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ULRICH TIGGES & MANDY MAYER (Eds.):

Report and summaries of the presentations, and additional contributions, given to *The Second Commonswift Seminars* Berlin, 10th - 12th April 2012

The 2nd international Commonswift Seminars took place in Berlin from 10th - 12th April 2012 and were initiated and organised by Ulrich Tigges. The location and the duration of the programme reflected the wishes of the attendees of the previous Seminar in 2010. 78 attendees took part and they came from 20 countries: Belgium, China, Czech Republic, England, Germany, Guernsey, Indonesia, Israel, Italy, Netherlands, Northern Ireland, Poland, Romania, Russia (Siberia), Scotland, Slovakia, Spain, Sweden, Switzerland and Turkey.

After his welcome address, Ulrich Tigges remembered the victims of the Second World War, many of whom will have been birdwatchers and some may even have been Swift enthusiasts, and then the following presentations were given. The majority of the summaries of the presentations which appear below in alphabetical order, according to the name of the speaker, were written by the lecturers (and appear in non-italic script). They are followed by a resume from the editors (in italics) of any discussion which took place after the presentation.

On the 13th April an additional excursion was made as part of the Seminar to the exhibition "Feathered Flight" at the Museum of Natural History in Berlin (Leibniz-Institut für Evolutions- und Biodiversitätsforschung an der Humboldt-Universität zu Berlin), which included the original fossil of Archaeopteryx and its counterpart, the impression it made in the limestone surrounding it. A special tour followed to the ornithological collections of the museum, including the collection of *Apodiformes*, guided by the curator Dr. Sylke Frahnert, to whom we express our thanks.

Thanks to the generosity of the Director Klaus-Randolf Weiser the meeting was held in the Evangelische Schule Neukölln (Evangelical School of Neukölln).

SUSANNE ÅKESSON:

The migration of Common Swifts tracked by geolocators

The Centre for Animal Movement Research in the Department of Biology at Lund University in Sweden has used small light-level geolocators to track the migration of different populations of Common Swifts in Europe, from Italy in the south to Swedish Lapland in the North. The project was initiated in 2009 when we started to track Common Swifts in South Sweden. The tracking of small avian migrants has only recently become possible by the use of small light-level geolocators, allowing the reconstruction of whole migration routes, as well as the collection of data on timing and speed of migration, and the identification of wintering areas. Six individuals were successfully tracked throughout a complete migration cycle from Sweden to Africa and back. The autumn migration followed a similar route in all individuals, with an initial southward movement through Europe followed by a more southwest-bound course through Western Sahara to Sub-Saharan stopovers, before a south-eastward approach to the final wintering areas in the Congo basin. The birds spent approximately six months at the wintering sites, during which three

of the individuals shifted sites. Spring migration commenced in late April towards a restricted stopover area in West Africa for all but one individual which migrated directly towards the north from the wintering area. In this talk I will present data from our first tracks from Sweden and give some examples from some of the other Swift populations. From 2010 we have jointly generated migration tracks from more than 45 individuals. The project involves local ringers and scientists from a number of countries across Europe, including Belgium, Germany, The Netherlands, UK, Italy, Finland and Sweden. Details of the research findings will be published in due course in the relevant scientific publications. If you are interested in participation in the programme, please contact: susanne.akesson@biol.lu.se

In discussion the following points were made:

- *There has been more than 10 years of recording of the Autumn migration through the Straits of Gibraltar with huge flights of Swifts seen but they do not appear in the Spring which implies a different return route;*
- *Average recovery rates under the programme have been 60%, some of that is due to natural mortality but some can be assumed to be due to disturbance;*
- *The position of the geolocator on the bird's back means that entrance holes need to be checked to ensure that the bird can enter and leave comfortably. In one case the Starling guard was taken off and in another, the height of the hole was raised;*
- *The accepted belief is that non-breeders fly for a number of years without landing before they breed but it is not clear what evidence underpins this assumption. This will require different research techniques than the geolocators;*
- *Anyone participating in the geolocator programme will need to be covered by whatever licensing arrangements apply in their respective countries and should not participate without considering the need for the care of the birds. The University of Lund supported their own application with arguments based on the long-established reputation of the Lund Migration Group, the species' decline and the need to explore where the birds' problems stem from ie in their breeding sites, on migration or in Africa;*
- *There must be very careful protocols for the handling of the birds. The advice is to catch them, whenever you can, outside the nesting site/box so that they do not associate the disturbance with the box and continue to think of it as a safe area.*

SUSANNE ÅKESSON,
on behalf of Susanne Åkesson, Petra Carlsson and Jan Holmgren:

The use of stable isotopes to define areas of origin for European Common Swifts

Several years ago we started to collect feathers of Common Swifts breeding in Europe with the aim of identifying the areas of origin of breeding Common Swifts across Europe. We have collected feathers from breeding adult Common Swifts and from nestlings thanks to many kind ringers and Swifts' enthusiasts who have helped us over the years. We have gradually analysed the ration of the stable isotopes nitrogen, carbon and deuterium in different Swift populations and, thanks to a recent grant, we have been able to finish most of what we aimed to do in terms of analysis. The project was set up in two parts in order to study across Europe how the isotopes (carbon, nitrogen but also deuterium) vary in nestlings which have been raised in a local area. We have also used stable isotopes in feathers collected from adult Common Swifts which have been grown during their wintering time in Africa. From these feathers we have seen larger variations than in the nestling feathers suggesting the Swifts are feeding on a larger variety of

insects in Africa or visit several sites in their wintering quarters. In this talk we will present an update of the situation and give examples of how stable isotope analysis may be used in the study of Common Swifts. We will present data from different study populations as well as from several years, including both nestlings and adult Common Swifts.

In discussion the following points were made:

- *The technique had not proved helpful in establishing geographical locations because of the variation in the diet of the birds and their ability to move about over significant distances. The University would be continuing with the programme to explore other factors:*
- *In some countries it was necessary to seek approval for collecting feathers. The University of Lund had asked people who donated feathers to ensure that they had the necessary local approvals and in some cases they had used feathers from dead birds which did not require any approval.*

DEREK BROMHALL:

The film of "Devil Birds"

The film 'Devil Birds' - an old English name for the Common Swift – was made in Oxford in the 1970s, at their nest sites in the roof of the University Museum of Natural History. Years ago nest boxes were installed behind the ventilation flutes of the Museum tower, and the breeding birds have been monitored there for many years.

For filming, the nest boxes were modified, with glass panels, and the birds were conditioned to accept the filming lights and the sound of the (pre-digital) cameras.

Following their arrival at the beginning of May the breeding swifts were filmed nest building, egg laying and rearing their chicks. The weather that summer was exceptional for England, with months of hot, sunny days. Although this allowed the birds to catch an abundance of insects (and an occasional spider!), it also had serious consequences. The heat in the tower, under the slate roof, was often suffocating, and many chicks fell to their deaths in their search for cooler air.

The film follows the young Swifts' growth and development through the summer and ends with the fledglings, identified by their white faces, peering out from the nest entrances before dropping into space and taking to the skies, their natural element.

In discussion the following points were made:

- *The film was still very important for a scientific understanding of the Common Swift's breeding cycle but also for enthusing people with the beauty and wonder of this bird;*
- *The speaker had made a copy without the English soundtrack which meant that copies with dialogue in other languages could now be made.*

LUIT BUURMA:

Swifts ascending at dusk and dawn: from individual navigational skills, via social performance, towards group decisions?

Since the pioneering work of Weitnauer and the famous book "*Swifts in a Tower*" of David Lack the Common Swift (*Apus apus* L.) is widely known as the most aerial of birds, even sleeping on the wing. Old Dutch radar observations of social "roosting" over water made the bird even more mysterious. In a non-peer reviewed conference paper*, images from 1979, 1996 and 1999 were shown indicating that the birds characteristically aggregate at night over Lake IJssel, in the centre of The Netherlands. They fix certain distances to coastlines, apparently using them as landmarks for orientation while ascending and descending after dusk and before dawn. The then new hypothesis was that the Swifts socially "evaluate" weather dynamics by averaging their individual assessments of the altitudinal wind vector/air pressure gradient.

Recently, a comparable hypothesis was put forward for juvenile Southern Bluefin Tuna. These fish perform so-called "spike dives" precisely timed with respect to sunset and sunrise, suggesting a relation to navigation under water. We show new simultaneous registrations of Swift ascents by means of two different types of radar. Improved horizontal and vertical radar resolution enable us to describe a remarkable mirrored resemblance of spatial behaviour of birds and fish.

Furthermore, the social component of ascents above Lake IJssel indicates an intriguing link between navigation, information sharing and learning. Our radar images suggest that the special climb phenomenon is a mix of play and performance. It seems to enable non-breeding Swifts to cope with the synoptics of the weather as well as to acquire social prestige. The supposed sharing and improvement of food finding abilities resemble the information transfer in waggle-dancing Honey Bees. It made me speculate a little on the interplay of individual survival and group selection, and ultimately on the biological roots of culture.

* Buurma, L.S. 2000. *Dusk and dawn ascent of the Swift, Apus apus* L. Proc. Int. Bird Strike Committee 25 Vol II, p. 113-124 – see www.int-birdstrike.org under the earlier title: *Bird strikes above the boundary layer.*

In discussion the following points were made:

- *In the middle of the night the birds concentrate in what looks like a flock (the calibration still needs to be done but at least 100,000 birds) above the centre of the Lake. They could just be sleeping but the speaker believes they are also having fun;*
- *There are huge flocks of midges over the Lake and there was an exchange about whether the Swifts could be feeding at night. One participant with a large long-standing colony expressed the opinion that the birds need to see the insects to feed and that Swifts' eyesight is no better than humans, therefore they cannot feed in the dark;*
- *The speaker's assumption was that his research was looking at non-breeders and referred to Swedish research indicating that non-breeders have a quicker wing beat than adults. It also implied that adult birds take more risks by flying low for food and then getting hit by cars whereas non-breeders go after higher flying insects. Susanne Åkesson said that the difference in wing beats shown in the research for non-breeders was too small to be used as an identifier. The comment was made by a number of participants that the use of drones (small robot aircraft now available for civil purposes) might be*

valuable in tracking Swift flight at low level and producing real time CCTV images of their activity to complement the speaker's research;

- *Another participant with a colony commented that all his adult birds return to the boxes to sleep every night during breeding, implying that they need and like their sleep. His assumption therefore is that all the birds screaming and "banging" outside are non-breeders who scream for a time and then rise up as night falls. It was also recorded (in 2011?) that in late August, after all the Northern Ireland Swift breeders had left, thousands of Swifts were found feeding over Lough Neagh, which were clearly not NI birds.*

BRIAN CAHALANE:

Fledging Failure in a Common Swift colony at Crumlin

I have attempted to ascertain if a pattern or fixed rate for fledging failure could be correlated in relation to the size of a growing colony over a period of four years. With this in mind all fledging failures were weighed, measured and examined for any parasitic infestations or injuries, and the results presented statistically. All external factors were taken into account such as wind, temperature, sunlight etc, and evidence was presented to show that this is happening elsewhere and may be overlooked at other colonies especially those with trees and dense vegetation in the near vicinity.

The object of the talk was to make the participants at the Seminar more aware of this phenomenon and to be more vigilant at their respective colonies.

In discussion the point was made that the first few seconds when a fledgling leaves the nest place are crucial and if they falter, they can fall to the ground. Windy weather in general does not seem a problem but sudden gusts of wind can knock them off their course. Also, the screaming parties of non-breeders seem at times to encourage the fledglings out too dynamically and they falter. There was then a discussion about whether the adult birds' behaviour is meant to be helpful or is just harassment, without a conclusion being reached.

BRIAN CAHALANE (with Dick Newell):

Diet at the Crumlin Common Swift colony

In 2010 I was contacted by Marian James who was very keen to see what Swifts at my colony in Crumlin were eating .When she heard I had House Martins and Swallows at my house she was anxious to analyse the faeces of all three to ascertain if there was competition between the species. The results were presented at the Seminar in graph form.

Because Northern Ireland has such a huge lake in relation to its size, namely Lough Neagh, particular emphasis was placed on the eco-system of this lake to Common Swifts and the possible threat of a newly established invasive species namely, the Zebra Mussel (the mussels could cover the bottom of the lake and thus prevent flies from completing their life cycle with drastic effects for the Swifts – and the Lough's eel industry).

The final part of the talk concentrated on the feeding techniques of Swifts when feeding in the vicinity of Lough Neagh.

MARTIN CEL'UCH,
on behalf of Martin Ceľuch, Ján Gúgh, Ján Kaľavský, Katarína Staples:

Will the Common Swift survive in Slovakia?

