass' from this event written by Dr Neil Forbes.



By N. A. Forbes BVetMed RFP DipECAMS FRCVS Great Western Exotic Vets, Great Western Referrals, Swindon, SN1 2NR. UK . http://www.gwreferrals.com

Abstract

The aim of this paper is to review the available scientific and practical falconry text on raptor nutrition in order that vets can advise falconers on feeding regimes, as far as possible based on proven scientific research, assisted by practical information.

Introduction

The argument, that in the absence of detailed nutritional data the dietary needs of any individual species are most likely to be met by feeding a diet closely approximating to that which would be taken in the wild under ideal conditions (Kirkwood 1981), can be contested. Firstly, without detailed nutritional data, how can 'ideal' conditions be identified? Even a relatively accurate analysis of 90% of a wild birds intake may not be truly reflective of the nutrient profile of the diet (Brue 1994). In the wild most raptors are opportunistic eaters i.e. they eat anything which is available e.g. feathered and furred quarry also insects, reptiles and carrion. Whilst some species have adapted over many thousands of years to a certain food intake,

in many others the environment in which they live and hence the food availability will have altered, often at a rate faster than the birds' metabolism has been able to adapt (Brue 1994). A totally natural diet is impossible to replicate in captivity regimes (Dierenfeld et al. 1994), particularly because a wild bird has the option of choice (even if availability determines this), (indeed choice may vary with season and breeding activity), whilst a captive bird does not. In addition, captive birds may have different inherent nutritional requirements on account of their unnatural life style (Brue 1994). Wild birds often live short lives and death due to malnutrition is the most common cause of mortality in wild populations (Keymer et al. 1980; Hirons et al. 1979; Brue 1994). In essence, the modern falconer needs to develop feeding regimes based on the requirements of captive bred, raised and maintained birds as opposed to trying to replicate the, less than perfect, feeding patterns of wild raptors. Falconers bemoan the lack of scientific research into raptor nutrition for domesticated raptors. The primary reason to study nutrition, for the falconer, should be to improve the wellbeing of the raptors in

our care. There are many factors that can influence both the quantity of food required by a raptor and its' requirements for specific vitamins. Life style, husbandry, geographical area, different stages of the life cycle, for example the stage of development, growth rate, health status and production level of our birds can all affect their nutritional requirements. Our aim should be to achieve/maintain optimal health: greater longevity (achieving the full potential [flight and breeding] life span of your raptor) may be possible by optimising the diet as some dietary components may have protective effects, for example, antioxidants are known to help reduce cholesterol levels. Promote disease avoidance: nutritionally related disease can occur, which with knowledge can usually be avoided, for example:

• DIRECT, because of inappropriate diet content or quantity

Starvation;

Malnutrition / sub optimal nutrition;

Metabolic Bone Disease (Ca:P:D3 in balance) (i.e. rickets); Obesity (leading most commonly to cardiovascular or liver disease);

Toxicities (e.g. excessive fat soluble vitamin supplementation, or mineral poisoning);

Competition for food between birds in the same aviary.

• INDIRECT, as a consequence of altered requirements due to other conditions:

Management techniques and housing;

Rapid levels of neonatal growth;

Fledging;

Moulting;

Reduced or ineffective plumage leading to increased heat loss;

Breeding, egg laying and rearing;

Old age:

Increased or decreased exercise;

Following medical treatment e.g. antibiotics altering the gut

flora;

During recovery after illness or treatment;

Altered ambient temperatures;

During periods of high stress e.g.:

Adverse weather reaction;

Weight reduction prior to entering;

Injury, change of aviary / husbandry or other conditions leading to sudden increases in metabolic rate.

• DISEASE, leading to:

Reduction in appetite;

Diarrhoea - decreased absorption of nutrients and electrolytes

Reduction in availability of food (e.g. parasitism); Method - measure input and output; when they are equal, assume the body is saturated. Assumes that the size of the in view of increased transit rates; body pool of the nutrient is appropriate and is not changed Reduced ability to store or mobilise nutrients, especially in by the experiment. Assumes that higher levels of intake would do no good (clearly not true of water -- hardly anyone liver disease. would recommend just enough water to maintain balance).

