

# 8<sup>th</sup> - 11<sup>th</sup> April 2010

# **The Common Swift Seminars - Berlin**

# Summaries

JEFF BLINCOW:

#### Primary purpose of Common Swift Apus apus screaming parties

Predators like the Hobby *Falco subbuteo* cannot use obstructions to hide behind. Therefore, when a bird wants to enter a nest situated in a confined space it may call for help from other members of the colony to build confidence and for support.

The screaming helps the birds bond as a screaming party, then aids their formation flying in restricted environments and creates a distraction for birds to slip un-noticed to and from the nest. The screaming draws attention away from the birds at most risk from danger.

#### ZOFIA BRZOZOWSKA:

#### Rescue Centre "Save our Birds" www.ratujmyptaki.org

Since the setting up of the trust we have rescued more than 1500 birds. About 75% of them have survived and have been released. Since 1998 we had 234 Common Swifts in our care and we have been successful with 213 of them.

#### **Situation in Poland**

Site owners, developers and builders wreck and destroy the nesting sites and they also do it during the breeding seasons. Birds are bricked in alive or their nesting sites are closed off. There are laws that protect birds, but only in theory. We have written many letters to officials, responsible for the protection of birds, but we do not get answers. 85% of Swift population in Szczecin have been wiped out, but the authorities seem not to care.

#### LUIT BUURMA:

#### Shared Skies: can aviators learn from Swifts?

Although the Swift (Apus apus L.) only roams the skies of Europe for three months per year, it nevertheless is the species most frequently struck by airplanes. Furthermore, her weight, shape and air speed bring the species to the borderline with respect to aircraft damage: smaller

Ulrich Tigges tigges@bgu.ac.il



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birds are usually pushed aside without creating a risk to flight safety.

Consequently, the Swift is the ideal species to calibrate radars for bird monitoring and the design of systems for bird avoidance and operational decision support. Identification of Swifts by tracking radar is relatively easy thanks to their characteristic wing beat signature. During June and July this extreme aerial bird produces by far the biggest number of echo returns at the display of the long range air defence radar in the North of The Netherlands.

It was at this S-band radar station where the author discovered typical dusk and dawn ascents of Swifts in 1979. Since then he infrequently checked the ascents at civil twilight in the field and found out that Swifts gather at night in big numbers over Lake Ijssel. The improved bird video extractor ROBIN at the big air force radar enabled him in 1996 to study the spatial and temporal ascent phenomenon and to put forward a new hypothesis on social assessment of synoptic weather dynamics by Swifts (Buurma, L.S. 2000. Dusk and dawn ascend of the

Swift, Apus apus L., Proc. International Bird Strike Committee 25 Vol II, p.113-124 – see <u>www.int-birdstrike.org</u> under the earlier title: Buurma, L.S. Bird strikes above the boundary layer). Recently these radar observations have been upgraded further with respect to radar resolution and shed new light on the old riddle of nocturnal aerial Swift escapades.

#### RENATO CECCHERELLI, GIANLUCA BEDINI:

#### **CRUMA - LIPU Rescue Centre in Italy**

In 2009 at CRUMA we had 265 Common swift hospitalized; number that represents 8.6% of the total number of admitted animals. 92 Swifts were adults, while 173 were nestlings.

Talking about swift pathology, we have to make a distinction based on age of individuals. In fact, main pathologies of nestlings are due to Candida and bacteria Gramm- infections and serious asthenia; while in adults the main causes of hospitalization are due to traumatic events (trauma with shoulder subluxation, trauma with flight feathers and tail feathers avultion; generic trauma).

75% of the hospitalized subjects were eventually reintroduced to the wild.

#### JERZY DESSELBERGER:

#### Dairy food for swifts (and some other birds)

There are good reasons to consider this food optimal, as for over thirty years it has been successfully used for many hundreds of Swifts, martins and other insectivorous birds, and no negative consequences have been found. So this presentation is a contribution to the knowledge of feeding birds (Swifts).

Ulrich Tigges tigges@bgu.ac.il



APUS life 7



#### The cheese mixture

full-fat "Farmers' (a.k.a. quark or curd) Cheese" without any additives300 gpowdered glucose30 grice flour15 gcorn flour15 gVitaral (Jelfa) – vitamin and mineral preparation1 pill (1 g)

#### Hard-boiled egg

Egg white and egg yolk are always provided in a proportion of 2:1. Cook the egg for 6–8 minutes (not longer!) and cool it in room temperature.

#### MAURO FERRI

and Fausto Minelli, Romano Benassi, Stefano Sirotti, Mauro Villani (Special thanks to G. Rossi, R. Gemmato and P.F. Micheloni too):