Nearly 99% of our Common Swift (*Apus apus*) population currently uses man-made structures (airshafts for ventilation, cracks and crevices in building blocks, attics of buildings, etc.) as breeding habitats.

Although the species is protected by legislation (the Nature Conservation Act, the Order of the Ministry of Environment and two European Directives), its population has been decreasing very rapidly due to extensive thermal insulation of buildings in most Slovak towns. While 15 years ago, the number of breeding pairs in Slovakia was 30,000 to 60,000, it is currently estimated to be declining by an average of 50-60%. In some towns (Zvolen, Štúrovo) Swifts have almost completely disappeared.

The results of monitoring show that in every city, even in different parts of the same city, the number of destroyed nesting sites varies. In Bratislava's city district of Petržalka, where approximately 1300 pairs of Swifts used to nest, from a total number of 315 identified nesting sites, 185 locations are still available for nesting (59%). In contrast, in the city district of Dubravka, from a total of 162 suitable sites it is now only possible to nest in 24 buildings (15%).

Active efforts to save the species began in 2010 with the monitoring of nesting sites (mapping was done in almost 30 towns) and by the installation of nest boxes on buildings, as well as the use of modified ventilation grills which allow Swifts to nest in airshafts. The first exemplar sites have been set up in 13 Slovak cities and the trend to implement similar measures is increasing. At present, there are about 120 nest boxes, mostly made from extruded polystyrene, installed in Slovakia. These have created alternative nesting sites for about 500 breeding pairs. In Bratislava, the capital, there have been 66 nest boxes installed so far. In addition to nest boxes, approximately 900 modified ventilation grills have been used on 30 buildings.

An important step toward the protection of the Common Swift in Slovakia is the joint guidance from the Ministry of Transport, Construction and Regional Development and the Ministry of Environment, issued in 2011. It provides guidance for the relevant government bodies as well as builders, for the protection of birds and bats during insulation and renovation/refurbishment work in buildings.

In discussion the following points were made:

- *There was no comprehensive data as yet on the extent to which the nest boxes are being used but it was clear that some at least, were occupied;*
- *The speaker agreed with a participant from Germany that woodpeckers can be a problem. The Slovaks use silhouettes of Sparrow Hawks to deter them.*

YUE CUI:

The Beijing Rain Swallow – the Common Swift in Chinese culture and tradition

The Common Swift (CS, *Apus apus pekinensis*), known as Beijing Yu Yan (Beijing Rain Swallow), is also called Hu Yan (Northern Swallow), Ye Yan (Wild Swallow), as well as Lou Yan (Building Swallow). *Apus apus pekinensis* was first named by Robert Swinhoe based on a swift taken in Beijing in 1870. The CS plays such an important role in Beijing culture and tradition that ancient Beijing was even called the Swift Capital.

The CS became well-known as Nini, one of the five Fuwa, the official mascots of the Beijing 2008 Olympic Games. Nini carries a message of friendship and peace and comes from the most popular Chinese traditional Swift-like kite. Her golden wings symbolise the infinite sky and she spreads the blessing of good luck to all the places she flies by.

Among over 200 types of Beijing kites, the Swift-like kite stands out because of its perfect performance in the sky and its cultural implications. Different shapes of Swift-like kites convey different meanings: the fat Swift and juvenile Swift represent a healthy boy; the thin Swift represents a beautiful girl; and the Twin-Swift represents the beloved couple, etc. Personalised drawings on the kite represent people's wishes. The structure of a standard Swift-like kite contains five bamboo battens, which guarantees both simplicity and stability.

4,500 years ago, Jian Di, one of Emperor Ku's wives, saw a Swift fly by and drop a colourful egg when she went out to bathe with two sisters from her clan. She happily picked the egg up and swallowed it and she then became pregnant and gave birth to Qi, the founder of the Shang Tribe. Thus, the Swift became the totem of the Shang Tribe.

Besides this famous folktale, there are a group of ancient Chinese classics which mention the CS. The fact that the CS breeds in people's houses made them believe that it was auspicious to marry and produce offspring at the time when the CS came. It was even said that women could not get pregnant until the CS came. If a woman was fertilised during the Swift breeding season, her child would be called the offspring of a CS. A couple would be called a "Swift couple" because people considered the CS as a beloved idol representing loyalty because the Swift never changed its partner once chosen.

Since the CS is neither a threatened species nor does it benefit government directly, local governments pay little attention to its conservation. We, therefore, propose that we should try to arouse government's interest in the future conversation of the species by focusing on its relevance to tradition and culture rather than to its threatened status.

IGOR FEFELOV:

Swifts in Central and East Russian Asia: what we know today?

The first mention of Swifts in Central and North-East Asia was made in the mid XVIII C. by Russian naturalists working in the Trans-Caspian region (P. Rychkov (1762), I. Lepekhin (1771, 1821)) and naturalists from the Great Siberian expeditions (D. Messerschmidt, S. Krasheninnikov, J. Georgi (1775, 1800), P. Pallas (1776, 1827), etc). This research covered the huge territory of Northern Asia and provided the first data on bird distribution. Much later in the

XIX C., more data was obtained by several researchers such as G.Radde (1855, 1856, 1857, 1861, 1863, 1887), A. Middendorff (1851, 1863, 1867), N. Przhewalski, etc. The work of L. Taczanowski, "Faune ornithologique de la Siberia Orientale" (1891-1893), brought together the known data on Common, Pacific and Needle-tailed Swifts in East Siberia, from the River Yenisey east to the Pacific.

In Central Asia, many birds were collected and their biology was researched by e.g. N. Przhewalski (1875, 1883, 1888), G. Loudon (1903), O. Finsch (1879), P. Kozlov (1905), P. Sushkin (1908, 1914, 1938), etc. in the late XIX and early XX C. More intensive ornithological research in Central and North-East Asia began during the XX C. Valuable information on Swifts was obtained by a set of expeditions in Yakutia, in the Russian Far East, and in Central Asia. In the early XX C., as was the case in previous centuries, the main method for bird study was through collecting specimens. This provided data mainly on distribution, morphology, moult and food. However, important data about behaviour and some of the biological features of Swifts was also obtained at that time.

Observation of migrations of Swifts in Central Asia was made by a team from the Zoological Institute (Sankt-Peterburg) in Central Asia in the 1980s. Long-term observations on Swift migration were done in Central Asia and Western Siberia by scientists from the Institute of Zoology (Almaty, Kazakhstan) and the Institute of Systematics and Ecology of Animals (Novosibirsk) in the 1960-1980s during special programs on bird migration in Asia, and later by Krasnoyarsk State University in the 1990-2000s. The Institute of Biology and Soils in Vladivostok did a bird research in the 2nd half of the XX C., including work on the breeding biology of Needle-tailed and Pacific Swifts. In this period, large amounts of data on numbers and timing of migrating Swifts, and other behavioural data were obtained.

Chapters covering all the Swift species of the USSR, including a lot of information from Central and NE Asia, were included in several identification guides and handbooks. The most important ones are "Birds of the Soviet Union" (Russ. ed. 1951-1954; Swifts are covered in Vol. 1, 1951), "Birds of Russia and adjacent regions" (since 1982; Swifts are covered in the 2005 volume), and regional handbooks, such as "Birds of Kazakhstan" (1960-1974; Swifts are covered in Vol. 3, 1970). Distribution and habitats, morphological features, migrations, time schedule and biological features of breeding, and moult, are well described.

In the USSR and ex-USSR, between 1918 and 1945, twelve papers out of four thousand ornithological publications, mainly in Russian, were dedicated specifically to Swifts. Between 1946 and 1970, the figure was 16 out of c. eight thousand. The number of papers, monographs, and short notes on fauna which mention Swifts is very large. However, the number of specific Swift papers remains low despite the number of ornithological publications increasing significantly. In Eastern Siberia, Common and Needle-tailed Swifts are less studied due to their predominant habit of breeding in tree holes vs. the Pacific Swift which breeds in big colonies in cliffs, and in cities and villages.

The migration of Swifts in the region has been poorly studied due to the low level of ringing at breeding grounds, as well as at wintering grounds. However, at the rocky islands of Lake Baikal, c. 70 adult and young Pacific Swifts were ringed after capture at the nest in the 1970-90s. Six of ten adult birds ringed in 1985 were recaptured in the same nests the next summer. One Swift captured there in 1985 was recovered breeding at a distance of c. 150 km north in 1998.

Thus, there is a general level of data on Swifts in the Asian part of Russia, and Central Asia is well covered now. However, there are many gaps in the data relating to more detailed aspects of

a Swift's life, ie. bioenergetics, time and energy budgets, night behaviour, details of migration paths.

In discussion the following points were made:

- *The Common and Pacific Swifts arrive in the first half of May after the snow melts and the Needle-tailed swifts arrive a bit later;*
- *It is impossible to estimate the size of the population of tree breeders but they do not breed in dense forest rather in trees on hilltops and at the margins of the forest.*

MAURO FERRI:

Exploiting Swifts - A history of challenges, choices, solutions and change

Common Swifts are nowadays associated almost everywhere with the buildings where they nest during their brief stay in their breeding areas but we should not forget their original ties with the primeval forests where they used holes in big trees drilled by woodpeckers or caused by rot, as still happens in a very few parts of their range. When Rome laid down the paved roads which connected the borders of its domain, the forests still covered most of Europe and Swifts may have been rare in the urban landscapes. Indeed, Pliny the Elder (in 77 AD), writing about these birds "without feet", made no mention of their presence in buildings or towns and indeed noted that they nested "in crags"; on the other hand, it is known that the Greeks and Romans fitted their roofs with artistic plugs in the hollows under the tiles, preventing the use of these spaces which are now much used by many little animals (birds and bats). The situation probably did not change during the next millennium that vast forested areas continued to occupy much of Europe and the mountains of North Africa but then during the Middle Ages, massive deforestation started to take over more and more arable land for a growing population.

So, faced with the progressive and intensive destruction of the old trees where they had nested, Common Swifts (along with Alpine Swifts, Sparrows and Starlings) started to search for alternative holes, such as those under roof tiles or the scaffold holes which had been included in the high buildings of castles and towns (walls, towers, domes, steeples, palaces). Perhaps these 'newcomers' were noted and someone thought of creating specific holes for them with the aim of gaining more food, since in these times wildlife was the commonest source of meat. The term "sparrow towers" may have been in use in XIII century Tuscany. Later, during the XV century, in countries quite far apart but connected by merchants and bankers (Northern Central Italy, Northern France), we have evidence of widespread use of artificial nests (for Swifts in Italy; for Sparrows in France) in the form of similarly shaped terracotta pots modified to be embedded in walls (in Italy), or to be hung around windows (in France, where perhaps the thin sections and the use of wood and mud to build the walls of the houses made other solutions impracticable with rare exceptions). It is well documented that in Italy there was a practice from the XV century of creating nesting cells embedded in walls using complete, modified or fragmented terracotta pots, or, by dispensing with pots and just placing stones and/or bricks to make the cells. They were also made in wood, stones or bricks and placed on interior shelves, and these practices were in use until the mid XX century, mainly for Swifts (swift towers, but artificial nests were common also in dovecots, bell towers, churches, palaces, walls of houses and barns) with the exception of a limited area in the Po River valley where such structures, from the XVI-XVII century, focused particularly on Sparrows (sparrow towers, and sparrows nests in barns and houses), because these birds were becoming more abundant as farmlands were increasingly taken over by cereal crops (wheat, barley, rice).

In the North East of France and in The Netherlands, although it was known how to embed these cells in walls, the practice was mainly to use terracotta 'bird pots' (documented since the XV century) which were hung outside houses or on the branches of trees, and this practice spread through France and up the slopes of the Spanish Pyrenees, and through the Netherlands and into some parts of northern Germany. In the XVI century the 'sparrow pots' were also in use in a few counties of the South East of England and a little later these devices were introduced eastwards in some Baltic area countries and westwards in the North American colonies. Despite documents and iconographies which bear witness to their abundant and widespread use until the early XX century, the 'sparrow pots' and 'starling pots' disappeared completely in a few decades from the landscape and local memory of France, Belgium, Spain, The Netherlands and England, where rare and ancient specimens still survive in some private or public collections, often as a curio. It is clear that the main reason for the Swift and Sparrow towers was to gain chicks for meat and this was common for Swifts and Sparrows in Italy and for Sparrows in France and neighbouring areas, including Southeast England where 'sparrow pies' lasted as a well known delicacy until the early XX century. It is interesting that in Italy and France methods of good practice to prevent the overexploitation of broods and to avoid the impoverishment of the colonies were adopted and documented and it is a fact that often these traditional artificial nest sites offered hundred of cells to the birds in huge towers where lines of holes were added to many times through the centuries, combining 'cropping' with the improvement of the colonies. In England it seems that the use of artificial nests for Sparrows was linked to the search for high value wild meat for both farmers and the middle class, but its main aim was the destruction of a species considered a pest for crops until the early XX century.