• GENERAL ILL-HEALTH, for example:

Metabolic disorders, e.g. liver disease, thyroid disorders, diabetes;

Neoplasia (i.e. cancers); Senility

• FOOD QUALITY, for example:

Excessive storage times reducing nutritional value;

Excessive storage times reducing water content;

Restricted food source / type, leading to limiting factors e.g. essential amino acids;

Poor hygiene precautions resulting in bacterial contamination;

Reduced quality food e.g. rancidity (excessive storage) which reduces vitamin E levels;

Usage of incorrectly balanced food supplements;

Excessive or inappropriate usage of food supplements.

How are nutrient requirements quantified?

In establishing dietary requirements the goal is to determine what amount of food or particular nutrient is sufficient, if ingested routinely, to prevent impairment of health even if intake becomes inadequate for a short period, for the life stage and life style intended.

1. Maximum growth in the young

This is a common criterion used for commercial animals. However: whilst maximum growth is advantageous in birds destined for meat production, very rapid growth rates are often contra indicated in raptors (Forbes and Rees Davies 2000)

2. Maximum breeding production (to fledging)

This is also a common yardstick, although excessive production of young can harm the parents and result in poor quality off spring.

3. Prevention/cure of deficiency diseases

This depends on the observational endpoint chosen. (E.g., 5-10 mg of vitamin A per day prevents growth defects, but skin tissue becomes discoloured at this intake level). Seemingly this criterion could on occasion, therefore, be considered inappropriate in the light of the current concern for levels that promote optimal health as opposed to disease prevention. 4. Saturation of tissue

Determines the amount that will not cause any further increases in concentration of the nutrient in the tissues. Problem: some nutrients (e.g., fat-soluble vitamins) dissolve in adipose tissue, and will accumulate to toxic levels, leading to potentially life threatening diseases.

5. Balance studies

Such results are only relevant to the bird in that controlled environment, at that life stage.

6. Changes in a secondary variable

Changes in some secondary variable in response to the nutrient may be measured, e.g., changes in copulation frequency in tiercels in response to Vitamin E supplementation.

7. Amounts in typical diets

Sometimes it is difficult or impossible to determine the amount of a nutrient that is required. In such cases the amounts that seemingly healthy raptors in a wild population take in may be accepted as the norm. These levels, however, may be limited by population levels, prey availability, seasonal factors, lifestyle or geography (raptors in the wild may not need vitamin D in their diets, however, those kept in poorly designed, dark aviaries may).

What is an essential nutrient?

The classical definitions are:

• Essential nutrient: substance that must be obtained from the diet because an animal cannot make it in sufficient quantities to meet its needs. Biotin is necessary in metabolism, but raptors normally produce sufficient quantities within their bodies. In contrast, pantothenic acid is equally necessary, but it is not produced internally. Hence, pantothenic acid is an essential nutrient.

1. Macronutrient: nutrient needed in large amounts (many grams daily).

2. Micronutrient: nutrient needed in small amounts (typically milligrams daily).

· Conditional requirements: some substances are not generally considered essential to life, but might become so under specific circumstances (that is, conditional deficiencies are possible). The existence of conditional deficiency states may give rise to exaggerated claims of the importance of certain substances in normal diets, leading to the recommendation of unnecessary routine supplementation. For example the supplementation of a raptors diet with thiamine may be recommended for fish eating birds. These may improve in condition and cease fitting if the supplement is given. The additional thiamine, however, is only required, because of the naturally occurring 'thiaminase' (an enzyme which digests thiamine) in the fish, which is destroying the normally available levels of thiamine.

Outlining the basics of a feeding regime

As a basic principle, it is important to remember that each raptor species has evolved over millennia to fill a very specific ecological niche (Brue 1994). The consumption of a prey animal by a raptor involves the bird eating casting (fur & feather), muscle, bone, viscera and the prey's gut content. In supplying food to captive birds, all these elements should be considered. Any alteration to the birds diet, even from

one prey species to another, in either captive or free living individuals can result in a change in the relative proportions of these materials consumed. It has been established that a raptors food requirement varies with body size. Buzzards, kites and eagles require approximately <10% wet weight, in food, of their body-mass per day, large falcons and Accipiter species 10-15%, whilst small falcons and accipiters 20-25% (Kirkwood 1980 & 1985). Total food requirement, therefore, can be seen as a correlation between an individual birds digestive efficiency and its metabolic rate.

