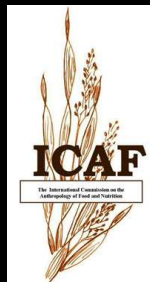


# BIRDS AS FOOD

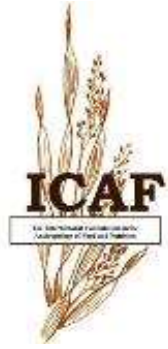
*Anthropological and Cross-disciplinary Perspectives*

edited by

**Frédéric Duhart and Helen Macbeth**



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***BIRDS AS FOOD:***  
***Anthropological and Cross-disciplinary Perspectives***

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# LIST OF CONTENTS

	<b>Page</b>
<b>Preface</b>	vii
<b>List of Contributors</b>	viii
<b>Introduction</b>	1
<i>A Feathered Feast</i> by Frédéric Duhart and Helen Macbeth	3
<b>Section One: Birds and Humans</b>	15
<b>Chapter 1.</b> <i>Birds as Food: an evolutionary perspective</i> by Wulf Schiefenhövel	17
<b>Chapter 2.</b> <i>An Ornithological and Cultural Perspective     on Birds as Food</i> by Frédéric Duhart	29
<b>Chapter 3.</b> <i>Edible or Disgusting? Notes on the Cultural     Value of Birds among Students in Paris (France, 2011)</i> by Eric Garine, Katia Buissereth, Jonathan Chambon, Mohamed Essouci, Gaële Guillouet, Isaura Mancilla, Jean Wencélius and the Ethnoscience class (Nanterre 2001)	57
<b>Section Two: Breeding, Preparing and Eating Poultry</b>	81
<b>Chapter 4.</b> <i>Frying Fowl in Early and Modern America: Cultural     and home economy aspects of chickens as working people's     food in southern USA prior to global commodification</i> by Richard D. Ralston	83
<b>Chapter 5.</b> <i>Huaxolotl, Guajolote, Huilo or Cocono:     A Mesoamerican resident of rural and popular class</i> by Gabriel J. Saucedo Arteaga and José Jiménez López	105
<b>Chapter 6.</b> <i>Turkeys on the Table: a story of many changes and     some misconceptions</i> by Helen Macbeth	127
<b>Chapter 7.</b> <i>Turkeys in the Zagorje Region of Croatia: a case     study from a cult bird to a frozen bird</i> by Bruno Beljak	147
<b>Chapter 8.</b> <i>Confit, Foie Gras and Magret: a short history of the     mule duck in southwest France</i> by Frédéric Duhart	165

	<b>Page</b>
<b>Chapter 9.</b> <i>Ostrich Meat between Exoticism and Regular Consumption</i> by Alicia Aguilar and F. Xavier Medina	185
<b>Chapter 10.</b> <i>Ostrich as Food in Mexico: from livestock production to consumer preferences</i> by Daria Deraga	203
<b>Section Three: Societies and Bird Consumption</b>	215
<b>Chapter 11.</b> <i>Ancient Artificial Nests to Attract Swifts, Sparrows and Starlings to Exploit them as Food</i> by Mauro Ferri	217
<b>Chapter 12.</b> <i>Eating Parrots and being Brazilian with Pleasure</i> by Almir Chaiban El-Kareh	241
<b>Chapter 13.</b> <i>Chicken, Goose and Quail: the tradition of eating birds in Russia</i> by Tatiana Voronina	259
<b>Chapter 14.</b> <i>Birds for Women, Birds for Men: food taboos and nutritional wisdom among the Eipo of the Highlands of West-New Guinea</i> by Wulf Schiefenhövel	275
<b>Epilogue</b>	295
<i>Being in the World and Eating Birds</i> by Frédéric Duhart	297
<b>Appendix: Indices</b>	319
<i>Index of Culinary Terms and Recipes</i>	321
<i>Index of Bird Species</i>	325

**Cover Photographs:** all are © Frédéric Duhart

*Front cover top row:*

Left: ‘SASSO strain’ naked neck chicken (*Gallus gallus domesticus*)  
Salies-de-Béarn, France;

Right: Braised squab (*Columba livia domestica*) Hong Kong, China;

*Front cover bottom row:*

Left: Quail Forestiere (*Coturnix japonica*), Hossegor, France;

Right: Song thrush (*Turdus philomelos*), Donostia-San Sebastián, Spain;

*Back cover:*

Top: Pomeranian Geese (*Anser anser domesticus*), Rosengarten, Germany;

Bottom: Braised chicken feet (*Gallus gallus domesticus*), Macao, China.