Also worthy of note was the use of 'sparrow pots' and 'starling pots' in The Netherlands where there may have been some interest in the birds as food, but there is certainly a documented widespread interest in placing pots on houses and trees with the aim of attracting so-called 'good luck' birds. This use of 'bird pots' was diffused through the Baltic South coast and spread towards North America where the practice became suddenly popular and was soon used to attract species of birds already favoured by the native populations, such as Purple Martins.

This complex historical legacy linking different European and non-European countries deserves more attention than it has received up to now both to safeguard cultural heritages and traditional technologies, but also because the techniques for creating historical and traditional artificial nests for Swifts (and Sparrows, too) could be important in revitalising our relationship with these birds, menaced by maintenance and renovation practice and by energy saving policies which are expelling them from our buildings and exposing them to a severe lack of suitable sites for nesting. In sum, the rewriting of the history of artificial nests and the enhancement of historical experience could offer a better support to projects for Swifts (and Sparrows) conservation worldwide.

In discussion the following points were made:

- *Around 10% of all rural historic buildings in the speakers region in Italy had holes for birds but the vast majority were neglected and in ruins; in recent years some of these historic nest sites have been used as a model for embedding nest holes in new or renovated buildings, or to modify scaffold holes in a way that excludes pigeons while offering a refuge for Swifts (and bats too);*
- *There were some potteries in the Netherlands and France (and Canada) that still made these bird pots but they needed encouragement to continue production (another delegate had found a potter in Champagne who made them and was keen to make more);*

- *In Andalusia there is a colony in the castle of Aroche (Huelva) which was using ancient embedded pots in bad condition and these have now been replaced with new embedded pots (referred to by Miguel Carrero);*
- *In Finland there is a monitored swift colony which is using nest-boxes embedded in the gable of a house built in the early twentieth century; no other similar example is known in the Baltic area (referred to by Susanne Akesson);*
- *Multiple nesting boxes for sparrows were put on mosques in Istanbul in the sixteenth century (some images of "sparrow palaces" on old buildings were shown later by Levent Turan in his presentation).*

CHARLES FOSTER:

The migration routes of UK-nesting Swifts

This was a review of the results of research on the migration routes of UK-nesting Common Swifts before the use of geolocators (see other presentation by Susanne Åkesson). The recoveries of UK-ringed swifts in Spain, Congo, DRC, Malawi, Algeria, Morocco, Mozambique, South Africa, Tanzania, Tunisia, Zambia and Zimbabwe, coupled with a few anecdotal observations of Swift gatherings in the Gulf of Guinea, and estimates of the likely average ground speed of migration (a rough average of 40 mph (64 km/h) (Lockley, 1970; cp Hedenström & Alerstam, 1998; Henningsson et al, 2009 - with average speeds higher on the northward than the southward journey), suggest that UK-nesting birds travel both to and from central and southern Africa via the west coast of Africa, and Spain. The northward journeys may take a more easterly trans-Saharan route than the southward journeys.

ENRIC FUSTÉ HENARES:

General aspects of insect and non-insect diets when hand-rearing Swifts

Nestling growth and development requires the integration of a variety of factors. The conditions under which the birds are maintained, their diet and the amount of parental care received, have a profound influence on the health and development of nestlings. Husbandry management needs to take into consideration all the factors which stimulate growth in their counterparts in the wild.

Diet is an essential factor and nestlings in captivity should be fed the same foods the parents would have fed them in the wild, however, duplicating this is a challenging task. Wildlife rehabilitation centres dealing with insectivorous species may encounter difficulties in the hand-rearing of large numbers of chicks as there is a limited selection of commercially available insects and they tend to be expensive. Even where it is possible to use insects to feed insectivorous species, diet is often limited to a single insect species. The nutritional composition of commercially produced insects has been studied by some authors who have demonstrated that they may be inadequate without appropriate supplementation. Cost is usually the limiting factor in using insects, an important constraint which has resulted, along with issues of effort and accessibility, in the use of alternative diets. The formulation of a diet is extremely complex; a balanced diet requires the precise combination of 45 different nutrients (chemical elements and compounds). A properly formulated diet needs to evaluate the large number of nutrient interactions, consider the differing bio-availabilities of these nutrients from different ingredients

and be able to include the micronutrients into the diet. Several authors have developed diet formulas where the main components are non-insects or these are combined with insects, and claim good results with nestling passerines, stating that some of these diets can be used as a stand-alone substitute for insects. Insectivorous bird species, particularly aerial feeders, consume a huge diversity of invertebrate species which presumably supply a complete diet, enriched besides by the intestinal content of the prey.

Research done by the author comparing different insect and non-insect diets revealed how final fledgling weights, feather condition and flight performance on two non-insect diets (rat mince and Kibble), were questionable when compared to chicks hand-reared with insect diets and birds raised in the wild. The results were paralleled when comparing two insect-based diets, cricket and mealworm. The author emphasises the success of the mealworm diet and that it has even proved successful when hand-rearing Chimney Swifts. There have been concerns generated by negative information on the use of an insect-based diet to hand-rear Common Swifts but this negative information has not been validated and should be scientifically investigated as it may adversely affect husbandry improvements. Rehabilitation centres without enough resources to use the recommended but expensive cricket-based diet may step back and keep on using non-optimal diets because an insect diet is "supposedly" dangerous for hand-rearing Common Swifts.

In discussion the following points were made:

- *There was an exchange of views about hunger v force feeding. In the speaker's experience it was always necessary to force feed for the last 4-6 days before releasing the chick;*
- *There were concerns that the handling of swift chicks for feeding might damage their "feather dust" (oils needed for flight). Another carer commented that she always used rubber gloves in feeding;*
- *The full role of the parents' saliva in feeding is as yet unknown. It appears to aid feeding and digestion and may have a role in immunisation. The speaker believed the loss of the saliva was not critical as long as the chick had experienced natural feeding for at least 10 days;*
- *All patients at the speaker's recovery centre are ringed but there have been no recoveries. Only 2 ringed Swifts from rescue centres have ever been reported as recovered and these were from Germany.*

ENRIC FUSTÉ HENARES:

Success in hand-rearing Common Swifts (*Apus apus)* using a diet based on mealworms (*Tenebrio molitor*) at a wildlife recovery centre: Analysis of survival and fledgling weights compared to those on previous diets not composed of insects.

Diets for insectivorous birds represent a major challenge. The optimal diet would be composed of different insect species and some rehabilitation centres currently hand-rearing insectivorous species do use diets based on mixed insect species (crickets, drones, wax moths larvae, flies), although involving only a limited number of admissions. A diet based solely on domestic crickets (90%) and large larvae of the wax moth (10%) is used in some rehabilitation centres in Europe specializing in hand-rearing large numbers of Swift chicks, with optimal recovery results. However, the crickets produced commercially are extremely expensive.

The results of a comparative study on diets conducted in CRFST (6th European Zoo Nutrition Conference) posed concerns for the non-insect based diets. In contrast, the study demonstrated excellent results using a diet based only on mealworms, an insect produced commercially but five times cheaper than the cricket. The mealworm diet is somewhat controversial as some anecdotal reports attribute health problems to it. Despite this, mealworms are used with success in hand-rearing Chimney Swifts (*Chaetura pelagica*) in the US. Histopathological analysis performed on three Swifts fed on mealworms for more than 20 days documented an optimal physical condition and no evidence of disease or organ damage that may be associated with the mealworm diet.

Concerns about the poor results observed in non-insect diets (rat mince and Kibble cat food) and the contrasting results with insect diets, led CRFST to make a drastic change in insectivore diet protocols. The mealworm diet was used in the breeding season 2010 and onwards as a base diet for the hand-rearing of Common Swift, Alpine Swift and other insectivorous birds. The results for the 2010 season using the mealworm diet show a significant increase in final weights and also on survival rates when compared to 2009, where the diet was based on Kibble cat food, and over 2008 and prior years where the diet was rat mince. The mealworm diet showed a survival rate nearly 30% higher than for the two previous non-insect diets – particularly notable in acute clinical categories (72.4 % mealworm diet, 44.0 % cat food and 45.7 % rat mince). Euthanasia based on the physical condition at admission was discarded in 2010 (previously acute cases, representing around 25 % of the Swift admissions, were sacrificed as no improvement was observed under rat mince and cat food). Despite this, after a period in the centre even with the insect diet, around 17 % of chicks were sacrificed due to the irreversible condition of the plumage. As for final weights, there was an average increase of 5 grams (adult weights around 40g) with a remarkable increase of 7g for the youngest chicks. Importantly, the increases were parallel in all clinical categories, including acute severe cases. Looking at the results, we recommend that the use of non-insect diets when hand- rearing Common Swifts is discontinued and a pure insectivorous diet is adopted. Mealworms could be a very good alternative when crickets cannot be used for economic reasons.

The success demonstrated is given greater significance by the fact that all the birds fed on the insectivorous diet had a high possibility of survival, even those in an initially acute condition. This renders any protocol based on poor clinical condition at admission as redundant.

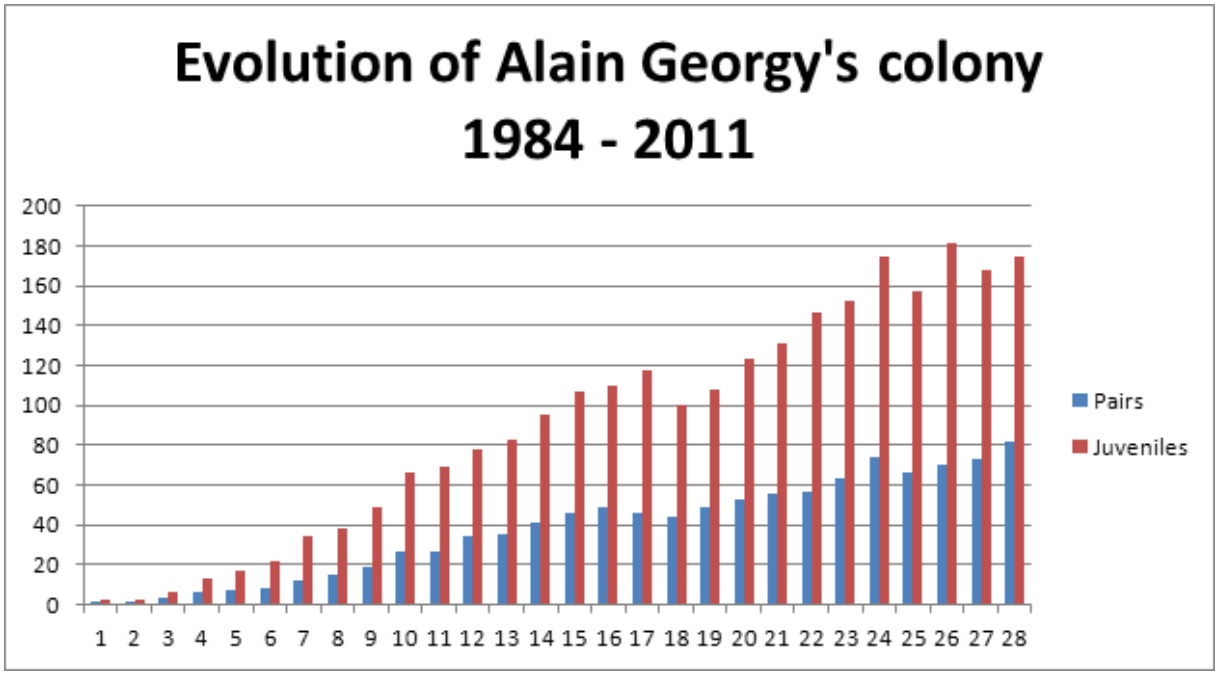
In discussion the speaker confirmed that he had never used the mealworm diet without the supplementary vitamins. It had never been his intention to invent any new diets but to take advantage of the successful experience of others and those using diets based on crickets had used additional vitamins.

MARCEL S. JACQUAT,
on behalf of Alain Georgy:

The house of Alain Georgy in Glovelier, Jura, Switzerland: 97 nest boxes and 82 breeding pairs in 2011

This house is situated in the Swiss Jura, in the north-western part of Switzerland, at approximately 510 m altitude. Glovelier is a little village with 1200 inhabitants. The surface area is 14.34 km^2, of which 43% is used for agriculture and 42% covered by forests.