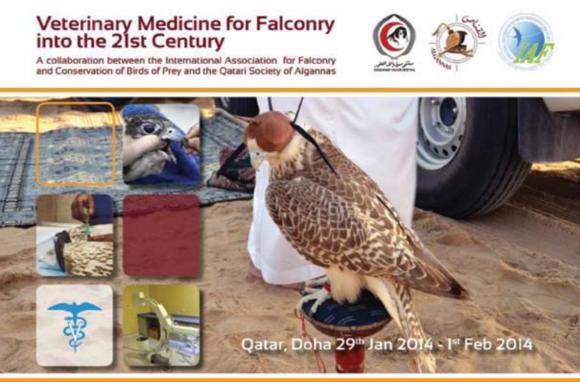
Commonly used raptor food

• Day-old chicks: are often, mistakenly, considered to have the equivalent nutritional value of a single hen's egg. This is not the case. The formation of an embryo within an egg and the development and subsequent hatching of a chick dramatically changes the chemical and nutritional value of yolk and albumen (Table 3). Day-olds are used as the basis of a staple diet for the majority of species of birds of prey. Offering a high protein, low fat diet with good levels of vitamins and calcium. In a recent study, the body composition of young American kestrels (Falco sparverius) fed on a diet of either day-old cockerels or mice were compared. This comprehensive study (Lavigne et al. 1994a & 1994b) provides ample evidence as to the nutritional adequacy of day-old cockerels as a food source for American kestrels. It should of course always be remembered that not all chicks, mice etc are equal, the nutrient value will in turn be governed by what they were fed on. The calcium levels, which are required by growing birds of prey, would be met by any of the whole prey outlined in Table 3 (Dierenfeld et al. 1994). Calcium levels, however, also need to be evaluated in relation to both dietary phosphorus (P) and vitamin D3. Ca:P ratios of 1:1 - 2:1 have been reported for indeterminate egg layers (poultry) with determinate egg layers i.e. those birds which lay eggs during a specific breeding season e.g. raptors, requiring lower levels (Bird & Ho 1976; Dierenfeld et al. 1994). Day-old chicks have the correct Ca: P ratio (the most important single factor) as well as good overall levels of calcium. The conclusion, is that day-old chicks are the ideal staple diet for most species of birds of prey, being nutritionally sound, with high ME/GE ratios, as well as being economically priced, readily available and convenient to use. As previously discussed, however, it would be most unwise to feed exclusively one type of food, therefore, a varied diet is always indicated.

• Quail: At six weeks old there appear to be no nutritional differences between male and female quail, however, at 16weeks of age marked differences appear: the nutritional quality of males remains unchanged yet the fat levels in female quail have almost doubled (Clum et al. 1997).

Age and sex differences in quail leads us to classify the main

into the 21st Century



types that are available as follows:

5 week old male culls, 6 - 8 week old prime birds, 8 month old ex-layer birds, Vitamin E enhanced quail. Quail become sexually mature at 6 weeks of age, therefore, the most readily available quail are surplus males that are culled at 5 weeks old, i.e. those birds not required for breeding programmes. 6-8 week old birds are generally considered to be the best quail readily available and are suitable for most raptors. 8 month old layer birds are the by-product of egg production, frequently yolk and fat filled and often carrying significant levels of pathogens and disease. These birds can represent a bio-security risk to captive raptors. Vitamin E enhancement of quail fed to falcons, at the Peregrine Fund facility Boise Idaho has seen:

Improved libido effects in adults (increased copulation frequency);

Increased hatchability of eggs (59% to 83%);

Increased activity in chicks with, for example, food begging occurring between 4 & 10 hours earlier than in previous years (although one accepts this was not a controlled trial). It should be remembered that in the same way as our birds are as good as what we feed them, so in turn the food we feed our birds is only as good as what they, in turn, were fed.