## PREFACE

The International Commission on the Anthropology of Food and Nutrition promotes cross-disciplinary discussion by bringing together contributors from different sub-disciplines within Anthropology and beyond from other disciplines in conferences on food-related topics. The chapters in this volume arise from such a conference, entitled, *Birds as Food: Cross-Cultural and Cross-Disciplinary Aspects*, which was held in Sopron, Hungary, in the summer of 2012.

We thought that a free e-book would be an excellent sustainable tool to communicate science in a world where the access to expensive books and journals remains a serious problem for too many students and citizens. For this reason, we chose a format that was easy to use and allowed full colour illustrations and a font size that made the print clearly readable even on a small tablet.

Of priority, the editors wish to thank Wulf Schiefenhövel and Georg Bohák who, so successfully, organised the Sopron conference, and especially we thank Wulf Schiefenhövel who stimulated and received the earliest written texts. The Hungarian-German Foundation, *Pro Lingua et Cultura Germanica*, The Austrian Ethnomedical Society, The Bonafarm Group of Hungary, The Institute for Animal Sciences in the University of West Hungary, Mosonmagyaróvár, and the Hotel Pannoniamed, Sopron, are thanked for supporting the conference in various ways. We are most grateful to all the contributors for their papers and for their patience with our comments and the many delays in finalising this electronic book. Last but not least we thank the two referees for their positive support for the book and the many constructive points that they made.

We hope that readers enjoy the result.

HM and FD  
January 2018

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## **CHAPTER 11**

### **ANCIENT ARTIFICIAL NESTS TO ATTRACT SWIFTS, SPARROWS AND STARLINGS TO EXPLOIT THEM AS FOOD**

*by Mauro Ferri*

#### **Introduction**

This chapter is about the artificial nests that in Europe, since antiquity, have been made to attract wild birds to nest and to reproduce in places where humans had access. The reasons for doing this have varied and, whereas, as relevant to this volume, the oldest and long-lasting reason has been to encourage the reproduction of birds for meat and eggs, other reasons have existed. Examples, more recently, are to encourage insectivorous species to multiply in farms or areas of managed woodland or, nowadays to support the protection of certain species of wild birds in gardens and backyards. Rediscovering such methods of support for protection purposes is beneficial as recent architectural details and designs tend to exclude the nesting sites and refuges that for many centuries linked birds (and bats) to buildings. In addition, modern attitudes and the laws of many European peoples no longer allow that many species of resident or migratory birds are considered as game to be hunted, trapped and used as food, as had previously happened with the species targeted by the ancient artificial nests represented in this chapter.

#### **About artificial nests generally**

Richards (1980), Soper (1983) and mainly Campbell and Lack (1985), suggest that in Britain the first use of artificial nests for birds started as a naturalist's pastime. Gilbert White's brother, for example, in 1782, successfully attracted house martins to nest in scallop shells nailed to the cornice of his home. It is also cited that later, in the early nineteenth century, the Yorkshire squire, Charles Waterton, adopted the use of artificial nests to attract wild birds, and that his suggestions were so widely followed that in Britain in 1897 Masefield listed 20 species benefitting from such nests throughout the country (Masefield 1897). The sources mentioned above indicate that in Germany Baron Hans von Berlepsch was so keen to use them on a large scale to protect



insectivorous birds in his forestry fields that in his life he laid down 2,300 nest boxes on his properties. However, all these authors suggest that the use of artificial nests is indeed more ancient (at least back to the late Middle Ages) and that it was primarily for food purposes, even reporting that specific terracotta pots were used in the Netherlands to attract Starlings (*Sturnus vulgaris*) and Sparrows (*Passer spp.*), so that the fledglings were captured and used as food, and that wooden flasks (*cistulae*) were used for starlings in Silesia, and that artificial nests were in use in Finland so that the eggs of common goldeneyes (*Bucephala clangula*) could be harvested easily.

### **Artificial nests for Starlings and Sparrows, in North Western Europe**

In fact, the story of the use of artificial nests seems to be even more ancient and complex for obtaining birds as food. Using iconographic sources, evidence is available well before Frederik van Valkenborch's *Kirchmessfest* of 1597 (cited by Campbell and Lack 1985), since earlier Flemish artists included artificial nests in their pictures, such as in Hieronimus Bosch's famous St. Christopher picture of ca.1496, which highlights a large 'bird pot' hanging from a branch of a tree, and even earlier in France the Limbourg Brothers in 1412-16 portrayed a rich set of similar pots hanging from the façade of a farm house, in the miniature of the Canaanite in the *Très Riches Heures du Duc de Berry* (Limbourg Frères, 1412-16).