Alain Georgy is a skilled mechanic working in the watch making industry. He has been interested in the Common Swifts of his village since 1980 when he located 3 pairs in the village. He decided to install six self-made nesting boxes on the southern part of his house which has two floors but he had to wait until 1984 for the first nesting pair! In the same year, he installed two or three new boxes on the southern part of the house. From that moment, the number of boxes and Swift pairs increased from year to year, on the north, south and east sides of the house.



The count of pairs and juveniles in Alain Georgy's colony in Glovelier, Switzerland, from 1984 – 2011

During 27 years, the progress was continuous, but not regular. In summer 2011, 175 young Swifts in 82 out of 97 occupied nest-boxes were ringed.

In discussion the following points were made:

- *No calls had been used to attract the Swifts;*
- *There was no evidence that the boxes under the bridges had caused any accidents;*
- *The speaker had no data on the number of screaming parties;*
- *2011 was the 3rd year of ringing (chicks and adults) but no ringed birds had been recovered as yet.*

AMNONN HAHN

How to find partners and get public awareness for a campaign to assist Swifts?

This was a presentation of work in Israel over the last few years which was received with enthusiasm and praise by participants.

ERICH KAISER,
on behalf of Christian Herrmann:

The film "Die Mauersegler von Bernried" (The Common Swifts of Bernried)

This 2012 Bavarian TV production first shows the monastery of Bernried, where the nuns are fascinated by their "roof tenants" (Common Swifts) and when their building was renovated, they insisted that all existing nest sites were maintained and they wanted to offer additional new ones.

It then shows the activities during a whole season in Erich Kaiser's colony for Common Swifts in Kronberg, where the breeders are so accustomed to human observers that they simply ignore them and demonstrate normal behaviour in spite of the strong lights and cameras. This film would never have been possible in any other colony because the breeders would have demonstrated nothing but panic.

Flying Swifts are shown in extreme slow motion and you will see spectacular scenes of Swifts entering and emerging from their nest sites. Using an underwater camera, Swifts are also shown drinking water from a lake - this is a trick, of course, but it looks quite convincing. The film shows Swift life using latest camera techniques and you will see details that are invisible to the human eye.

An English version of the film is in preparation and a French version may also be prepared.

EDWARD MAYER:

Swifts and Insulation - The Challenge

There is a European-wide Policy on Insulation and Building "improvements" based on the EU's "End-use Efficiency & Energy Services Directive" which requires EU member states to achieve reductions in carbon emissions. One of the means to achieve this is retro-fitting insulation to poorly-insulated buildings under national policies for Global Warming and Carbon Emission reduction. Big Business is campaigning for major investment by governments and private finance in insulation resulting in campaigns such as "Renovate Europe" and the UK Government's "Green Deal". Across Europe many modern buildings have already been insulated, leaving the older and expensive to insulate buildings to be dealt with under these new initiatives. Most insulation materials are unsuitable as nest platforms for swifts and they all block entrances and fill voids once useful to swifts and bats. In both Germany and the UK there is also pressure from the building industry and government to build "Eco-Homes", insulated sealed boxes with no apertures for birds or bats to breed in. But for very little expense, simple enclosed nest boxes can be inserted into insulated walls.

Can European Biodiversity Directives help to fight this? Yes they can if we take action. The document "*Our Life Insurance, our natural capital: an EU biodiversity strategy to 2020*" (2011/2307(INI)) has the ambitious target (no.1) of: "*Conserving and restoring nature: to halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status*."

To do that they will have to acknowledge that "Nature" needs to live in more than just "Nature Reserves" – it needs to share "our" living space. New attitudes, new thinking, and lots of new projects are urgently needed. We need more new commercial nest box designs compatible with insulation that are very easy for builders to buy and install during insulation work. We also need political solutions. The EU institutions need to act if swifts (and bats) are to be saved from the effects of policies aimed at energy conservation.

We need to:

- As a Conference, write to the European Commissioner for the Environment, Janez Potočnik, and the Chair of the European Parliament's Committee for the Environment, Public Health and Food Safety, Matthias Groote and ask for swifts & bats needs to be considered & included in EU policies, and we follow up with Press Notices etc.
- As National Societies and Individuals - we identify and talk and write to the members of the European Parliament we can identify as being involved in Green Issues and Biodiversity on behalf of our respective countries. We ask for swifts & bats needs to be considered & included in their biodiversity policies for the Built Environment and we supply them with useful positive information to assist them in their work.

And we keep up the pressure until something is achieved!

www.swift-conservation.org

In discussion the following points were made:

- *When making representations about the built environment the need for connectivity with green spaces for wildlife needs to be made;*
- *These insulation efforts have very limited validity. The efficiency of the insulation materials being used is only 10-15% and in 30 years it will become toxic waste. For old walls with a 40 cm or greater thickness, no insulation is necessary at all;*
- *We should concentrate on selling positive aspects to builders and developers, and building alliances. The speaker completely agreed but pointed out that we are now facing activity totally integrated into politically motivated government funding programmes which are exclusively for insulation and with no component for biodiversity, therefore action needs to be taken at the political level.*

ALEXANDRU STAHL and CARMEN-MIHAELA STAHL:

The status of the Common Swift in Romania

The information that we have regarding Common Swifts comes from ornithological studies - old reports of the Romanian Ornithological Center (from 1939-1970), and newer information found in the studies and observations made by the Romanian Ornithological Society, S.O.R, regarding the census of this species and the distribution of the Common Swift in Romanian teritory. We can assert that the status of the Common Swift in Romania, especially in towns, is the same as the general situation all over Europe – it is an endangered species due to all the renovation work being done on buildings, the destruction of old buildings and new construction techniques.

Until recently the conservation status of *Apus apus* in our country was of little concern, but with

new laws and modification to existing laws regarding the protection and conservation of natural habitats, this species can now be found among those categorised as a vulnerable species. There are several laws relevant to the protection of wild birds and the protection of biological diversity but we have no knowledge regarding the application of these laws.

Even if it is a long and difficult road ahead, together with government agencies such as Environmental Guard and N.G.Os like S.O.R, we will continue to inform Romanian citizens about this beautiful bird and hope that, step by step, we will encourage Romanians to protect and help this species, at least by providing nesting places.

ALEXANDRU STAHL and CARMEN-MIHAELA STAHL:

The beginning of the Romanian Common Swift Initiative

It all started with a long conversation with Ulrich Tigges, who asked us if we wanted to translate some parts of his Common Swift Worldwide website into Romanian. That happened in 2009 and we gladly accepted, as we wanted to have information in Romanian about this species (at that time we could not find any accessible information for the public in Romanian about this bird). In 2010 we started a blog about "common birds" in which we provided several articles about the Common Swift and other wild bird species, general information about the Common Swift, the importance of providing artificial nesting sites and/or the protection of existing nest sites, and the difference between *Hirundinidae* and *Apodidae (www.omulcuduhdebufnita.blogspot.com).* We wanted, through these small steps, to enable ordinary people - not just ornithologists, biologists and some amateur birdwatchers - to recognise this species.

At the same time the Spring Alive program had already taken place which involved the Romanian Ornithological Society, S.O.R, in monitoring 4 migratory birds: the Swallow, Stork, Common Swift and Cuckoo. That summer we started to take care of foundling Common Swifts, to monitor our natural colony of Common Swifts and to make observations of the Common Swift in general, including the timing of migration (in Bucharest).

Meanwhile we decided to do more for Swifts as, in general, the Romanian NGOs focused on endangered bird species and the protection of nature reserves, especially the Danube Delta reserve. The idea of a Common Swift Initiative came from U. Tigges. In January 2011 the Romanian Common Swift Initiative was born in a department of the D.S.M.S Romania, an environmental NGO, which moved in the spring of 2012 into the A.R.S.P.A.C association. S.O.R. became a partner in our Common Swift Initiative in order that we could develop joint projects.
Our objectives were to create a Romanian website about the Common Swift, to make a small documentary about the Common Swift in Bucharest, to create an artificial colony in our attic, to open a ‘rescue center’ for foundling Swifts (both adults and chicks) and to publish a brochure about the species (this latter project was abandoned because it was expensive and with the money we were able to provide more food for foundling Common Swifts).

At the beginning of May the Romanian website www.drepneauaneagra.ro (the Romanian name for Common Swift) was online. The Romanian website for the Common Swift was created with the help and support of U. Tigges, Christiane Haupt, Amnonn Hahn and Edward Mayer. We also started to explore what was said about the species in Romanian ornithological books or articles, we searched in Romanian folklore but without success and we did an initial study of the origin of

the Romanian name of the Common Swift (Drepneaua neagră). This study will continue in the future as at the time we only had access to material available in the Library of the Romanian Academy. What we found was also made available on the website.

In the spring of 2011 we started a small artificial colony with 8 internal nests in our attic and we have also set up our Rescue Centre. The diet we have used and will continue to use is crickets (*Acheta domesticus*), wild insects (grasshopers and crickets), wax moth larvae (*Galleria mellonella*), or mealworms (*Tenebrio mollitor)* when wax moth larvae are too hard to find, vitamins and calcium with minerals. About 70% of foundling Common Swift chicks have been successfully released and these chicks came not only from our home town but from the wider country. The only foundling Swift chicks which we were able to raise and release were those who had not previously been fed with the diet traditionally used by people and even recommended by vets: cat food, dog food, meat, so-called "food for wild birds" from pet shops, and bread. We decided to take only one of the damaged chicks to the Maureseglerklinik, the rest of them had suffered irremediable damage to the skeleton, feathers and even the feet or toes. It was only possible to save the adults with minor injuries, other injuries such as shoulder dislocation, or the results of an attack by a crow or a cat, proved fatal.

In discussion concerns were expressed about whether Romanian bird ringers were using an appropriate ring for ringing Common Swifts. The speaker was not sure exactly which ring was being used.

LEVENT TURAN:

Wildlife and birds, including Common Swifts, in Turkish culture

Turkey has a rich biodiversity with the number of both plant and animal species being equivalent to those of a single continent. The main reasons for this are Turkey's geographical location, its climate, landforms and diverse habitats. In recent years there has been an increasing trend of migration into the cities from the rural areas where the vast majority had lived for a very long time close to nature with a large population of wild animals. Encounters between man and nature, particularly during migration, were part of everyday life.

This topic became an important component of cultural life. The first representations were songs and poems but it has been the subject of novels, and has even entered into proverbs. Birds are the most intensely represented in the culture; many songbird species (*Passerines*), including also particular species such as Swift, diurnal and nocturnal birds of prey and, outside those prominent groups, ducks and geese. The Common Swift is a puzzle because it is the most frequently mentioned bird species, and the birds are even the heroes of a famous event in the "Year of the Elephant" (when Mohammed was born) when Abraha the Christian ruler of the Yemen marched on the Kaaba but his army, which included elephants, was attacked by a flock of swifts who dropped rocks from their beaks and the army fled in panic. Birds are followed in popularity by mammals which stand out especially in songs and poetry for children and include domestic and agricultural species. Invertebrates, reptiles and amphibians are the least represented species in literature.

In discussion the following points were made:

- *Common Swifts in Turkey have only one brood;*

- *The bird in general is not experiencing problems because there are very many nesting place opportunities in roofs and the Turkish people have no issues with them being in buildings.*

LUBOMIRA VAVROVÁ,
on behalf of Lubomira Vavrová, Martin Cel'uch and Ján Gúgh:

Protection of Common Swifts (*Apus apus*) and bats in buildings in Slovakia - LIFE10 NAT/SK/000079 project

It is clear that during the last decade the population of Common Swifts as well as bats, in particular Common Noctules, has significantly declined in Slovakia. These species have lost their natural habitats (rocky habitats, and forests with large tall trees). As a result, a gradual shift in roosting strategy has been observed. Recently the species has occupied mainly prefabricated panel houses and buildings in human settlements. Recently the greatest threat to the species has been renovation and refurbishment work and thermal insulation of buildings. To minimise the negative impact of these activities on the species, three environmental NGOs in Slovakia – the Regional Association for Nature Conservation and Sustainable Development (BROZ), the Slovak Bat Conservation Society (SON) and the Slovak Ornithological Society/BirdLife Slovakia - have launched the project *LIFE10 NAT/SK/000079 Protection of Common Swift and bats in buildings in Slovakia*. The project started on 1st January 2012 and will last until 31st December 2015. The main aim is to halt the recent decline in the population of the species in all 138 cities in Slovakia. Specific project objectives are to: 1) establish and strengthen institutional capacities to support systemic solutions to protect the species and their nesting habitats in cities; 2) protect existing nesting and roosting opportunities and establish new ones (installation of nest boxes); and 3) raise public awareness and support active public participation in the species' conservation.