Wild prey species: any wild source of food (e.g. pigeon, game, road traffic kills) must be considered potentially contaminated. • Rats: notwithstanding the above comments regarding That animal failed the 'fitness for life test' and we do not vitamin E enhanced quail, rats are naturally high in vitamin E, know why. Such birds may be carrying pathogens, parasites therefore, a strong argument exists for using both rat and quail or toxins. Many falconers' feed ferreted, rifled or shotgun

as part of a feeding regime. Rats appear to be almost opposite to the quail in that the younger the rat the higher the vitamin content (Dierenfeld 1994).

• Hamsters: nutritionally equivalent to rats, hamsters may be a good substitute for those falconers who do not wish to prepare rats. The thin skin and fur combined with their smaller size, means that hamsters do not require evisceration and can be fed whole.

• Guinea pigs: are herbivores and so have long digestive tracts and require evisceration prior to feeding. Guinea pigs have very loose fur, which can quickly fill a falcon's crop and should be totally skinned before feeding.

• Mice: are typically the most expensive food available to smaller hawks and owls in terms of their cost to weight ratio. Clum et al. 1997 expressed concern over their particularly high levels of vitamin A. Additionally, their high fat content and low protein levels (Lavigne et al. 1994a & 1994b) suggests they are less suited to feeding to birds of prey than appreciated.

shot foods (especially rabbit and pigeon). Shotgun killed quarry should never be fed. Rifle bullets frequently fragment on impact, so even head rifle shot food should be discarded. Ferreted or hawk caught rabbits may contain lead pellets from a previous non-fatal shooting incident. Lead ingestion from the consumption of fallen shooters quarry is a major cause of mortality especially in free living eagles (Saito et al., 2000). Keepers should be aware of the clinical signs of lead poisoning (weakness of legs and wings, inability to stand, often grasping the feet each in the other, inco-ordination, poor appetite, green faeces, and weight loss). It only takes one lead pellet to kill a raptor; any suggestive signs should result in immediate presentation to an avian vet for examination and appropriate life saving therapy.

Other foods: the feeding of muscle (e.g. shin of beef) as a major part of the diet is unsatisfactory without supplementation. Birds flying on public display, are often fed beef as the public may object to seeing fluffy chicks or mice fed. This can lead to calcium deficiency even in adult birds presenting with central nervous signs or muscle cramps. Dietary composition is more critical in neonates than that of adults. The diet for chicks and growing eyasses must comprise whole carcasses, and not simply muscle (i.e. meat). When considering eyass diet it is important to study the food that is being consumed by the chick, rather than the food which is being offered to the parents, the two may be very different.

In conclusion, no one raptor diet can be ideal for all species. Day old chicks may make up the mainstay of raptor diets, but should be supplemented with variety of other wholesome foods, this is the case for both hunting and breeding birds. Falconers should not neglect the vitamin and other trace element requirements of their birds when limiting food intake in order to control weight for flight training.

Problem areas to be avoided in feeding 1. Ignoring differences between species

There may be a temptation to feed the same feeding regime for all birds of prey. The nutritional requirements of hawks, falcons, eagles, owls, secretary birds or ospreys, vary between genera, with age, reproductive cycle and whether the bird is being flown, moulted out or free lofted. Wide variances exist between species, for example, European Kestrels (Falco tinnunculus) can breed successfully for several generations on an exclusive day old chick diet (Forbes & Cooper 1993). In contrast merlins (Falco columbarius) fed on the same diet will not thrive. Free living merlins consume a predominantly insectbased diet and a high fat diet may be a contributory factor in Fatty Liver Kidney Syndrome of Merlins (Forbes & Cooper 1993). The diet of free living Secretary birds (Sagittarius serpentarius) is predominantly snakes, which are lower in food) energy and higher in Ca:P ratio than most commercial raptor diets. Young fast growing Secretary birds fed on standard

raptor diets may suffer a Ca:P:D3 in balance with resultant metabolic bone disease (rickets).

2. Unnecessary or excessive vitamin supplementation

Vitamin supplementation is not a good substitute for good basic nutrition (Sandfort et al. 1991, Forbes & Rees Davies 2000). Furthermore, if raptors are being fed a good diet, supplements will only be required at times of additional stress (e.g. training, moulting, breeding), if at all (Forbes & Rees Davies 2000).