#### Fidelity to the birthplace in Common Swifts

Ringing activities on swifts are maintained twice a year since 1991 in a historic Swift Tower, the Castellaro, in the Regional Park of Sassi di Roccamalatina, in the province of Modena, Italy. This tower (XIV Cent.) has over three hundred historic artificial nests for swifts build through the centuries, most of them ruined by the injuries of time. Thanks to the owner (late Dr. Maurizio Ferrari family) after a long decadence the tower in 1985 the tens of nests were rehabilitated by M. Ferri and G. Scorzoni and since that year is managed to preserve a little swift colony. First data from ringing sessions were early published (Minelli and Ferri, 1993), reporting about active nests (56, 48, 68) monitored during three years, reporting the eggs per nest  $(2.86 \pm 0.53)$  and the rate of chicks ready to leave the nests  $(2.54 \pm 0.53)$ , reporting also about the ringed birds (128 adults, 372 pulli) and (1993) recaptured ringed birds (20 ringed as adults, 2 ringed as pulli). About recaptured birds, 13 adults were in the same nest of 1991 and one was in the same nest where was ringed as pullus. Considerations are offered about these first few and interesting results. Since 1991 every year the team maintain the same scheme, based on a first check in the nests (early May, daytime) searching for pairs and checking again a second time (June late, night-time) for pulli and adults too. After the first report, data about 19 years of ringing activities are briefly offered, reporting about 1446 ringed birds (1155 pulli, 291 adults). In this period the recaptures of birds were 122, whom 34 ringed as pulli and 88 ringed as adults. Figures about recaptured pulli and adults are offered, also about the ages of the birds of which one was captured at his 14<sup>th</sup> year meanwhile the main part of adults and chicks were captured after 3-5 years. A short gallery of pictures will show the conditions of ringing activities in the ST. The group aim to collect data at least also this year using the same scheme, in order to obtain data useful to evaluate and discuss the main points of the methods for all the period 1991-2010 and contribute for a guideline for a best practise on ringing activities in a historic Swift Tower, as many of these particular buildings still remain in good number in some regions of centre-northern Italy.

Ulrich Tigges tigges@bgu.ac.il





#### MAURO FERRI:

#### Italian historic Swift towers, special buildings for swifts, since XIV Cent.

After a first visit to a "Swift Tower" in 1985, that building ((the Castellaro tower, in the Regional Park of Sassi di Roccamalatina, province of Modena, Italy) and is ancient compound of more than three hundred artificial nests, became suddenly a focus of interest to be developed, discovering and visiting other similar buildings around there and also in other provinces and regions. References (books, articles) about a very complex argument that mix together technical and cultural aspects from History and Agriculture to Natural history, were collected and after considerations, visits and inquiries it was drawn a figure of the starting and developing process of this particular artificial nests (Historic Swifts Tower, HST) conceived of course to collect birds for meat. Anyway the method to manage the HST, at least in two regions, seems to have been developed in order to not weak the colony rather than strengthen, since talks with former <swift keepers> and even references indicate that at least one chick was let in every nest, both in Emilia and Tuscany areas, as it was a ante litteram sustainable practice. Actually the number of nests in each HST often exceed hundreds; more, the different kind of "holes lines" in the walls witness, in many cases, a progressive enhance corresponding to an increasing numbers of pairs in the colonies, even in area where till nowadays HSTs are spread often in great number and high density, as in the provinces of FC, BO, MO and RE in the Emilia Romagna region. Ancient authors (for instance, Pliny the Elder, Columella) where considered without results to investigate how this practices possibly started and little aspects in few fresco paintings may indicate the XIV C. as the beginning period. Later there are useful references from Spallanzani (1797) and one by Savi (1831) whereas some contemporary enthusiasts wrote reporting about the surviving buildings. Three catalogues of censused historic buildings, in 9 municipalities of two provinces of the Emilia Romagna region, were considered to state that at least 77 HSTs remained on 747 building in an area of ca. 60 km of diameter, in the period 1981-1988. Galleries of pictures are shown to illustrate the three main kinds of "holes & nesting cell "were conceived and spread trough Italy, on many type of buildings: the oldest ones were in defence towers, then were adapted to towerhouses, to dovecote-towers, to house walls, to attic and to dovecote-on-roof and even to church towers, since XIV C. to early XIX C., in rich and humble buildings and houses too. The area were the remaining HSTs are spread nowadays cover quite all the centre-northern Italy, although is not clear why these buildings seems to be present in large numbers in the some municipalities, in high density in some cluster areas or very sparse and often with only lone specimens in large regions (at least in one case also abroad, in Belgium, where a church tower in a village show some similar holes, after in early '900 a Italian priest ruled the parish: LP Arnhem, pers, comm.). More, the HSTs in the main part of Po River Plain seems to have early shifted (XVI C.?) to became <Sparrow Towers>, to target species clearly more abundant after the development of the intensive farming on cereals (mainly wheat and rice) in large flat lands, maintaining that function till late '40 at least. The Historic Swift Towers, at very high expenses of building and maintenance, seem to have been devoted to produce not meat as a staple food but little "crops" (1,5 chicks/nest/year, resuming from Spallanzani, 1797) for preparations to be preserved and used mainly as luxury gifts meanwhile Sparrows Towers became suddenly more interesting to adopt because monthly crops for domestic meat needs

Ulrich Tigges tigges@bgu.ac.il





and selling too, as documented for mid XIX C. (Mazzoleni, 1999). Luckily not few of these historic compounds of artificial nests (both for swifts and sparrows) remain nowadays in our towns, villages or farms, but really in some cases are well preserved, also to maintain ringing activities, (Ferri, 1990, 1993; Minelli & Ferri, 1993; Brichetti Caffi & Gandini, 1993; Mazzoleni, 1999; Boano & Malacarne, 1999; Bassi, 2002, 2006, 2008; Ciani, 2003). This particular buildings are actually a real legacy and ought to be better considered by the Authorities for the conservation of monuments and historic buildings, to prevent the definitive lost of the lasting ones or by ruin or by building renovations and development, as it happens normally. A better knowledge about HSTs would be very useful to suggest solutions to preserve or restore the last ones of them and also to reuse these architectural solutions in new building on demand of the landowners oriented to do real things to preserve the swifts, as suggested in two cases in Reggio Emilia and Milan towns. The aspects about the historic artificial nests are also useful to suggest swift-friendly solutions to renovate or restore historic buildings, for example preventing the use of scaffold holes by pigeons, and HSTs seems also to be useful for educational activities about urban wildlife and to promote biodiversity preservation even in highly inhabited areas. This real legacy may also suggest how to implant artificial nests in new buildings and maintain Swifts and their artificial nests as topics of the anthropogenic landscape in Italy.