These goals will be achieved through a variety of activities. It is important to gather up-to-date data on the distribution of Common Swifts and bats in cities and the locality of their nesting sites. Communication with key stakeholders (managers and owners of buildings, architects, state administration, etc.) is also critical, in order to identify and implement conservation measures. To increase stakeholders' capacity and knowledge, several workshops and training programmes will be organised and specific guidance published in the framework of the project. Project staff will be available to assist in identifying appropriate conservation measures and their implementation. Media will play a key role in communication with the public. It is expected that a documentary will be put together aimed at presenting the problem to a wider audience and demonstrating effective solutions.

All these activities aim to reverse the current negative trends and halt the population decline of Common Swifts and bats in Slovakia. There are several relatively cheap and simple technical solutions available to preserve Swift nesting sites and bat roosts in renovated/refurbished and/or thermally insulated buildings. What are needed are communication and a will on both sides - conservationists and public/stakeholders - to join forces and help these species to survive in urban areas. It is our duty to keep the skies alive for future generations.

In discussion the following points were made:

- *There was concern about whether the polystyrene boxes could become too hot for the Swifts. The Slovaks now had 4 years experience of using them and found they had better isolation than the traditional boxes. The manufacturing product had good insulations properties and the entrance hole also provided ventilation but it was important to place the boxes on the North-facing side. This led to a wider discussion of what height of temperature a Swift can tolerate. In Northern Ireland temperatures of 37.5˚C were recorded over a 2 hour period, with the young chicks panting heavily but they went on to fledge successfully. In Spain it was believed that over-heating was one of the main reasons for fledgling failure and local adaptations to Swift nest boxes had been made by putting holes in the top board. One participant who was a Swift carer had experieince of different individual Swifts being able to sustain different levels of temperature. Reference was made to published research work on small rodents that could be relevant (references would be passed to Ulrich Tigges). It was agreed that more data needed to be collected on this issue;*
- *The lifspan of the boxes was unkown but one of the issues was damage by birds themselves. This was mitigated by coating the inner surfacs with a concrete-based mixture.*

LUKÁŠ VIKTORA:

Under One Roof: Five Years of the Common Swift Programme in the Czech Republic

The Czech Society for Ornithology started the Common Swift Programme in the Czech Republic (CSP) in 2008. The most important CSP partners are the Czech Bat Conservation Society, the Ministry of Environment, the Czech Environmental Inspectorate and regional offices.

The Programme was built on four main pillars:

1. Education, focused on the civil service (environmental departments and building offices' staff, inspectors of the Czech Environmental Inspectorate), engineers and experts from the building industry and building owners. Altogether 17 seminars for more than 700 participants were organised in 13 regions of the Czech Republic;
2. Public awareness. The main tool of this pillar is a special website www.rorysi.cz. We also organise public events (twice a year) and an incentive programme *Friends of the Swifts*. We also link up CSP with *Spring Alive* (internet project of BirdLife International) and *Swift Schools Concept* (currently 2 primary schools, 1 high school). We provide e-mail, phone (over 1000 calls every year) and personal consultations too;
3. Conservation of breeding sites which we organise in close collaboration with responsible bodies – municipalities, regional offices, branches of the Czech Environmental Inspectorate. Municipalities approve regional decrees for breeding sites protection using the Methodical Direction of the Ministry of Environment nr. 8/2009. We undertake controls on building sites (more than 100 constructions per year), sending data from the database of registered breeding sites to owners and offices. Every year we save more than 1000 Swift nests; and
4. Research and development. The most important element is breeding sites registration. Every year, almost 140 volunteers from across the country undertake registrations. Up to now we have collected altogether 16,317 records, including 9,615 breeding sites, all

saved in a special database. Minor activities are: monitoring of some breeding colonies, ringing of adult birds and nestlings, and, as part of the Lund University Project, the use of geolocators (2011, 2012).

The development of technical solutions and methods for existing and newly created breeding sites is done in collaboration with the *Cech pro zateplování budov* (the Guild of companies providing thermal insulation of buildings experts).

Friends of the Swifts, under one roof

In discussion there was a question about the database. The speaker confirmed that the quality of entries to the database is assured through the use of a specified methodology (relating to time of season, time of day and behaviour) and the training of the volunteers. If there are any doubts about an entry, someone from one of the regional groups is sent to validate it.

KAZIMIERZ WALASZ

What is the minimum practical size for a Common Swift nest place entrance hole?

Some initial results are presented from a study of the Common Swift nests in the walls of St. Mary's Basilica (Koseiól Mariacki) in Krakow. The full results of the study will be published in due course.

In discussion the following points were made:

- *The holes in the walls had been blocked with a piece of brick, placed in the middle, which gave room on three sides for the birds to enter. The speaker explained that the birds showed no preference for how they entered the whole; they had been observed going in*

from the left, the right and over the top. The bricks inside the holes could not be moved as they were fixed in place. The speaker was asked whether there was a possibility of replacing the bricks with entrance devices which would provide easier access for the birds, like the ones developed for historic buildings by Mauro Ferri in Italy; this would be followed up after the Seminar;

- *An incident was recorded by the speaker where he found 15 nestlings in an attic full of polystyrene. He was surprised to find them and coming back to see them a few days later he found half the nestlings dead and one of the adults injured. He has assumed that the material caused this damage.*

ARNDT WELLBROCK,
on behalf of Arndt Wellbrock, Christina Bauch, Jan Rozman and Klaudia Witte:

Who jumps first? - are there sexual differences in the development of Swift nestlings?

The decision to leave the nest is crucial in the life of Common Swift fledglings (*Apus apus*). By staying in the nest, a fledgling can profit longer from parental care. On the other hand, a nestling faces the problem of unpredictable parental provisioning schedules, especially at the end of the breeding season. It is known that well-fed nestlings close to fledge stay at the nest and drop in body mass before reaching an optimal wing load. Some fledglings leave the nest before their wing feathers are fully-grown. We want to know i) whether the timing of departure from the nest differs between sexes in the late nestling phase (35 to 45 days); and ii) whether the sexes differ in body mass and wing length on the day before leaving the nest.

We investigated a Swift colony of about 40 breeding pairs situated in a concrete federal highway bridge spanning the Bigge reservoir, near the town of Olpe (North Rhine-Westphalia, Germany) in 2010 and 2011. We daily measured nestling body mass and wing length of nestlings. For molecular sex determination, we sampled buccal swabs and blood samples. We analysed data from 22 nestlings (11 females, 11 males) from 2010, and 37 nestlings (21 females, 16 males) from 2011.

In both years, female nestlings left the nest on average one day before male nestlings. They were also slightly lighter than males (about 1 g). However, these differences in timing of departure from the nest and in body mass were not significant. Female fledglings left the nest with a 4 mm smaller wing length than males. This difference was particularly observed in nestlings where there were initially two nest siblings. Adult females still show a significant smaller wing length (on average by 2 mm) than adult males in this colony. Thus, are female offspring less "expensive" for a parent than male offspring in the context of life history strategy?

In discussion the following points were made:

- *The speaker was asked about his reference to "poorly fed chicks" and asked if he knew the reason for this. He explained that he had not yet factored in weather conditions but he did not believe that it was due to parent desertion;*
- *The point was made that the study involved a lot of weighing and measuring. The speaker emphasised that much had been done to reduce the disturbance for the birds. They were not handled during feeding time and one bird was always left in the nest;*
- *A question was asked based on the assumption that there was a relationship between weight and the wing length. A participant with a huge and long established colony*

commented that his birds were weighed continuously (without handling) and their weight can vary significantly throughout the season.

LUKAS WIHARDJO:

Compensatory rescue activities related to the industrial exploitation of the Edible-Nest Swiftlet (Collocalia)

The Edible-Nest Swiftlet (*Collocalia Fuciphaga*, in the Indonesian language "Walet") is commercially exploited in South East Asia, in particular in Indonesia, due to its pure saliva nest which is much prized by the commercial market. Whereas the nests of the *Collocalia Linchi* (in the Indonesian language, "Seriti") are not commercially exploited because they contain less than 10% saliva mixed with other material such as grass and leaves, and this makes them less attractive to business.

It has become a common business practice by many businessmen to seek to convert colonies of *C. Linchi* into colonies of *C. Fuciphaga* by egg replacement techniques. The colonies of *C. Linchi* are discriminated against, their eggs being thrown away and substituted with eggs from *C. Fuciphaga.*

In the long run this will lead to cumulative extinction of *C. Linchi* while *C. Fuciphaga* is gaining ground. In an effort to help preserve the population of *C. Linchi*, I have set up a bird house in Garut (West Java) to try and redress, at least in part, this discrimination. My activity starts with the hatching of eggs in incubators, the chicks are then hand reared until they are capable of flight, and released back into nature.

In discussion the following points were made:

- *Edible-nest Swiftlet chicks are taught to feed by their parents (unlike baby Common Swifts) and this can be an issue when they are bred in artificially created colonies. A participant pointed out that this was similar to Barn Swallows who also learn to feed from their parents. When Swallow babies are taken into rescue centres they need to be released as soon as possible and into a Swallow community, so that they can find an adult who will teach them to feed. If you keep them too long they become conditioned to human hand rearing. She also suggested trying the Edible-nest Swiftlet chicks on locusts as the insects move quite slowly and they are therefore more suitable for teaching the babies to feed. The important thing was to watch the behaviour of the Swiftlet adults with their young and seek to mimic that as much as possible;*
- *The Swiftlet chicks appear to enjoy water and rain. They will fly outside the colony buildings where they are misted with water and then return indoors to feed;*
- *There was an exchange about the value of vaccination. There were risks because the vaccinated birds can be a danger to non-vaccinated birds;*
- *There was no sharing of potentially important information within the industry about the characteristics of the birds life cycle because of fears of giving away a competitive edge;*
- *Farming practices were changing in Java with greater industrialisation, eg.of palm trees, the birds are being forced to move to get their food;*
- *The speaker believed there was some hope that the industry could be re-modelled on a sustainable basis through the younger generation. Many of the current business leaders*

in the industry were in their 60s and would retire in the not too distant future, leaving the way open for a change in the culture and an opportunity to spread different messages.

RICK WORTELBOER,
on behalf of Rick Wortelboer and Marleen Andriessen:

A closer look at the Common Swift: the results of seven years monitoring nests with cameras

From 2003 onwards, the Dutch Swift Society (GBN) installed cameras at the nests of Common Swifts (*Apus apus*) in The Netherlands. The aim was to study the Swifts' breeding biology during the whole breeding period. Volunteers recorded the important aspects of the Swifts' breeding biology and additional information on its behaviour. 471 reports on nest activities were generated from 271 nests with breeding Swifts and 307 clutches were monitored. The nests were distributed over 41 villages and cities in The Netherlands.

Arrival dates of first parents were relatively constant, varying between April 18 and April 26. The long term median date of first arrivals on the nest was April 24. In some years (e.g. 2010) egg laying was postponed because of the cold weather. The average time between egg laying and hatching decreased from the 1st to the 2nd and 3rd egg, although the spread in the data is considerable. The observed minimum length of the breeding period was 17 days. The nesting period of the young lasted on average 42.5 days, with no differences between successive young, but a considerable spread (32-52 days).

The average number of eggs, young and young fledged was 2.55, 2.39 and 2.20, respectively, for the successful clutches. Calculated for all the breeding attempts (successful and unsuccessful) the numbers are: 2.47, 2.0 and 1.77. The number of eggs, young and young fledged is higher in first clutches than in successive clutches ($P<0.05$). In our study, this seems to be a function of time during the season and not of temperature during the nesting period.

Nesting places were categorised as natural nesting sites (with natural nest entrances) and artificial nesting sites (with man made objects, such as nestboxes, nest stones and Swift tiles). The number of young hatched and young fledged are significantly lower for natural nesting sites. This is probably related to extra mortality in natural nesting sites during warm weather. This shows that the careful selection of sites when creating artificial nesting sites for Swifts, i.e. in less sun-exposed sites on buildings, pays off well. The recorded times of first flight of the young Swifts shows a daily pattern with a preference for fledging in the evening.

Breeding success is on average 80% of 1st clutches started. Due to a high percentage of successful successive clutches, breeding success in nests with breeding Swifts is 91%. Breeding success of nests is lower in natural nesting sites (87%, n=84) when compared to the artificial nesting sites (97%, n=180). This is probably caused by higher mortality in the young phase and the occurrence of less successive clutches when first clutches have failed. No overall relation between weather and breeding success could be established.