The problem is two-fold:

a. Incorrectly balanced supplements, for raptors i.e. a vitamin/ mineral supplement based on the nutritional requirements of one species is unlikely to be suitable for another (Angel & Plasse 1997, Forbes & Rees Davies 2000). All fat-soluble vitamins compete with each other for absorption. Hence if any one of the fat-soluble vitamins is available in excess there can be competitive exclusion in the fat micelle. This leads to an antagonistic interaction among the vitamins. A vitamin supplement formulated for one species may well be incorrect for another. Any supplement used should be one prepared professionally specifically for raptors.

b. Inaccurate supplementation, either in an attempt to 'do good' i.e. in the mistaken idea that if one pinch is good, two pinches are better, or simply through lack of accurate manufacturers guidelines. In a study undertaken at Houston Zoo (Angel & Plasse 1997), wide variations were found amongst individual keepers' interpretation of the quantities of supplements that should be added to avian diets. "A pinch" was found to weigh between 0.1 and 1.9 g. Vitamin supplementation added directly to the food has also not shown any detectable differences in health although food supplementation when provided in the food to prey species, has shown benefits to the secondary consumer (Dierenfeld et al. 1989).

In conclusion, varied, whole animal diets are desirable as they require little or no supplementation (Carpenter et al. 1987, Burnham et al. 1987, Dierenfeld et al. 1994, Bruning et al. 1980, Lavigne et al. 1994a & 1994b, Forbes and Rees Davies 2000).

3. Monotypic diets – (being provided with only of one kind of food)

Despite the adequacy of day-old cockerels as a staple food for many species of raptors, monotypic diets are unlikely to be advisable. Manganese deficiency, for example, has been documented in captive raptors fed a diet containing exclusively rat (Clum et al. 1997).

4. Monophagism – (habitual eating of only one kind of food)

Comparative work on digestive efficiency of birds of prey has shown that the Common Buzzard (Buteo buteo), a generalist species, has a greater digestive efficiency on a wider range of prey than the Peregrine Falcon (Falco peregrinus), a specialist species (Barton & Houston 1993). Such variation in the ability of different species to extract nutrients from their food requires the falconer to consider the dietary suitability for his own species and to ensure that the birds of prey in his care do not become locked into eating a narrow selection of foods. Raptors have no innate nutritional knowledge. Like children who would eat burgers and sweets daily if allowed, raptors may be selective. Only enough food of a single type per day should be fed, with diet variation taking place over a period of time, in order to ensure that large enough portions of each food type are eaten thereby maximising the nutritional advantages of each food consumed.

6. Excessive food provision

Birds eat to satisfy energy demands, so on a diet high in energy e.g. a high fat diet; they will eat less and therefore may not obtain the required micronutrients or trace elements from the food they consume. Although the dietary requirements of a captive raptor are less than that of a wild bird, their micro nutrient and trace element requirements will be the same, i.e. proportionately they require more trace elements. Whilst food energy content control is strict in flying birds (for weight control), it is less certain in aviary birds, such that obesity can arise. Excessive feeding leads to selectivity, potentially deficiencies, obesity and the potential for food decay, ingestion of spoiled food and the attraction of vermin.

5. Incomplete diets

Whole diets comprising flesh, bone, skin and casting materials are preferable to partial diets comprising just lean meat. Bones, for example, found in pellets cast by the gyrfalcon, (Falco rusticolus), were heavily modified by digestion, with traces of digestion observed on more than 80% of articular ends, nearly 100% of broken surfaces and on some shafts. It would appear, therefore, that the digestive tract of falcons are adapted to cope with bone structure and that the high levels of digestion found suggest that bones form an important part of the diet of birds of prey.