#### MAURO FERRI:

#### Spallanzani and the Common Swifts (A booklet of field notes and tests about CS)

The Natural History get large impulses and contributes by Abbot Lazzaro Spallanzani (1729–1799) which was a scientist, a Professor in Pavia's University, and a passionate traveller to study Natural History. During his life applied routinely experimentations (Pasteur restart from his fundamental observations on absence of fermentation in boiled juices) and the Common swift too was long time under his attention trough the years, mainly with visits and tests on the field>. Actually he wrote about this species (Rondone Hirundo apus) in one of the five booklets on "Five Swallows" he added as an appendix to the Italian printing of his "Travels in the Two Sicilies and some parts of the Apennines" (1797). Unfortunately this appendix was not translated in the English edition (1798) and would be interesting to extend his accurate observations also to the contemporary passionate English reading people of swifts-watchers and lovers.

He observed swifts in several towns and villages of the <Lombardy> (of his time) and where he referred too about "dovecotes for swifts" and often used them for his observations and tests. More, his interest on Common swifts was also along his journeys in Italy, Greece, Balkans, and Turkey.etc... and in this booklet reported a lot of notes and data, totalling 9466 words in 14 pages. His writing is nervous and colourful, not so easy to translate but very interesting and often fascinating. He observed how raw materials of the swift nests were <glued> by a substance produces by the jaws, and how these birds do prefer high buildings in towns or lower too if near the water, as in the Pavia's bridge. He often used the towers or the

Ulrich Tigges tigges@bgu.ac.il





"dovecotes for swifts" (the Swift Towers!) To observe the behaviour of this birds, also in mating, opening a little hole in the door of the artificial nest he had in his sleeping room during the Summer holidays he yearly spent in villages in the provinces of Reggio E. (where he born) and Modena. He was also the first to band birds for scientific purposes, as he tied a tiny red rope to a leg of a pair of swifts he captured in one of his artificial nests, checking the next summer for one swift back, one of <his swifts>. He also read Le Martinet Noir by Montbeillard but wanted verify much of his statements sometime having some evidences or sometime confuting them and investigating for this purposes a lot of aspects as the daily number of the chicks feeding, the capability to fly up from ground, the supposed feeding behaviours of the adults daytime, the sharpness of the sight of the swifts (LS state swifts can discover from 314 feet a ant flying 12 feet high!) and the particular way of fattening and weighing of the chicks, measuring the weights of chicks and their parents at different ages. And more and more things that may capture the attention of a modern reader too. My (very bad) translation from the colourful, polished, learned and often obsolete Italian of XVIII C. to English of the full booklet "Swift Hirundo apus" is in progress and thank to the kind patience of Mandy and Edward Mayer who revise the text, in few weeks we all may share the legacy of this great Scientist about the natural history aspects of the Common swift.

#### ENRIC FUSTÉ:

#### Status and trends in Spain

Based on the data from the last Atlas of Breeding Birds in Spain (2004), the minimum population of Common Swifts is considered around 620.000 breeding pairs (no data from

18% of the territory). Previously in 1997 were estimated in 450.000-600.000 pairs. On the other hand, the Atlas of Breeding Birds in Catalonia (2002), a region North-East Spain which represents the 6% of the Spanish territory exposes a breeding population between 203.000-288.000 pairs. When comparing both censuses, we observe quite an important inconsistency, possibly due to the difficulty to obtain an accurate census of this species. How such small territory contains one third of the Spanish breeding population? In 1988 Bernis, a Swift researcher, estimated the breeding population in Spain in around the million, and later on even estimated the population in a few millions! How that estimation was changed? Based in new census techniques? In addition, the database from the long-term monitoring scheme on common breeding birds in Spain (SACRE), from the Spanish Ornithological Association (SEO), estimated the average population sizes of 95 species from 2004 to 2006. They published an estimated for the Common swifts that seems hard to believe, 32.750.000, yes that's 32 millions (the study refers to a general population, not breeding birds). I personally have addressed to SEO about the reliability of this data, which to me (and some other professional ornithologist) is absolutely inaccurate for this species. All this mixture of data exposes an important concern; there is no accurate data to expose an accurate population thus describe the trend of the species in Spain.

Ulrich Tigges tigges@bgu.ac.il



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ENRIC FUSTÉ:

#### **Current research on diets**

Until 2008, Torreferrusa Wildlife Rehabilitation Centre (CRFST) in Barcelona was using a diet based on rat mince to hand-rear common swifts (Apus apus) orphans. In order to assess the performance of this diet, growth rates and body weight of hand-reared common swifts at release were compared to those of wild parent-raised. The results showed significant Differences in final weight, being remarkably lower for hand-reared birds on the rat mince diet (rat mince diet 32.8g SD  $\pm 2.7$  vs. Wild 42.6 SD  $\pm 3.9$ g). In 2009 CRFST extended the diet study by including three additional diets: one based on the FoNS 08 © formula (kibble diet), where the main ingredient is a high protein-low carbohydrate cat food (Orijin ®); one based on crickets (90% Acheta domesticus, 10% Galleria mellonella) and a third one using exclusively mealworm larvae (Tenebrio molitor). Insect diets were particularly supplemented with vitamins and minerals. The mealworm diet is somehow controversial; however it is used successfully in hand-rearing Chimney swift (Chaetura pelagica) in the US. Histopathological evaluations of tissues conducted in three birds fed for more than 20 days on mealworm gave no evidence of illnesses of nutritional origin or damage in internal organs. The final weights results in both insect diets groups were highly satisfactory, with values close to those on the wild (Cricket 40.1g SD  $\pm$  4.2 – Mealworm 40.3g SD  $\pm$  3.1). The results for the kibble diet were not as optimal as expected according to the literature reviews as they had low final weights (32.5g SD  $\pm$  3.7). Survival results on the two insect diets discard any sacrifice protocol based on clinical condition at admission. The results expose the need to implement changes in the diet protocols when using those non-based insect diets. Under the circumstances, the expensive cricket diet cannot be provided for economical reasons. The results encourage and support the possibility to use the less expensive mealworm diet with Proven success as a base diet for all admissions on the oncoming season in Torreferrussa, analyzing the outcome results with care.