The cameras in the nests of Swifts have shown us some very interesting facts about the Swifts' breeding behaviour. The project will be continued.

In discussion the following points were made:

- *The time of hatching and laying was sometimes difficult to establish exactly because of movement in the nest box. The data includes only incidents where the action was seen;*
- *There was much comment about the occurrence of fighting in nest boxes. A video clip was shown of a nest box in the UK where an intruder bird appeared to effectively see of a resident in the nest box and then ejected the 2 eggs from the nest. The newly formed pair left immediately and then came back very shortly, a new clutch was laid and one chick fledged. Another example from Germany was a nest box where the adults ejected 2 chicks (one was saved from the ground, the other never found);*
- *As fighting appeared to be quite common, there was speculation about the implications for nest box size – should they be large enough to allow them to fight? - no conclusion was reached but it was pointed out that where there is a large box any Swifts inside are likely to come to the entrance screaming to deter any intruder, whereas in a small box, when the intruder enters, it is immediately in contact with the resident(s) and a fight is more likely to take place;*
- *The speaker commented that he always makes a hanging wall available for the Swifts inside his boxes and they seem to appreciate this, particularly in the early period after their return from migration. One of the Swift carers commented that a good first sign of recovery in an adult bird is when it starts to hang and chicks also like to hang, yet this is not currently provided in the designs of nest boxes;*
- *In discussing the possible effects of bad weather, one delegate commented that there is evidence that Barn Swallows stop feeding their young in bad weather which may be due to the difficulty of obtaining food with the necessary levels of Vitamin A in it. There was, however, observations from Northern Ireland and the speaker that Swifts continue to feed their young through extremes of bad weather. The comment was made that in bad weather, feeding the young will compete with self-feeding, so the Swift adults may be continuing to feed the young while denying themselves. Evidence from a rescue centre in Spain was that in the rainy season, a greater number of chicks are brought to the centre. The conclusion was that perhaps data needed to be collated from a wider range of countries.*

LEI ZHU:

The status and conservation of the Common Swift in China

The Common Swift (CS, *Apus apus*) is a well-known summer breeder in most provinces of China. However, there are only a few published reports that concentrate on the population and conservation of the CS in China. Nowadays, the only long term project that relates to this species is *The Observation and Conservation of the Common Swift in Beijing*, which has been managed by us (*Beijing Bird Watching Society*) and funded by *Hong Kong Bird Watching Society* since 2007. This Beijing Swift Project covers local distribution, timing of migration, breeding population, ringing and discusses conservation problems, with appropriate suggestions for conservation of the CS in Beijing.

According to results from the Beijing Swift Project, the vital breeding area of the CS is limited to the ancient buildings in urban districts of Beijing, such as the Beijing Imperial Palace and the Temple of Heaven. The nests are in the gaps in these buildings. The CS always arrives in Beijing in April and leaves at the beginning of July. There are in total 2500 to 3000 CS individuals

breeding in Beijing every year, with a slight decrease during the five years of our observation. Annual ringing of CSs in the Beijing Summer Palace has also been conducted as a component of the Beijing Swift Project since 2007. There are 80 to 120 individuals ringed every year, 12% to 20% of which are recaptured individuals.

This suggests that the CS is facing a negative impact from fragmentation and loss of its breeding habitat, caused by the increasing urbanisation and commercial development of Beijing over several decades, thus the remaining suitable nest sites are concentrated in much smaller areas. Most modern buildings are not Swift-friendly for nesting, although some individuals have tried to breed on some modern buildings or bridges in recent years.

There are also a number of challenges at the wider level. As a relatively common species in cities, the CS has not attracted any interest from professional researchers and local governments, which the result that there is a lack of demographic information and studies of their habitat status. Chinese ornithologists have always preferred to study more threatened or endemic species, and local governments also see no direct benefit from protecting the CS. So there is also a significant issue about how to publicise the importance of protecting the CS and its habitat to researchers and governments.

On the other hand, there are positive aspects. First of all, with the development of bird watching in China, an increasing number of bird watching societies and international NGOs are focusing on the CS in China, and we also have more volunteers available (bird watchers) to take part in the observation and protection of the CS. Thus it is possible to study and protect the CS in some areas. Secondly, a few local governments have also made some effort to protect the CS. The government of Beijing did build a "Swift Tower" in 2008 and set it in the Beijing Olympic Forest Park. However, it has not attracted any Swifts up to now, only some sparrows, due to the lack of proper scientific design and evaluation. Moreover, a number of people, especially senior citizens and students in schools and universities, are willing to do something to protect Swifts even if they do not know what they can do as ordinary citizens. Swifts are also, at last, gradually shifting their nest site selection preferences. We found an increasing number of swifts are building their nests in the cracks of bridges in central Beijing because of habitat loss and fragmentation.

In discussion the following points were made:

- *Even the historic buildings in Beijing were under threat because the authorities were starting to net the buildings because they think the Swift nests will cause damage (one participant had visited Beijing during the breeding season and seen netting being undertaken which would clearly affect breeding birds);*
- *There was much interest in whether anything could be done to save the Beijing Swift Tower which is owned by the Olympic Park and ultimately by the government. The speaker said efforts had been made to engage with the authorities (who appeared to have logged it as a success!) but to no avail as yet.*

Attachments

Attendees, and those who were unable to attend, were invited to present their posters, statements or messages relevant to the Common Swift. They were not discussed during the Seminars and are included here without any comment as attachments.

MIGUEL CARRERO GÁLVEZ:

Wind farms - A new threat for swifts, a new challenge for researchers

Wind power is a clean and sustainable source of energy, reducing CO2 emission from fossil fuels and thus decreasing global warming. However, wind farms are also a threat for birds and bats with negative impacts from collision with turbines, as well as displacement or fragmentation of habitats. Many thousands of birds and bats have been killed by wind farms worldwide, mainly during the migration periods.

Although wind power is not yet one of the main sources of mortality for birds, it is already something to be concerned about (to play with the old saying: “which straw will break the camel's back?”). This issue has been the subject of study over recent decades. So-called “Smart” policies and guidelines for wind power have been documented and implemented but the problem is still far from being solved. Environmental and risk studies conducted so far have not proved to be good indicators of the risks associated with a wind farm for bird casualties.

Although soaring birds and raptors are the most studied casualties from wind farms, in the USA it is known that the majority of birds killed at wind farms are songbirds.

This paper focuses on Common Swifts (*Apus apus)* and House Martins (*Delichon urbica)* killed by wind turbines in the province of Cádiz, in Southwest Spain, where there are 63 wind farms with a total of 921 wind turbines, producing 1,25 GW. Due to its habitat diversity, and to the presence of the Strait of Gibraltar (a major Euro-African bird migration route), the province of Cádiz is a very important area for birds.

From 2005 to 2011, 79 Common Swifts have been reported as killed at wind farms in the province of Cádiz. In addition, in this seven-year period, 37 *Apus melba,* 23 *Apus pallidus*, 164 *Delichon urbica* (!), 2 *Hirundo daurica,* 9 *Hirundo rustica,* 6 *Ptyonoprogne rupestris,* and 2 *Riparia riparia,* were found dead in the same wind farms. The sex and age of all these dead birds were not determined (e.g., for Common Swifts, only 11 were labelled as adults and 15 as young, with the remaining 53 as unknown). Raw data seems to indicate that both adults and young birds are affected.

The data seems far from reliable and is now thought to underestimate the problem.
Trained dogs are currently the best way to find dead birds in a wind farm, detecting more than 95% of the carcasses, but it is people not dogs who usually look for dead birds and therefore probably less than 50% of bats and passerines killed on wind farms are reported. The rest are not counted because they have already been taken by predators or have decomposed, or were simply not found by the people in charge. Thus, we do not know the real figure for dead Swifts on wind farms.

We do not know how wind farms affect resident swifts nearby. As wind farms could be suitable areas for feeding, this also needs to be studied and may be crucial for *Hirundinidae*.
Some solutions for reducing bird collisions are currently being tested: trained human watchers who give orders to stop the turbines, sometimes called "idling"; radar surveillance systems to stop turbines; sound-recording and analyser systems to stop turbines; radio-controlled predator simulators to drive birds away from the wind farm. Changes in "cut-in" speed (increasing the wind speed that makes the blades begin to operate) has been proved to reduce bat mortality; could it also be helpful to reduce mortality of some bird species, such as *Delichon urbica*?

More research is needed, studying the effect of wind farms not only on soaring birds and raptors but on Swifts and other non-soaring birds. Solutions under test need to be studied and evaluated so they can be adapted/tuned for Swifts and other non-soaring birds. For that purpose, procedures and standards are necessary to develop better methods, metrics, and predictive models - and developers should be encouraged to take responsibility for this.

MIGUEL CARRERO GÁLVEZ,
on behalf of the children of Virgen del Rocío School:

Proyecto Vencejo Amigo ("Our Friends the Swifts" Project)
Colegio Virgen del Rocío (Huelva, Spain)
E-mail: info@colegiovirgendelrocio.es
Web: www.colegiovirgendelrocio.es

The Project "Vencejo Amigo" was born in 2007 in Virgen del Rocío School based on a simple idea: swifts and people should be able to share buildings. Even more than that, people should learn to share urban habitats more generally with Nature. This became one of the main ideas supported by Virgen del Rocío School within its International Eco-School Programme. Common Swifts used to nest in the school window-blind boxes but problems soon arose. The school needed to be restored. Nesting Swifts were a source of noise and distraction, and some people even raised possible health risks. Therefore, in order to protect the Swifts, the first nest boxes were hung on the school walls in 2008. In 2009, the boxes were occupied by Swifts.

In 2009, a Swift nest was discovered in a closed window just behind the glass, and there was a great expectation amongst the teachers and pupils at the school. Puchini, a beautiful Common Swift, was born and raised in front of the childrens' eyes, and one happy day he flew away. Apart from noise, distraction and fear of health risks, new problems arose; windows blinds cannot be kept closed in a school and some unfortunate accidents happened when the blinds were closed every night.

In 2010, Puchini's parents returned to their nest in the window and four eggs were laid; the school children were very happy and excited. Three eggs were lost but from the fourth one, Pocholita was born.

Sadly, Pocholita did not survive. But this strengthened the project. In 2011 and 2012 new boxes were built and hung for swifts and artificial nest places for house martins were also installed. The next steps will be the installing of cameras in the nest boxes, uploading to the Web and the sharing of the experience with other schools.

Swifts, especially Puchini, Pocholita and their parents, have become "friends" to those at Virgen del Rocío school, "vencejos amigos", but they have also been ambassadors for Nature. Now, it is not only Swifts which are of concern to the school. Every animal, every garden, every piece of Nature or environmental issue, is seen as an opportunity to educate the children to a better world, a world in which every living being has a place and should be preserved.

MIGUEL CARRERO GÁLVEZ and ENRIC FUSTÉ HENARES:

Proposal for ethical guidelines for the study of Swifts and Swallows

Context: The signatories of these guidelines recognise that there is a need for more research on Swifts and Swallows so as to inform and optimise efforts to sustain their populations, which are under severe threat. However, there is a risk that such research, where it involves interference with living birds, can damage individual birds, mitigating against their ability to fly, breed and, in the worst case scenario, leading to the death of individual birds. We believe that any unnecessary and avoidable harm to individual birds in this way is unacceptable. These Guidelines set out a practical ethical framework for such research which should ensure that such impacts do not occur.

1. Any research resulting in dead or injured birds is unacceptable, no matter what the aim or purported benefit of the study might be.
Each and every bird, no matter its physical condition, is a living creature which should be respected and treated with the utmost care.

2. No new experiments or research should be undertaken until all previous similar experiments have been studied.
Before beginning any research a thorough search of relevant bibliographies should be undertaken to identify any previous studies using the same methods or with the same research objectives. Interfering with birds to undertake research that has already been done or where appropriate data or conclusions can be drawn from previous studies is ethically and scientifically unacceptable.

3. Any experiment should be immediately terminated if birds are in danger, even where the danger is not related to the experiment itself.
Survival of Swifts and Swallows is the prime and overriding objective. Research can never be an excuse for causing damage or danger to a bird. Any damage that does occur during research should be reported and published in detail so that similar instances can be avoided in the future.