6. Over enthusiastic evisceration

The liver of an animal stores over 90% of the vitamin A Although this is already covered, since this subject is so content of a carcass as well as many other vitamins (Annex B). important the practical aspects of Ca:P:vitamin D3 are The evisceration of animals, therefore, beyond the removal of also considered, in greater depth, here. Ca:P:D3 in balance, the intestines (where necessary) should be avoided. The routine metabolic bone disease (MBD), also commonly known as de-yolking of day-old chicks will also dramatically reduce their rickets is the most important nutritional deficiency of raptors. vitamin A content and is not recommended except in specific Birds may present with signs ranging from slight bowing of situations, for example when feeding merlins, when yolk once the legs, longitudinal rotation of the tibio tarsae to major a week is the maximum recommended frequency (Forbes and multiple folding fractures of the skeleton and even fits. MBD Cooper 1993). is most likely to occur in fast growing larger species. Breeders should be advised not to feed such species ad libitum, but

Poor preparation, storage and handling

The manner and duration of storage can dramatically affect food quality and nutrient levels. Blast feeding of day-old chicks, for example, produces a significantly higher nutritional quality end product when compared to slow freezing in a domestic chest freezer. If meat products remain at room or body temperature for any period during the euthanasia, freezing, storing, transport, storage, thawing, feeding process, bacterial levels which are bound to be present will be permitted to multiple - rapidly creating a dangerously contaminated diet. Food kept for protracted periods (>3m) in domestic and commercial freezers deteriorates in nutritional quality, particularly in terms of water-soluble vitamins and vitamin E. Freezing is a drying process and long-term storage (unless sealed) can reduce the water content of food. As birds of prey obtain the majority of their water intake from their food, moisture depletion caused by long-term storage can cause potential problems during warm weather. Food should always be sourced from reputable suppliers with modern large-scale freezing plant and with sufficient turnover of stock to ensure that the food supplied has been frozen immediately after culling and is supplied as soon afterwards as possible. The temptation of bulk buying to obtain quantity discounts, with subsequent long-term storage in domestic freezers should be avoided. The method of killing should be ascertained and it should be certain that no toxic or noxious substances could be in the food.

Barbiturate poisoning has occurred in both wild and captive raptors after birds have been fed the carcasses of animals euthenased with pentobarbitone. Other possible toxic contaminants include alphachloralose, mercury, mevinphos and other pesticides. Animals or birds fed to raptors must not have been on any form of medication, or medicated withdrawn food prior to their death. The feeding of day old poults hatched from antibiotic treated turkey eggs has led to infertility (Forbes & Rees Davies 2000). The potential risks of zoonotic (diseases transferable to man from animals) infections should always be considered when handling raptors or their food.

Veterinary aspect of raptor nutrition Common deficiencies and excesses

rather to restrain the potential growth rate. 'Angel wing' or 'slipped wing' (an outward rotation of the section of the wing from which the primary feathers originate) has been experienced in several fast growing larger raptors, in particular when being imprinted. This is readily controlled if diagnosed early by bandaging the primaries against the body, together with Ca, vitamin D3 supplementation and restriction of the growth rate. The diet must comprise of whole carcasses, i.e. not simply muscle (i.e. meat).

The author has investigated calcium deficiencies in free living Golden eagle (Aquila chrysaetos) and European buzzard (Buteo buteo). In the former case the young were parent reared in an area with limited ground game (rabbit or hare). The birds were feeding predominantly on fallen sheep and deer carcasses. However, the young were only consuming meat from the carcasses (as sheep and deer bones were too large for young to ingest). The buzzards were rearing young in an area with a significant rabbit die off due to myxomatosis. Food was plentiful and rabbit bones were too large for young buzzard chicks, moreover in view of excessive food availability selectivity of ingestion was encouraged. A similar situation can arise when a breeder feeds a whole carcass diet of rabbit and pigeon for the parent rearing say, young Harris' hawks (Parabuteo unicintus). Either the young are unable to consume the larger bones or the parents feed what is easiest. The result is severe MBD. It is always a question of what food is consumed by the birds rather than what is provided. Calcium deficiency may also be encountered in neonates produced by a hen with significant renal pathology, or from one which has laid an excessive number of eggs (due to egg pulling or multiple clutching). Any hen likely to 'multiple clutch' should be supplemented with Ca, D3 as soon as the first clutch is completed. Calcium deficiency due to inadequate D3 levels is less common in raptors in comparison with psittacines as most captive raptors have access to day light, this could change in the event of enforced housing due to avian influenza risk.