#### ENRIC FUSTÉ:

#### **Diet and Cost Balance: A way forward?**

Nestlings in captivity should be fed the same food the parents would have fed them in the wild. Diets for insectivore birds represent a real challenge. Clearly, the desirable diet would be composed of diverse insect species. However, this cannot be feasible in many wildlife rehabilitation centres where large numbers of chicks are hand-reared. An insect diet mainly based on crickets (Acheta domesticus) is used in some specialized rehabilitation centres in Europe to hand-rear swifts. This diet is most favourable in terms of recovery, reaching optimal fledging weights and feather condition. Nonetheless, crickets are expensive items and they cannot be provided for economical reasons. The results of a diet research conducted in Torreferrussa Wildlife Rehabilitation Centre encourage and support the possibility to use the less expensive mealworm larvae (Tenebrio molitor) diet as a base for all the admissions on the Apus species. Commercially produced insects can be deficient in some nutritional components, being mealworm larvae particularly deficient in some vitamins and minerals.

Ulrich Tigges tigges@bgu.ac.il



APUS life



The mealworm diet formula has to be followed strictly to cover those nutritional deficiencies. Other strategies can also be conducted to supplement the diet with different insect species at low cost. Examples of in-house production of some species with easy breeding biology are: silk worm (*Bombyx mori*); wax moth larvae (*Galleria mellonella*); Dubia cockroach (*Blaptica dubia*); drones (*Apis mellifera*) obtained from regional bee-keepers and finally wild insects captured using pheromones traps (mainly coleopteran). The mealworm diet will be used in all expected admissions (790 on year 2009), providing an excellent outcome and hopefully settling this diet as definitive. The desired objectives are to obtain release weight close to 40g and to increase the survival rate.

#### **BERNARD GENTON:**

#### **Behaviour of non-breeders**

I have distinguished four generations of Common Swifts from my observations. Their behaviour in the proximity of nest boxes is an indicator of their sexual maturity:

From youngest to oldest:

- 1	"effleureurs"	- 2 pre-nesters	= non breeders
- 3	young breeders	- 4 adult breeders	= breeders

"Effleureurs" (effleurer = action of skimming a surface): Immatures of the  $2^{nd}$ , sometimes the  $3^{rd}$  or rarely the  $4^{th}$  calendar year, who brush slightly the entrances but almost never enter. In the annual schedule of arrivals, this generation is subdivided into two groups:

-  $3^{rd}$  and  $4^{th}$  calendar years, who arrive from early to mid June

- *the yearlings*, of which a certain proportion return to "skim" the colony of their birth, and arrive almost certainly after mid June (coloured rings).

**Pre-nesters**: Immatures of the  $3^{rd}$  (?),  $4^{th}$  and a part of  $5^{th}$  calendar year, who begin firstly by an exploratory stage (visiting several entrances) and finally end up choosing one; after which they attract a partner using diverse, structured, complex and long strategies to finally form a nest. Exceptionally they may lay eggs but reproduction is unsuccessful

**Young breeders:** who lay and reproduce for the first time, usually in the nest chosen by them the year before, when they were pre-nesters. But some individuals of this generation can also play the part of "free electrons" with regard to adult breeders

Adult breeders (a well known generation): Faithful to their nesting place, who form a solid, stable foundation for the colony.

#### GILDA GÖDERT:

#### Diet and feeding methods for rehabilitating Swifts

Swifts do not need to be force fed, but they have to learn to take food. Here one must distinguish between adult Swifts, fledged young Swifts, blind and featherless nestlings or feathered nestlings with open eyes. Young Swifts just before or just after leaving the nest are







an exception and need special care. In all feeding trials, the natural behaviour of swifts gives the best clues. The swifts' special ability of seeing, their sense of smell, their tactile sensitivity and their communication behaviour all play an important role. Normally Swifts have an ambivalent behaviour to humans as long as they have had no negative experiences. They only see humans as a new source of food. This raises intriguing questions about life in the wild. In our presentation we also want to introduce some new problems associated with parasites and a dreaded fungal infection. In addition we want to give some hints for an emergency diet and a review of the long-term care of Swifts and the impact of diet on plumage, particularly to the outer wing feathers.

#### **INGOLF GRABOW:**

Year	Sum	Nest boxes	Fixtures
1989-2002	21	21	-
2003	34	12	22
2004	38	20	18
2005	249	49	200
2006	249	110	139
2007	244	145	99
2008	140	124	16
2009	126	109	17
All together	1101	590	511

#### New nest sites in Frankfurt (M.) and surroundings:

#### ERICH KAISER:

#### **Observations of a Swift Colony in Germany**

The Kronberg Colony near Frankfurt in Germany started in 1966 with one pair and has now grown to 47 pairs of Swifts. With two exceptions, all nest sites have been occupied continuously over this period. The survival rate of nestlings has been 2.3 per nesting pair. In all these years there never has been a really bad season, and none of the breeders ever participated in a weather movement.