4. Any research project should include an element of activity directly related to helping Swift or Swallow survival.
Just as many research bodies require a "public good" element be included in project proposals, we believe that every Swift or Swallow research project should include a "Good for Birds" element. Swifts and Swallows are under severe threat and this is a way of "paying" them for the privilege of using them for our research. The action actually taken to help them can come in many forms e.g. installing new nest boxes, giving some money to charities who work to help Swifts and Swallows, undertaking education work in schools to help children understand and love these birds, working as a volunteer carer...

5. Any research project involving live Swifts or Swallows should reflect the following "state of the art" protocols.
These include a presumption that the number of birds involved in and affected by any research should be kept to the minimum compatible with achieving reliable results. Sound pre-planning and strong statistical models should be used for every project, resulting in a documented project plan.

In addition, no project should begin unless it is reviewed by an ethical committee or peers. These details must be clearly stated in the results and in any subsequent publications. A protocol describing procedures and precautions to ensure the welfare of the birds during the research

should be documented before the project starts and must be followed during the research. Research results should always include the full details of this protocol.

A proposal is made to establish an Ethical Committee with the aim of ensuring that these guidelines are disseminated, applied and developed as necessary.

The Committee would always consider any proposal for research or experimentation involving living Swifts or Swallows from the point of view of whether it would genuinely help their survival.

Those who signed up to these protocols would seek to ensure that all proposals for research involving living Swifts or Swallows:

- voluntarily and fully complied with these guidelines;
- are submitted to the Ethical Committee before the work is started and again once the results have been established;
- include reference to the guidelines along the following lines: "This research has been undertaken in compliance with the *Ethical Guidelines for the Study of the Common Swift* and has been approved by the [Ethical Committee - *name to be agreed*]."

It is also proposed that any research which is not compliant with these guidelines should not be accepted for presentation at conferences, seminars, publications (including web pages) by signatories to these guidelines.

Miguel Carrero Gálvez (APUS - Spanish Assoc. for Swifts and Swallows) - mcarrero.cai@gmail.com
Enric Fusté Henares (APUS - Spanish Assoc. for Swifts and Swallows) - enricfuste@yahoo.com

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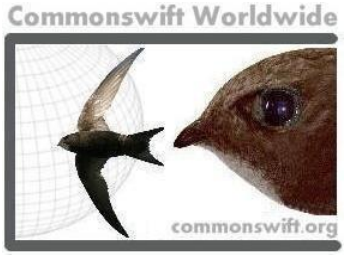
Commonswift Worldwide and FRIENDS OF THE SWIFTS R.A.:

Modified version of the



Guidelines for Building Swift Towers

The purpose of building a nesting tower for Swifts (*Apus apus*) is to offer a long-lasting nest-site at a permanent site.

An extra aim that may be achieved is to allow ornithologists access to the nesting boxes in order to monitor the breeding of the Swifts. Here we refer to the first version as the

Swift Tower (ST), and the latter as the Swift Research Tower (SRT). Both constructions can vary in shape.

A Swift Tower (ST + SRT) comprises two parts, the tower structure itself and the nest-box assembly, the design of which allows the birds easy access to a safe nesting site and in the case of the Swift Research Tower version, also permits ornithologists safe access to the nests for monitoring, ringing and maintenance purposes.

Nest-box assembly

The assembly may comprise either single nest boxes or groups of nest chambers. The basic inside dimension of any one box is 150 mm high, 250 mm broad and 350 mm long, the minimum size being 100 x 200 x 250 mm. The platform for the nest should always be horizontal. The size of the round entrance hole is between 40 - 50 mm in diameter or 30 x 65 mm with no access for competing Starlings (*Sturnus vulgaris*), but should be placed some 10 mm above the nest box floor level, although the entrance may be located in the floor. To avoid heat accumulation there should be ventilation holes on top of one wall; this should be the wall which is opposite the main wind direction in order to avoid cold draughts. To enable human access to each nest place, the nest boxes need to be fitted with access doors. These should be light-excluding, easy to operate and require minimum maintenance.

Swift Tower (ST) structure

1. The design should have a life of 50 years with minimal maintenance needed for structure, nest-boxes and their attachment points (if used).

2. The tower should be ca. 4 and more metres high.

3. Unauthorised access to the tower needs to be prevented. Vandalism needs to be deterred by the use of non-flammable materials, un-climbable surfaces and an attack-resistant structure.

4. The nest-box assemblage should be sheltered from solar radiation, the temperature in any individual nest-box remaining below 40 °C in still air.

5. The arc of a Common Swift's approach to any nest entrance hole from below must be at least 40° from the vertical, so it follows that access to each nest space must take this into account.

6. The entrance holes must be sheltered from rain and be secure against predators, whether mammals or birds.

7. Both materials and design should be harmless to animals and in particular should not be of such a design that they trap Swifts or other creatures.

Two additional points for the Swift Research Tower (SRT)

8. The Swift Research Tower version design includes not only safe platforms from which conservationists may access nest-boxes, but also safe and simple means for the conservationist to reach the nest sites. So consideration should be given

to including in the design integral ladders that may be raised or lowered and which are capable of being locked in either position.

9. In order to be able to trap Swifts that are visiting, or inspecting the nests, consideration should be given to incorporating fixtures to enable the setting of trap nets.

These Guidelines were developed by Commonswift Worldwide and FRIENDS OF THE SWIFTS R. A. and are supported by

Oxford University
EGI
Institute of Field
Ornithology

Tsinghua University
Ecobalance Center

Hacettepe University
Environment Education
Bird Research and
Ringing Center

Lund University
Centre for Animal
Movement Reserach

Irkutsk State
University
Research of
Biology

TEL AVIV UNIVERSITY

The International Center
for the Study of Bird
Migration, Latrun

Society for the Protection of Nature in Israel
החברה להגנת הטבע
Israel Ornithological Center

Deutsche Gesellschaft für Mauersegler e. V.

German Association for the
Protection of Common Swifts R.A.

Bird Conservation
Society of Iran

Museum & Institute
of Zoology
Polish Academy of Science

GREFA

Native Fauna and its Habitat
Rehabilitation Group

ČSO

Czech Society for
Ornithology

International Birding &
Research Centre in Eilat

אורנים
המכללה האקדמית לחינוך המובילה בשפלה

Oranim College

University of Haifa

Ornithological Station
of Tarifa

Italian Research Group on Nest Boxes

Siegen University

Norwegian Ornithological Society

League of Natural Conservation

Warsaw Society for the Protection of Birds

Association for the Study and Protection of Swifts, Swallows and Martins

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YUE CUI

contributed a painting of *Apus a. pekinensis* in traditional Chinese style:

NIKOS DEMETRIOU:

Common Swifts in Cyprus

My name is Nikos, I am from Cyprus and I have been blind from birth. Since I was a child I have always enjoyed hearing the sound of the Common Swifts each spring but I didn't know the name of the bird nor any other information about its life.

In 2004 I started using the internet to learn about birds and I came across the Common Swift. Now that I knew the name of the bird, I started reading about its life and its behaviour. I also tried to record the dates when it arrives and leaves Cyprus.

I live in Nicosia which is the capital of Cyprus. In other parts of Cyprus the swifts may arrive and/or leave on different dates. My experience, which is based only on sound and without any help from sighted people, is that the swifts arrive at the beginning of March in Nicosia and they leave at the end of June or the beginning of July.

Over the years the swifts usually arrive at the same time every year but each year they leave on different dates. For example this year (2012) they arrived on 6th March and in previous years the earliest they arrived was 2nd March.

But the departure dates are very different each year. For example in 2008 they left at the beginning of June but last year, in 2011, I heard a few swifts on 9th July. More usually, the numbers start decreasing after 21st June and by the end of June or beginning of July, the birds have disappeared completely.

IGOR FEFELOV
contributed two photos showing the two layers in which the Archaeopteryx was found.

Layer with the convex Archaeopteryx

Layer with the concave Archaeopteryx Photos Igor Fefelov

INGOLF GRABOW:

The Frankfurt Common Swift - Initiative

Frankfurt Common Swift - Initiative

11/1

Our aims: Recording the nest sites in the city, retaining and creating new nest sites.

Creation of new nest sites :

year	1989-2002	2003	2004	2005	2006	2007	2008	2009	2010	**2011**	**Totals**
internal boxes	---	22	18	200	139	99	16	17	41	**122**	**552**
external boxes	21	12	20	49	110	145	124	109	118	**78**	**708**
total	21	34	38	249	249	244	140	126	159	**200**	**1460**

Our action group has again been successfully working for the Common Swift.
In 2011, we created 200 new nest sites, at 31 different locations.
But we cannot calculate the large number of nest places that are being lost due to redevelopments. Applying insulation is very important, but don´t forget our Swifts !
Here are some examples of how you can help the Swifts when they are searching for a nest place. Please do read our previous reports. There you find more examples and reasons why you should start helping Swifts!

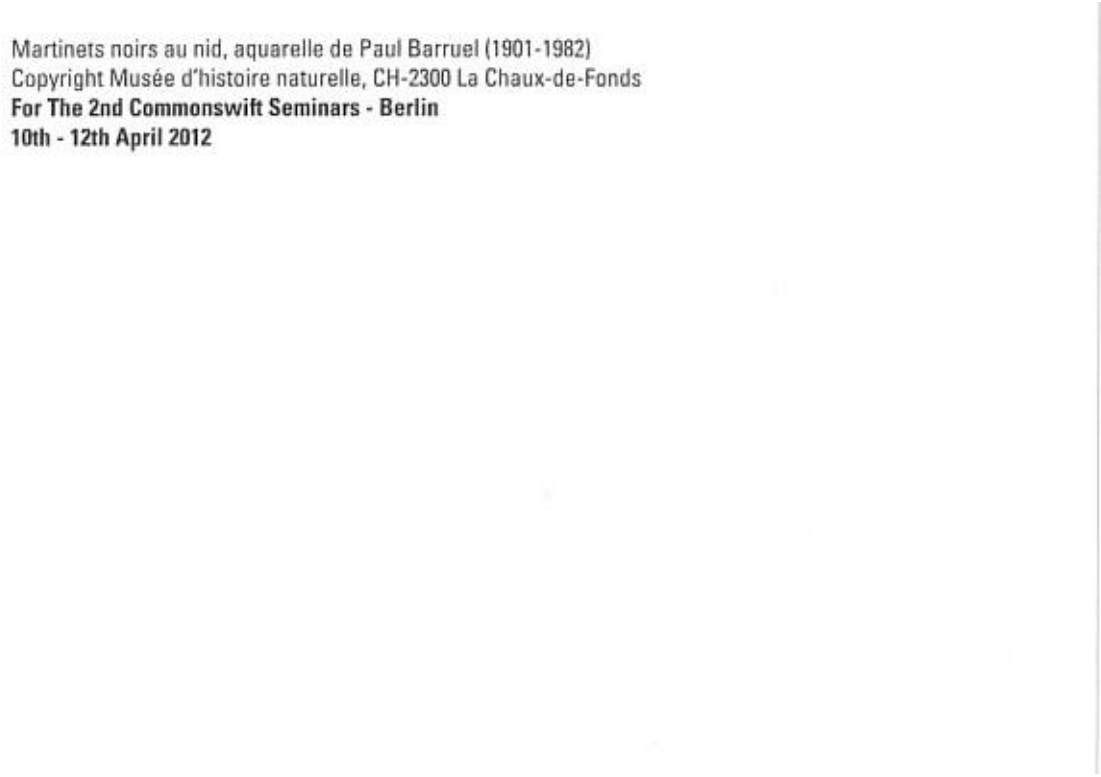
Keeping the sky over Frankfurt alive!

Staatliche Vogelschutzwarte für Hessen, Rheinland-Pfalz und Saarland
BIOFRANKFURT Kompetenzverbund Biodiversität Frankfurt
NABU Kreisverband Frankfurt a. M.
BUND FREUNDE DER ERDE
Deutsche Gesellschaft für Mauersegler e.V.

Frankfurter-Mauersegler-Initiative, Ingolf Grabow, An der Ringmauer 68, D-60439 Frankfurt am Main, Tel. 004969-578273, ingolf.grabow@gmx.de www.nabu-frankfurt.de

MARCEL S. JACQUAT & MUSÉE D'HISTOIRE NATURELLE de La Chaux-de-Fonds

contributed postcards showing a painting by Paul Barruel (1901 – 1982), which were reproduced on the occasion of the Second Commonswift Seminars 2012 and were dedicated to the attendees



Martinets noirs au nid, aquarelle de Paul Barruel (1901-1982)
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For The 2nd Commonswift Seminars - Berlin
10th - 12th April 2012

CHRIS MASON:

Cherwell Swifts Conservation Project

Cherwell is one of four District Councils in Oxfordshire, southern England. There are 3 main towns: Banbury (population c.48,000); Bicester (c.37,000 and growing fast); Kidlington (c.18,000); and 75 other smaller parishes.