These mediaeval pots for starlings and sparrows were made of terracotta (Figure 1) and looked like calabashes or flasks; they were very varied in shape and size in each region, more or less slim or globular, and they were made to be hung on the trees or on the façades of houses or barns. The types to be hung on walls had a very wide base and often had an opening in the back in order to facilitate checking the nest and withdrawing the brood. The methods of attachment of these flasks to branches, or to nails or hooks on the walls varied from model to model and often the various types were made to be hoisted and dismantled with the aid of a perch.

The use of 'pots for birds' in the Netherlands at the end of the Middle Ages and of the flasks in Silesia was marginalised last century by ornithologists (Richards 1980; Soper 1983; Campbell and Lack



**Figure 1: A modern terracotta bird pot, very similar to an ancient type used for Starlings in the seventeenth century in Amsterdam (NL).**

[See also figure 5] Photograph © Mauro Ferri

1985), but fortunately we have the rich and handy manual of Max Labbé (2009) about the history of these amazing old and widely used devices. After detailed investigations in museums, art galleries, libraries and private collections, Labbé (2009) documented the variety and multiform practice, focusing on the Netherlands for starlings and Luxembourg, Belgium, France and Spain for sparrows. Moreover, he describes that the practice of these bird pots spread over a large area extending over much of western Europe, indicating a North-South flow, and he identified a trade of bird pots crossing the Channel, the Baltic, and even the Atlantic to the North American colonies. Here these items seem sometimes to have had a less utilitarian value but were more similar to the pumpkins set up by native Americans for the pure delight of accommodating in their villages the purple martins (*Progne subis*), their beloved messengers of the beautiful season.

In Holland too, the pots for starlings sometimes assumed a non-utilitarian meaning as shown by the famous terracotta sign of an inn

dated 1649 in Amsterdam advertising ‘*in de Spreypot*’ (In the Nest of the Starling), featuring a nice scene of a starling entering a bird pot to feed its brood, a visible reference to the comforts provided by the innkeeper for his customers. Furthermore, Labbé reports on the use of ‘sparrow pots’, which spread from Belgium to Luxembourg, France and Spain, where their use diversified in local shapes, became specialised and were often made right up to the First and Second World Wars.

In Italy, on the contrary, hanging bird pots were maybe uncommon, although the Flemish origin of the starling and sparrow pots and their main use were known also to G.P. Olina (1622a, 1622b) who reported them for the two species where he was born, in Novara, Piedmont, where in nearby Biella some vestiges are even found today (Figure 2) (Costa S., personal information).