Using a clap net mounted on a wall net below part of the colony I can catch non-breeders (bangers), which are out of reach in most other colonies. Amongst them I have also caught 122 nestlings born in the colony. In 2004, for instance, I caught 17 nestlings born in the colony in 2003. The percentage of nestlings returning to the colony is probably even higher than my catching figures indicate, because I never catch 100% of the bangers. The return rate







of nestlings to the colony varies enormously. In some years I just catch a few, in others more than a dozen. Yearlings (nestlings from last season) normally return almost a month later from Africa than breeders. In fine weather non-breeders weigh considerably less than breeders, regularly below 40 g, the lightest was as low as 33 g and in perfect health. My theory concerning this is that in aerial roosting a heavy bird has to work really hard to stay aloft, whilst a lightweight individual can spend the night much more comfortably.

So far 12 of the breeders have been born in the colony; my oldest breeder was 17 years old.

#### LYNDON KEARSLEY:

#### **Geolocators and tracking Common Swifts**

What are geolocators and what they can and cannot achieve. What is the difference and usual confusion with GPS.

Why would we want to track swifts anyway.

How do we propose to attach them, when and where?

It is worth the risks involved?

Swifts remain only a very short time on their northern hemisphere breeding grounds and return to Africa very quickly. We can take steps to conserve their nesting cavities for the rest of the year cycle they are on their own. Tracking them will hopefully show how long they are in transit to Southern Africa and if there are specific routes taken. As high altitude flyer, are they affected by maritime and desert barriers?

Once in Africa a number of obvious questions come forward:

How do swifts deal with weather fronts and the rainy season.

How much of a barrier are the tropics and what is the relationship with the Inter Tropical Climate Zone.

What is their wintering region and niche particularly in competition with other swift species. How does the winter moult affect them and do they need to roost other than on the wing?

I would suggest that any attempt to understand global threats to swifts must look at their African odyssey.

#### MACIEJ LUNIAK, MARIUSZ GRZENIEWSKI:

#### Application of nest-boxes for swift – experience from Poland

This report is based on data from 1648 Swift nest-boxes which were installed in the years 2006-2009. They were located in 8 big cities and 7 smaller towns: 90 localities in total. In the period 2006-2009, 11 nest-boxes were available for Swifts for at least 4 breeding







seasons, 338 for at least 3 seasons, 1299 for at least 2 seasons, and 1648 for at least 1 season. In 2010, a total of 1810 nest-boxes will be "waiting" for swifts.

There are estimates for "visiting" (or not) by Swifts for 1013 nest-boxes: 268 (27 %) of them were reported as "visited" by birds and 745 (73%) were (or most probably were) "not visited".

Of the 268 "visited" nest-boxes, 32 were "found" by birds in the first season of availability and this is 24% of the total number (n = 135) of nest-boxes available in their first season. In the second season of availability 220 nest-boxes (32%, n = 687) were "visited", in the third one -15 (8%, n = 180), and in the fourth season -1 nest-box (n = 11).

In the group of 18 "visited" colonies of boxes 15 were located close to former or existing colonies of swifts and in 3 cases there were no swift colonies in the vicinity. Among 7 cases of "not visited" box colonies the respective ratio was 3 versus 4.

Conclusions: An effort to create breeding places for Swifts by installing nest-boxes gave disappointing results (so far???).

The highest percentage of nest boxes "found" by Swifts was in the second season of availability.

The proximity of other Swift colonies seems to be a significant condition for "finding" nest-Boxes.

#### HILDE MATTHES:

#### **Treatment of foundlings**

1. Don't put a Swift into a cage; it could damage the wings and the feathers of the tail. They like to sit in a half closed boxes, the bottom covered with kitchen paper, change several times a day. Put something like a nest (cork, wood, cloth) into one of the dark corners.

2. Don't feed meat or bread to a swift, they need insects: drones, crickets, wax-moth-larvae cut in half, dry insect food, circa 10 food-parts 5-8 times a day. If required you can give in the beginning Amynin or similar re-hydration fluid added to water.

3. Make a daily weight-control, the aim is, to bring the swift up to 50 grams. During the last days before release it slims down to 40-45 grams. An absolutely tiny swift may be only 37-40 grams.

4. For feeding wrap the swift into a handkerchief, try to open the beak carefully at the side with a fingernail, put a finger from the holding hand between upper and lower part of the beak, place the food with blunt tweezers behind the tongue. After feeding rub gently the









throat in downward strokes. A particular food item, he doesn't like, can be replaced with another.

5. Never throw a swift into the air to release him, just hold your hand up and wait. He will make his own decision to fly or to stay a little bit longer with you.

#### EDWARD MAYER:

#### Working with Local Government, Architects, & Landowners Persuading Building Professionals to Help Swifts

The future for Swifts in the United Kingdom cannot be left solely in the hands of individuals who place nest boxes on their homes. If we relied on individuals, there would never again be the same numbers of Swifts that there once were. There has to be a wider acceptance that Swifts need nest places specially created for them in buildings by the builders themselves. That, after all is where they have nested ever since the Romans came to Britain.

Public building projects are the best way to create Swift nest places in quantity and have them there and maintained for a long time to come. When working with building professionals one has to be able to make the case for Swifts on both practical and economic grounds, while using government policies on urban biodiversity to push the projects ahead.

Above all one needs the ability to find a simple low cost solution and to enthuse and be able to work successfully with people who may not share your interests or priorities.

#### EDWARD MAYER:

# Swifts and the Law in Europe and the UK - A quick look at the present state of the law and its effectiveness

#### **Europe – The EU Birds Directive**

Directive 2009/147/EC on the conservation of wild birds creates a comprehensive scheme of protection for all wild bird species naturally occurring in the Union.