Obstructions

Casting: is the indigestible parts of the carcass, normally consumed and then regurgitated as a pellet by raptor. This includes hair, feathers and in some cases (e.g. owls) skeletal elements. Casting should not be given to any chicks under 12 days of age, and for some species (e.g. Merlin) not until 20 days of age. This applies in particular to 'hard' casting such as rodent fur, whilst chick down is considerably easier to deal with. Young chicks are typically unable to cast such material; leading to a proventricular obstruction and death. Clinically a firm swelling may be palpable caudal to the edge of the sternum. Standard medical treatment using prokinetics, oral and parenteral fluid therapy, and oral liquid paraffin is typically ineffective. Surgery of such debilitated neonates typically results in the chicks death. If instead the chick is force fed for

a few days, so it increases in size, it will then typically be able to pass the casting itself. Breeding females with developing ovarian follicles and a swollen active oviduct may have difficulties with excessive casting due to lack of coeliomic space. Casting should be reduced rather than increased in preegg laying females. A normal raptor will produce a casting 8 - 16 hours after a meal. Birds cannot be fed again until they have cast. If feeding occurs prior to casting, a small intestine obstruction can arise. If presented with a thin or a weak bird, where it is desirable to increase the birds condition (weight), then frequent, small, cast free meals of readily digestible food (e.g. skinned day old chicks), should be given. As soon as the crop is empty the bird may be fed again.

Inadvertent ingestion of indigestible matter: On occasions organic material may be consumed with food (e.g. peat or vegetable material from nest ledges, wood shavings, which the bird is unable to cast. In such cases an ingluviolith or proventricular impaction may occur. Harris' hawks are considered the most intelligent of the common captive raptor species. They will at times 'play' with materials in their surroundings and can ingest various foreign bodies. One example is that they can learn to untie the knot tethering their leash to the perch. The leash can be pulled free of the swivel and the bird can then swallow the leash necessitating an ingluviotomy, although the bird will often cast it back itself. Large foreign bodies may be safely left 24 hours, in the expectation that the bird will naturally cast them. Owls, both in captivity and in the wild, occasionally eat very long twigs (on occasions 6 - 8 inches long). The bird may appear in appetent, uncomfortable and miserable. Sometimes the twig is 'cast', but on other occasions, it may perforate the crop or proventriculus with a grave prognosis. Endoscopic or surgical removal may be necessary. Another form of obstruction seen especially in the larger owls is the ingestion of pea gravel. The bird is presented with a history of having a good weight but marked loss of body condition. Gastric distension by the gravel reduces the bird's appetite and little or no food is ingested. The condition is often advanced by the time of presentation.

Ingestion of over size food items: the feeding of rabbit or hare carcasses with intact femurs can cause problems. The bone may pass directly into the proventriculus and be digested. However, in larger raptors the bone may rotate into a transverse position in the crop or proventriculus. The bone may form an obstruction in the crop or perforate the gut leading to a terminal peritonitis. If the bone is broken (preferably without sharp ends) before feeding the problem does not arise. A similar situation can develop when pheasant or chicken necks are fed whole. The neck usually passes down straight, but occasionally will double over in the crop or distal oesophagus becoming. On occasions, birds will eat uncommon previtems. The most unusual obstruction encountered by the author was

when a female red tailed hawk (Buteo jamaicensis) which had maintained at 38 - 40oC, with no gastric acid or enzymes caught and eaten a hedgehog (Erinaceous europaeus). Initially present to prevent bacterial multiplication. This occurs most the bird was fine, but after 18 hours with no casting, she was commonly in thin or sick birds which are given an excessive presented for examination. Barium contrast radiography crop of food. The most urgent action required is to empty confirmed the presence of multiple spines and fur lodged in the crop, which will generally require veterinary intervention. the proventriculus. The obstruction was successfully removed The most rapid and atraumatic method is, with the bird via abdominal surgery. anaesthetised and entubated crop, ingluviotomy is performed, Decreased motility: 'Sour Crop' is a common and often rapidly the crop lavaged with warm and closed immediately or a day fatal crop stasis. Ingested meat is held within the crop being or two later.