Main aim
To protect and enhance the Swift population and Swift nest sites in Cherwell District.

Specific Objectives
1. To record which buildings in the District are used by Swifts
2. To safeguard those nest places –
- by improved local awareness
- through the planning system.
3. To encourage the provision of additional nest places in appropriate places.
4. To increase interest in, and knowledge about Swifts and the risks they face from building work and other factors.

Methods
1. Buildings used by Swifts for nesting are identified by Swift enthusiasts and bird watchers. This information is compiled into a spreadsheet and sent to the Thames Valley Environmental Records Centre (TVERC) and the RSPB.
2. 'Safeguarding' these nest places takes 2 forms
- the 'informal', whereby local knowledge and advocacy can bring about Swift-friendly building work or an acceptable alternative e.g. nest boxes

- the 'formal', whereby all records are sent to the local planning authorities (County and District) by the TVERC. Planners can recommend Swift-friendly development.
3. Provision of new nest places is being encouraged
- by the existing network of Swift 'friends' (with advice)
- through our links with the Council.
4. The main ways of promoting awareness are
- a film (Swifts Stories) which will be freely available from various websites and on DVD
- a leaflet which will be available to all Swift 'friends' and through them to others especially the owners of 'Swift-buildings'
- a portable display for use at talks, events and shows.

Achievements
The project began in 2008. So far amongst other things:

1. 130 buildings used by Swifts have been identified; up to about 400 nesting pairs.
2. Over 50 other places have been identified where Swift screaming parties indicate nearby nest sites.
3. We have a network of more than 30 Swift 'friends' who submit records and keep an eye on their local Swifts.
4. The Council has installed a number of Swift bricks in a new Sports Centre in Banbury, and fitted nest boxes to its headquarters south of the town.
5. Negotiations are in hand to make provision for Swifts in buildings at a development under construction in south-west Bicester, as well as in the Bicester Town Centre refurbishment.
6. The Council has drafted good practice *Guidelines for Biodiversity in the Built Environment* which should be adopted this year. Also a Briefing Note has been produced for Registered Social Landlords (RSLs), who manage property formerly owned by the Council. We hope this will reduce the risk to Swifts' nest sites at buildings being managed by RSLs.
7. Council planners have already made recommendations to developers as a result of our data. One result is that Thames Valley Police will include Swift nest places in an extension to their headquarters in Kidlington
8. Nest boxes have been installed in 3 church towers and we have agreement for a fourth (in Bicester).
9. Nest boxes have been put up on a number of buildings in Adderbury, Bicester, Deddington, Kidlington, Kirtlington and Islip.
10. Sanctuary, the Registered Social Landlord of a number of properties in the District has put up nest boxes on properties it manages in Bicester. Swifts are nesting very close by.
11. We have a good link with the Oxford Diocese which supports our work with churches.
12. We have organised displays at a number of events in the District (including a Farmers' Market, libraries, a Cherwell Council Countryside Forum, several village fetes, local environment group meetings and County Recorders Conferences).

The Future
- Continue to expand the network of Swift 'friends', and register more Swift buildings; fill gaps in our knowledge.
- Generate greater awareness in communities generally, schools and churches.
- Create a strong link with those responsible for the Ecotown in Bicester and campaign for substantial provision for Swifts (and other urban wildlife) there - including a Swift Tower perhaps. Take advantage of present emphasis on Eco-friendly activities in Bicester generally to promote the project.
- Continue to work with the Oxford Diocese; try to find a way of making sure that churches still used by Swifts are maintained in a Swift-friendly way.

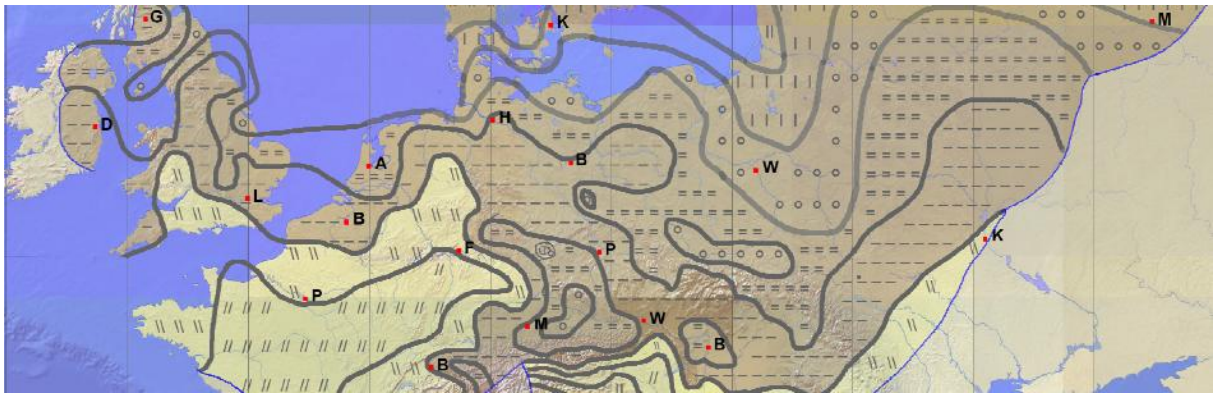
JOHANNES SCHLEGEL, pers. comm.:

Our experience in Annaberg, in Saxonia, is that when replacement boxes for swifts were installed 1-2 years before the restoration of buildings or the elimination of their traditional nest sites, then they were accepted by the birds in more than 90 % of cases.

ULRICH TIGGES:

Project for the completion of Sliwinsky's (1938) map

In 1938 Urszula Śliwińska published a phenological article in which she drew a chart showing, as a series of date lines, the arrival dates of Common Swifts over the Central European landmass - see http://www.commonswift.org/0494sliwinskyu.html.



Sliwinsky's map newly designed, digitised and adapted to the new conditions (extract) by Ulrich Tigges

One of my projects is to complete this map for the whole range of *Apus apus* - see http://www.commonswift.org/arrival.html).

I am therefore seeking data for arrival dates outside the geographical range of Śliwińska's map. It is very difficult to obtain data on arrival dates in sufficient quantity to continue enlarging the map's coverage. I kindly ask you to help with this task by collecting and providing me with relevant data.

SYLVIA WEBER:

A Tower for Common Swifts at the Olympia horse-riding park in Munich-Riem

On the 15th of April in 2008, the first Bavarian 'Swift Tower' was put up at the Olympia horse-riding park in Munich-Riem. It was meant to provide a new home for the Common Swift (*apus*

apus) colony which formerly nested in the cladding of a run-down terrace. The terrace was in a ruinous state and therefore demolished in 2008.

Higher buildings, offering appropriate breeding grounds for Swifts, were missing in the immediate vicinity. As a substitute for the lost breeding facilities, the Free State of Bavaria ordered the installation of a ten metre high swift tower as a compensating measure. Expert advice was given by the Landesbund für Vogelschutz in Bayern e.V., office in Munich, in the context of the project *´species conservation on buildings´*.

The LBV functioned as a skilled advisor for the measurements as well. First the mast (diameter: 26 cm at base, 19 cm at top) was arrayed by a mobile crane and secured to a foundation; afterwards the cornice, consisting of nest chambers, was positioned in place. The attachment is made of larchwood, the entrance holes on the swift-house are irregularly set. Attention was paid to the visual effect of the attachment: it looks very similar to the cladding of the terrace. The wooden box (size: 250x250 cm; height: 130cm) is fixed on a steel frame. On the back you can open the nest chambers for maintenance and via two hinged doors in the bottom, you can enter the swift-house.

The wooden attachment contains 40 breeding sites for Swifts as well as two gap quarters for bats. To help the Common Swifts with building nests, every nest chamber was prepared with depressed short hay. To accelerate acceptance, hi-fi equipment was integrated into the tower to draw the Swifts to the place with species-characteristic birdcalls. When the Common Swifts returned the tower had already been constructed, but the implementation of the hi-fi equipment was delayed. After one week, the hi-fi equipment was working and the Common Swifts reacted immediately. Previously they had only circled round the place of the former terrace; after the first imitated sounds, the Swifts flew to the tower and answered with birdcalls. At the end of May 2008, 10 nest chambers had already been occupied by Swifts. Since then the tower has been continuously used by the Common Swift colony.

Assemblage of the attachment


The nest chambers

Costs 2008 incl. VAT (19%):
Mast and foundation: about 10.000 Euro
Attachment swift-house: 3.850 Euro
Static calculations : 952 Euro
Delivery and Assemblage-attachment: 1.165 Euro
Hifi-equipment: 2.300 Euro
Remark: The realization and implementation of mast and foundation by
Co. Agrofor would have been less expensive!
Building contractor: Free State of Bavaria
Executive department of planning and building inspection:
Government building inspection office Munich 1
Mast and foundation: Co. Max Jung
Swift-house: Co. Agrofor, Oliver Wegener, www.schwalbenschutz.de
Expert advice and contact: Landesbund für Vogelschutz in Bayern e.V., Geschäftsstelle München, Tel. 089/20 02 70 83, s-weber@lbv.de, www.lbv-muenchen.de

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DOROTA ZIELINSKA:

Swift Towers in Warsaw – a summary

The Warsaw Society for the Protection of Birds (STOP) protects birds in Warsaw. In big cities birds mostly nest in buildings. The biggest problem for these birds is the loss of nesting places. Modern architecture in Poland does not have places for birds such as e.g. slots in the eves. Older buildings are renovated and after renovation, there are no places for birds. Many birds are being killed during renovations despite the fact that they are protected by law and they are also useful to people because they eat so many oppressive insects. Birds nesting in renovated buildings are a cause of conflict between developers and those who want to protect birds. Across Europe a decline in the population of birds like Common Swift or House Sparrow has been observed and in many European regions these birds are nearly extinct.

One of the best ways for protecting these birds may be the creation of safe nesting places in

special buildings, near to human beings but away from areas of potential conflict. Something just for them is the way to do it and so we planned to build swift towers. It is possible to build such towers in green areas and on estates. We want to protect Swifts and other birds in buildings through educating people, building nesting places for them and attracting the attention of the media to them. That is why STOP decided to build swift towers which we saw as an ideal solution. The first step was a competition for the design of a swift tower which was launched in 2011 with the President of Warsaw as an honorary patron of the event. We received lots of very interesting and varied designs. There was one winning project and 6 others received awards. Now we plan to build many different swift towers in Warsaw. We are counting on more support from the Warsaw authorities and we hope that we will secure it. We want Warsaw to become the swift capital of Poland.

Stowarzyszenie Stoleczne Towarzystwo Ochrony Ptakow (STOP)
Warsaw Society for the Protection of Birds (STOP)
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List of the attendees 2012

Åke Jönsson, Alexandru Stahl, Amnonn Hahn, Andries Berghuis, Arlet Wills, Arndt Wellbrock, Brian Cahalane, Charles Foster, Charlotte Jacquat, Chris Mason, Christian Herrmann, Daniel Kaiser, Daniele Muir, Dawid Zyskowski, Denisa Lobbova, Denise Thompson, Derek Bromhall, Dick Newell, Dorota Zielinska, Edmund Hoare, Edward Mayer, Elena Muñoz Lopez, Elisabeth Grabow, Enric Fusté, Erich Kaiser, Evert Pellenkoft, Gilda Gödert, Gillian Westray, Hein Verkade, Helen Hodgson, Henning Wills, Hilde Matthes, Igor Fefelov, Ingolf Grabow, Jaap Haveman, Ján Gúgh, Jan Holmgren, Ján Kaľavský, Joanna Suchodolska, John Wilson, Julia Bromhall, Kazimierz Walasz, Klaudia Witte, Klaus Roggel, Lei Zhu, Levent Turan, Louis-Philippe Arnhem, Lubomira Vavrová, Luit Buurma, Lukáš Viktora, Lukas Wihardjo, Lyndon Kearsley, Mandy Mayer, Marcel Jacquat, Marko Legler, Markus Werder, Martin Cel'uch, Martine Wauters, Mauro Ferri, Miguel Carrero Gálvez, Carmen-Mihaela Stahl, Miranda Berghuis, Peta Sams, Peter Cush, Petra Carlsson, Regine Tantau, Rick Wortelboer, Rose-Marie Schulz, Roy Overall, Rüdiger Becker, Sarah Niemann, Susanne Åkesson, Susanne Salinger, Tanya Hoare, Tom R. Westeneng, Ulrich Tigges, Victor Froome, Yue Cui.

Group photo 2012

Photo Klaus Roggel

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