The Birds Directive bans activities that directly threaten birds, such as deliberate killing or capture, destruction of their nests and taking of their eggs, and associated activities such as trading in live or dead birds, with a few exceptions. Its effectiveness varies greatly from member-state to member-state, but in general it has not proved much use so far in helping Swifts.

Ulrich Tigges tigges@bgu.ac.il Sponsors: Evangelische Schule Neukölln



#### The EU Habitats Directive

By espousing a system of reserves where wildlife may continue to exist, it serves to confine wildlife to a very limited existence, intentionally kept apart from all areas where humans are active. As it does not protect the species that share our cities, towns and villages it is quite useless for the protection of Swifts.

#### UK – Wild Bird Crime in the UK

Wildlife and Countryside Act 1981. Despite having a reasonable level of legal protection, Wildlife Crime is usually a very low priority for the Police and Judges, and the few cases that do come to court often result in minimal penalties. Almost always the Police & other Government Agencies fail to take any action unless provided with the evidence by the public or nature protection organisations. The situation regarding protection of nesting Swifts is very poor; I do not know of any prosecutions for destruction of occupied nest sites despite evidence that it happens frequently.

#### The future?

The only way forward is to press the Police and legal authorities all the time to take up cases where good evidence is available, and to also press parliamentarians for improvements to the laws to improve the chances of success for those cases that are brought before judges.

#### EDWARD MAYER:

#### Swift Conservation in the UK in Action

Showing some examples of the work we and others are doing in Britain to encourage both institutions and individuals to build nest places for Swifts. It can be as simple as a wooden box fixed to a high wall, or as complex as an architect designed feature on a major building.

I also show what you can do personally. This typically involves finding out where your local Swifts are nesting, protecting those sites against all threats and setting up additional nest places to permit the colony to grow, as well as enthusing your neighbours and friends and getting them to help Swifts too.

#### DICK NEWELL, EDWARD MAYER:

#### Swift Towers: the London Olympics 2012 Swift tower competition

As part of their biodiversity plan, the London Olympics organisers have decided to provide accommodation for Swifts in the Olympic Park, including 250 nest-boxes and a Swift Tower.

This presentation will include some general remarks about Swift Towers, as well as describing some of the designs submitted, including the winning design.



Evangelische Schule Neukölln





#### DICK NEWELL:

#### Some DIY Swift Nest-box Designs

There are several successful designs of nest-boxes and nest-box cabinets which any amateur carpenter should be able to make. There is also an experimental design of a box made out of recycled mains water pipe, as well as a sun-proof box suitable for placing on a south-facing wall. All of the designs are illustrated and specified with drawings on these web-pages: <a href="http://www.magikbirds.com/image.asp?search=0&title\_id=1117">http://www.magikbirds.com/image.asp?search=0&title\_id=1117</a>

#### DICK NEWELL:

#### Trends in the Swift Population in the UK

In the UK, we are fortunate to have the British Trust for Ornithology, an organisation that coordinates the survey activities of thousands of volunteers. Although there is no Swift-Specific survey to monitor the population of Swifts, results can be inferred from two surveys, namely the BTO/JNCC/RSPB Breeding Bird Survey (BBS) and from BTO/RSPB/Birdwatch Ireland Birdtrack. The BTO themselves provide an analysis of trends inferred from the BBS, and these results will be presented. Also, a more detailed analysis of trends derived from Birdtrack data will be presented. Ideas for a Swift-specific survey, for the purposes of monitoring Swift population levels, are also presented.

#### DICK NEWELL:

#### **Some Swift Questions**

This presentation examines a number of questions about Swifts and looks for data to support the answers. Received wisdom has it that, in the UK, young Swifts rarely return to their colony of birth, compared to some European colonies. Is this the case? What can we say about the stability of a Swift colony, given known survival rates of Swifts? Although Swifts seem to nest in 'loose' colonies, how close do they like to be to their nearest neighbour? What do Swifts prefer in their nesting place?

#### **ROY OVERALL:**

#### 47 years of observing CS in the Swift Tower in Oxford

Total birds ringed in Tower in last 50 years 5,500 Total Adults ringed in Tower 694, and recorded in subsequent years 217 Total Pullus ringed in Tower 4806, and recorded in subsequent years 52







EVERT PELLENKOFT:

#### Legislation in the Netherlands Law for the flora and fauna of the Netherlands

#### The articles 9 through 12 prohibit:

Article 9: killing, hurting, catching Article 10: deliberate disturbing Article 11: damaging or disturbance of nests, holes etc. Article 12: seeking and collecting of eggs of protected native birds during the breeding period.

Actually all breeding birds fall under this law. The breeding period is not specified in this law and depends on the species. Most birds make a new nest each breeding season. The one-time only nests fall under article 11 during the breeding period.

Some species return each year to the same nest. For these birds (amongst others the Common

Swift) article 11 is valid all year round.

It is important that, during building activities, it is prevented that the functionality of the permanent residence gets lost.

#### Code of behaviour for the building branch

In 2009 the minister of Agriculture, Nature and Quality of Food (LNV) drew up a code of behaviour for the building branch to the effect that, amongst others, the nests of the Common swift (Apus apus) are protected year round.

This implies that builders, when renovating or demolishing, must take inventory of the nests before the work starts.

The inventory should be carried out by specialized agencies or local birding groups. When nests are found, compensating measures must be taken to ensure that the birds can return to their old nests.