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REMEMBRANCES OF VIC HARDASWICK

By Bill Johnston

I met Vic Hardaswick in the early 70's at the home of Heinz Meng, my mentor and NAFA sponsor. A mutual friend knew of a great rabbit spot in an old apple orchard in Rockland County, NY. Vic and Orst Itswan would travel to my place in Monroe, NY and together we headed down to Suffern, NY to Meet Frank Webber. Total travel distance from Vic's in Beacon Falls, CT, at least 160 miles, one way. Vic was flying an imprint Goshawk named Tinkerbelle, and Orst, Vic's protégé, a red tail. Of course falconry wasn't legal in Connecticut at the time, so the ever-resourceful Vic somehow found a way to secure licenses from both Virginia and Maine. So, along with "Mike, or Blue" or one of his other beagles we chased bunnies. Never one to stand too much on formality, Vic would use the first rabbit taken as a lure to call Tinkerbelle back when she decided to stray. He would simply throw it in the air and call to his bird.

Vic also attended most of the fledgling New York Falconers Association meets and meetings. His insights and advise, although not always diplomatic were well thought out and right on.

In 1979 my job took me to Oxford, CT, about four miles from Vic's. After we had moved and I announced to Vic that we were neighbors, his first words were, " why the hell would you do



High Flying Gyrtalcons

Neer Hardswick

a dumb ass thing like move to this state!" Several years before I left New York, Gary Starr, who was in the Army, stationed at West Point, and I had secured a couple of eyess goshawks

from a nest not far from Lake George, in

the Adirondacks. The hawk traveled with me to CT, and yes before I surrendered my New York falconry license, I was able to get one from another state.

From then until Vic, Jan and their daughters moved to Ithaca to work for the Peregrine Fund at Cornell, we would head to Massachusetts most weekend to catch up with John Tobin and Tommy G. and hunt bunnies on "Cottage Street" in Springfield. I never saw any cottages on Cottage Street. It was an overgrown landfill in an industrial park, where despite the cold, the water never froze.

Long before anyone in Connecticut ever thought about legalizing falconry in the state, Vic was working as a one-man army to achieve recognition through legislation, or regulation. His arguments convinced the wildlife authorities and legalization of falconry was placed on the house agenda for a



vote. The day that it was to be considered, a bunch of citizens showed up in hawk costumes and protested on the state house steps. Ella Grasso, the governor along with everyone else headed for the hills and that doomed any further effort on Vic's part to convince Connecticut lawmakers to join the many other states that had adopted falconry regulations.

Vic was one of the first people that I know of to breed falcons in captivity. At the time, peregrines were in steep decline and gyrs were beyond the reach of most people. Prairie Falcons were the only large falcon available for falconry. He had a pre act peregrine and bred her to a prairie, telling me that his reason for making his own birds was to ensure that he would continue to have falcons to fly.

I lost contact with Vic after he moved to Cornell. It wasn't until he settled in Centerville, SD to start a breeding program with Don Hunter that we re-connected. Always hospitable, I made many trips there and stayed with Vic and Jan. Others made the pilgrimage too, like Ed Hepp and Darryl Perkins. I purchased several Finnish Goshawks bred by Vic and found them second to none. When it came to raptors, Vic just had a knack for understanding them, flying them and breeding them.

Although I knew of Vic's ill health, it still comes as a shock when someone larger than life such as Vic is lost. We are all a little richer for having known him, and a whole lot poorer for his passing.

"The traditional sport of falconry was passed down to us from our fathers, from a time when we were close to nature and life was more simple. It is a constant reminder to us of the forces of nature, inter-relationships of the between living things and the land they share, and of our own dependance on nature. Falconry depends on healthy populations of the quarry, such as the Houbara, and they in turn depend on the continuing health of their breeding and wintering grounds. Falconers thus have a concern for natural habitats and for the sustainable use of resources.

During my own lifetime, I have seen many remarkable changes and achievements occur in the Middle East. Oil has brought immense benefits for the welfare of our people. But progress can also pose problems for nature - pollution of land and sea, unwanted development and spoiling of natural areas, and disturbance of quiet places which once gave refuge to wildlife. Some of the prey species have suffered from loss of habitat, and from persecution or over-hunting. It is importance for us to take steps to turn the tide before it is too late, in order to safeguard the future. All of us share a common goal: the sustainable, balanced use of resources. We wish to leave the earth as good, or better, than we found it."

Sheikh Zayed Bin Sultan Al Nahyan The Late President and Founder of the United Arab Emirates