#### KLAUS ROGGEL:

#### The legal situation of Common Swifts in German

According to §42 of the Federal Nature Conservation Act (old version), endangered species

must not be interfered with, they cannot be caught, injured or killed nor can their nesting or roosting places be destroyed. §20a of the Federal Nature Conservation Act (2002) designates the Swift as a protected species throughout Germany. This protection is also provided by the Federal Conservation Regulation and by the EU Birds Directive 79/409/EEC.





#### MARK SMYTH:

#### Building a Swift colony on my house

Back as far as 2000, or before, I have been trying to attract Swifts to my house. It has been a long up-hill struggle. First I had a small wooden box under my eaves, but how did I know the hole was too big? Starlings nested every year but no Swifts even looked. Then I bought a Schwegler 16 nest box. Again starlings nested. The hole was too big. Then I heard about the CD. Initial interest was great and exciting but then nothing major happened until 2007. Where did they come from!?

In 2006 I had one pair move in, but playing the CD attracted nothing else. The CD was played loud all day every day. In 2007 the breeders were back but another pair banged at the nest box all day. I put up a new box and now I have both breeders and a practicing pair.

In 2009 I had 7 pairs. 2010? With a bit of luck, maybe a full house!

#### LEVENT TURAN:

#### **Common Swifts in Turkey**

There are four Swift species in Turkey. Apus apus, A. melba, A. pallidus and A. affinis.

The population density of Apus apus the Common Swift is higher than of the other three swift species. It is a widely found summer visitor and partially a north-south and south-north migrant in Turkey. Generally it comes to Turkey in March and the last migrants are seen between September and November.

There is no significant negative interaction between the people in Turkey and the individuals of the Common Swift.

They are protected by law and nobody hunts them. Nobody damages their nests, eggs or hatchlings. They have a cultural significance; they feature in many poems and songs.

Turkey has no detailed research results regarding the distribution of any bird species. There is neither any systematic study of the Common Swift.

#### HEIN VERKADE:

#### Swifts in Noordwijk-Binnen (the Netherlands)

Since 1993 all the 'fly-in places' of swifts in Noordwijk-Binnen (13.400 inh.) are counted every five years. The results are:







1993: 167 1998: 167 2003: 173

2008: 148 different places where swifts flew in.

The population of swifts in Noordwijk seems to be stable with a small decline during the last five years.

In 1993 the birds were concentrated in the older parts of the village just around the medieval centre. Between 1993 and 2008 the numbers declined in these areas but increased in the newly build parts of the village. The medieval centre is located in the middle of the eastside of the village. In 1993 44% of the 'fly-in places' were orientated to the east. Perhaps this can be explained by occupation strategy of swifts (circle model). So the origin of the 'colony Noordwijk' must have been in the medieval centre. Nowadays only a few pair of swifts are found there. Restauration of many monumental buildings during the 70s and 80s perhaps caused the decline of swifts in the centre.

The reason for the overall decline during the last five years is not yet clear. During this period 40 'fly-in places' were destroyed while 47 places were abandoned. Many of those sites abandoned in 2008 were just newly occupied in 2003.

On the other hand, of 48 similar nesting places, all known by swifts in 2003, 9 were occupied in 2003 and only 15 in 2008. So housing shortage cannot be the only reason for the decline. Perhaps another explanation should be found in winter survival rates, food availability etc. In new buildings where special nesting places are created the occupation seems to follow a certain pattern. First the nesting places at the edges of the buildings are occupied followed by the nests at the centre.

#### GILLIAN WESTRAY:

#### The Swift care environment

The rehabilitation unit for orphaned and injured Common Swifts, Swallows and House Martins has evolved over the years. Maximum number admitted per year has been 150 with an average release rate of 85%. The unit is safe for flying and physiotherapy exercising, the windows have soft screens allowing the natural daylight in, and the floor is cushioned with foam rubber.

The cages are of smooth plastic with fabric sides for clinging, a dark nest area with natural light from one end – as in nature. The youngsters defecate outside of their nest and so keep clean. When they reach about 4 weeks of age they spend more time exercising and looking out at the sky. Inside floor area of the cage measures  $60 \times 40$  cms, giving room for full wing spread during "press ups" and wing beating exercises.

Diet and feeding techniques are the same as Hilde Matthes. Very young swifts have saliva transfer from an adult. All patients are weighed everyday with the target being the same progression as a natural swift, peaking at 50-55grams and releasing at 40-45grams.









Before release the birds are checked for weight, feather length, strength – able to take off from the floor, behaviour indicating maturity and finally good weather. The swifts always have the final decision and are never thrown.

#### **Lessons from House Martins**

The Hirundines have the same diet as the Swifts. The advantage with these birds is that they can be fully assessed for their flying ability before release. House Martins often suffer from Hypocalcaemia, this will often present as a fledgling with splayed legs, or a seemingly normal bird, but too weak to fly. Nestlings will show the first signs with a lack of co-ordination when offered food, for example closing the beak as the food approaches. Remarkable recoveries have been achieved with Calcium Gluconate and vitamin B complex. This is now included with the regular supplements.

Swifts may develop a slightly unnatural head movement and seem to lack enough strength to lift from the floor. Administration of the Calcium Gluconate and Vitamin B Complex has been found to rectify these problems. The normal vitamin and mineral supplement containing calcium carbonate has always been used and does not seem to prevent the problem in some cases. This does not apply to all birds as there seems to be a wide difference of absorption rates, but these supplements are now included for swifts.

#### ARLETT WILLS:

#### Maintenance and development of a Swift Colony as a teaching aid

The Swift-School (Mauerseglerschule) in Regensburg.

I established the Hans-Herrmann-Volksschule as a Swift school in 1998.

My aim was to teach my students how to become responsible for the environment and how to care for birds.

We realised this aim by teaching social skills, achieving consensus and by handcrafts. We took great pains to

1. protect a swift-colony for the last 30 years in the Great Schoolyard,

2. establish a new swift-colony in the Little Schoolyard and

3. protect and maintain the nest-sites of both swift-colonies by the different branches of our school.

The students learned to observe closely and to write about their experiences. They developed their creative skills.









#### JOHN WILSON:

#### **City Development Planning in Edinburgh**

Edinburgh Council, in consenting to some new housing developments, is now willing to insert a condition requiring installation of swift bricks. Some examples are shown. The Council has a biodiversity post, 2 part-time staff sharing, and they have been useful in explaining to planning officers what is required.

KLAUDIA WITTE and Jan Rozman:

#### Daughters preferred – Imbalanced sex ratio in offspring in a colony of Common Swifts *Apus apus*

To maximize the lifetime reproductive success bird species have evolved specific life history strategies. One important factor for maximizing lifetime reproductive success is the sex ratio in offspring. The common swift *Apus apus* is a long living bird species with an extreme "lifestyle". We investigated the sex ratio in offspring in a swift colony near Olpe in 2008 and 2009. We found an extremely female based sex-ratio in two consecutive years.

# 8<sup>th</sup> - 11<sup>th</sup> April 2010

# **The Common Swift Seminars - Berlin**

## Supplement

#### **Diets and post-release problems**

After the meeting some attendees discussed the problem of the diet for Swift chicks again with regard of the post-release.

Here is the summary:

On the one hand certain diets, inclusive soft food, work fine. The chicks look healthy, vivid and the feathers are in good shape.

On the other hand there have been the following experiences with Swifts, which were fed with soft food and which came into human care:







1. they did not take hard (insect) food voluntarily or spat it out.

2. after the change to insect food, they lost many wing and tail feathers.

From these facts (no matter the reason) it is likely that the same will happen with released chicks, which were fed with soft food. They either will not change to insect food or they could lose feathers.

This is the up-to-date standard of knowledge. (U.T.)

### Attachment

#### "Swift City/Building homes for the Swifts" <u>A Worldwide Campaign for building stable and lasting Swift towers</u>

Promising the future of the Common Swift is our common goal.

We, the FRIENDS OF THE SWIFTS Association, would like to offer to all you Swift Activists the idea of an International Worldwide Swift Campaign.

This Swift Campaign will be based upon erecting Swift Towers in all main cities where Swifts are in need and Swift activists are ready to assist. From Morocco & Israel in the South, to Norway & Finland in the North, Spain & Portugal in the West and India & China in the East.

- **The Challenge:** Raising awareness for the swifts and their plight, and encourage activism
- **The Strategy:** Getting people to connect to the life of the Common Swift.

#### Creative solution:

Physical layer: We created outdoor installation - huge interactive nests with viewing facilities in central locations that allow people to interact with the swifts. The nest itself with its unique design empowers the idea of urban nature, which reinforces the swift's positioning as a unique urban bird.

Digital layer: Where the physical acts as an actual proof to the problem, the digital platform brings to life the swift experience with a Live Camera on a mini site, which broadcasts live video from the nest. In order to keep peoples' attention we asked them to register via their mobile phones with specific SMS Swift number in order to get the hottest reports as they happen.

Ulrich Tigges tigges@bgu.ac.il





PR layer: Connecting to major influential media outlets-National Geographic channel and major portals. Also we supported the urban idea with transit advertising.

We have already started such a Swift Campaign locally and the results are fantastic.

Our sponsors are a subsidiary of the International Advertising company: DRAFTfcb, which may be interested to lead such Campaign on an International scale as well.

In order to proceed, we should elect representatives and form an International Steering Group (ISG) that will work together with the elected Advertising Company.

This is the time to join in for promising the future of the Common Swift.

Looking forward, Amnonn Hahn, FRIENDS OF THE SWIFTS r.a. Israel

e-mail: <u>hahn@bezeqint.net</u>

### Second attachment







### **Guidelines for Building Swift Towers**

The purpose of building a nesting tower for Swifts (*Apus apus*) is to offer a longlasting nest-site at a permanent site. A secondary aim is to allow ornithologists access to the nesting boxes in order to monitor the breeding of the Swifts.

A Swift tower 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 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

Ulrich Tigges tigges@bgu.ac.il Sponsors:







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 35 - 50 mm in diameter, but should be placed some 10 mm above the nest box floor level, although the entrance may be located in the floor, and should include a barrier to keep out competitor species. 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.

#### Tower 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 at least 10 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. 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.
- 8. 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.
- 9. The tower design should include 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.

contact tigges@bgu.ac.il

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









Oxford University Edward Grey Institute of Field Omithology



Tsinghua University Ecobalance Center



Hacettepe University Environment Education Bird Research and **Ringing Center** 



Lund University Centre for Animal Movement Reserach



Irkutsk State University Research Institute of Biology



The International Center for the Study of Bird Migration, Latrun



Bird Conservation Society of Iran



International Birding & Research Centre in Eilat



Museum & Institute of Zoology Polish Academy of Science



Protection of Nature in Israel Israel Ornithological Center



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Native Fauna and its Habitat Czech Society for Omithology Rehabilitation Group



Ornithological Station of Tarifa



Italian Research Group on Nest Boxes



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Oranim College

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Norwegian Ornithological Society



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Ulrich Tigges tigges@bgu.ac.il



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## The attendees of the 1<sup>st</sup> International Commonswift Seminars Berlin 2010



Photo: Amnonn Hahn