**Figure 2: A cluster of bird pots on the wall of a dwelling (Biella, Italy)**

*Photograph © Stefano Costa*

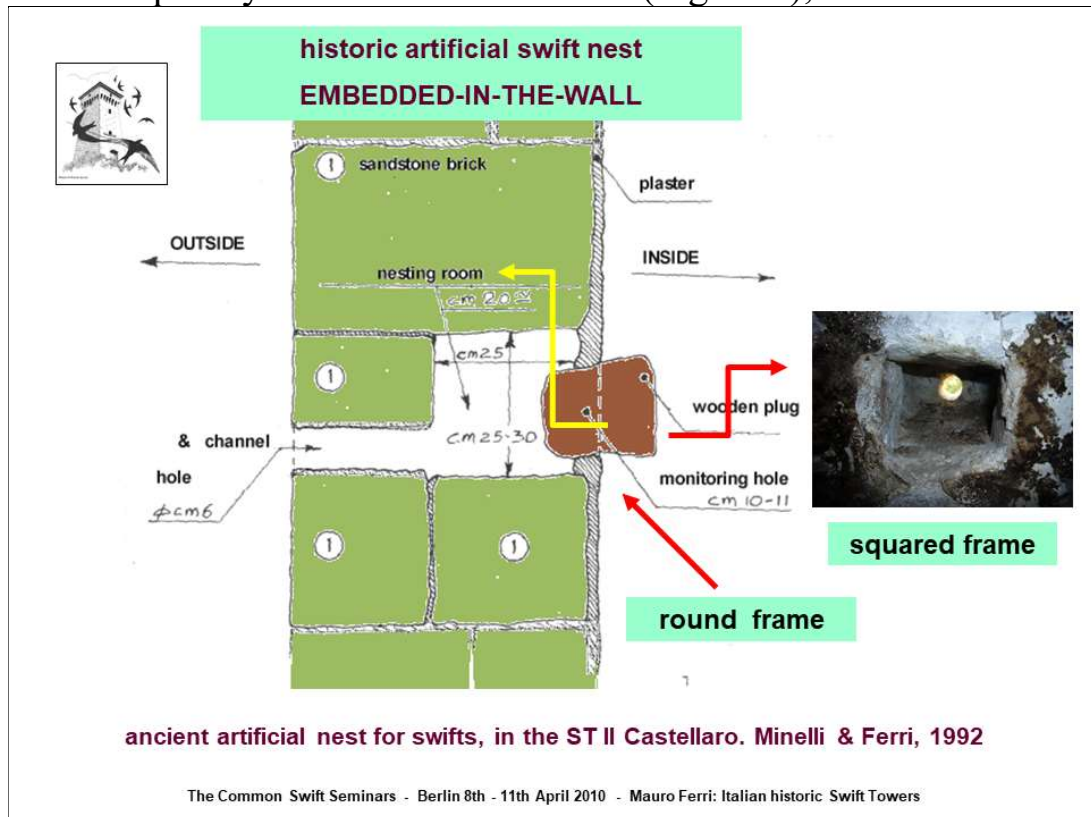
As mentioned above, most types of artificial terracotta bird pots were made to be hung on nails or hooks, but there are also areas where people liked the pots to be embedded more or less deeply into walls. Also, for Britain, from 1600 to early 1900, albeit in a limited area (London and the south east of England), the use of hanging sparrow

pots has been documented and supposed to have lasted until the 1930s (Labbé 2009; Cooper 2004). In all these areas the interest in having such bird pots waned and collapsed within a few decades of the first half of the twentieth century with two world wars, and most of the fragile pots were taken down and crushed. A remnant has remained as relics in old dwellings or have fortunately been preserved in museums and collections (Labbé 2009) inspiring recent similar handicrafts.

### Swift towers and Sparrow towers, in Northern-Central Italy

The interest in the production of ‘artificial colonies’ of birds to be exploited for food purposes spread across a large part of Italy, but these were based on a different method and were especially for swifts and sparrows.

First of all, artificial nests in Italy generally are not based on the use of terracotta pots or flasks but were based generally on ‘nesting cells’ completely embedded in the walls (Figure 3), with access to



**Figure 3: Longitudinal section of an ancient artificial swift nest embedded in a circa sixteenth century wall.**

*Drawing © Mauro Ferri (Minelli & Ferri 1992)*

nesting cells on the inside of the walls. The birds reach the nesting cells through holes on the outer surfaces of the walls (Figure 4) and through quadrangular or more often cylindrical little ducts connecting the holes to the cells. In order to monitor the broods, there was an opening at the



**Figure 4:**  
**Just under 300 holes in the four walls of the swift tower II Castellaro, Regional Park of Sassi di Roccamalatina, Guiglia (MO, Italy), active in 2017 with a colony of 91 pairs of swifts**

*Photograph © Mauro Ferri*

back of each the cell, covered by a wooden plug (Figure 5) or a brick or by a door, single or collective. This method, closely dependent on



**Figure 5: Removing a wooden plug; this kind of nesting cell is available for inspection of the brood, seen here for a ringing session of broods of swifts**

*(Apus apus) for research purposes Photograph © Mauro Ferri*

the thickness of the wall and on the dimension of the stones and/or bricks, seems to have initially spread as structures built into the upper part of the ‘*casa torre*’ (tower houses), mediaeval fortified rural buildings (Figure 6), well-known in almost all of northern and central Italy since the thirteenth Century (Bertacci et al. 1974, 1975). These



**Figure 6: Tower house (*casa torre*), with little square windows for the dovecote and smaller holes for swifts, well renovated, Guiglia (MO, Italy).**

*Photograph © Mauro Ferri*

frequently included a dovecote which also accommodated a number of artificial nests for swifts, easily identifiable because of one or more parallel lines of smaller holes, which were, especially in the older cases, in the upper part of the building. The role of the ‘tower houses’ in the development of the ‘swift towers’ perhaps is not well known, and it is possible that there were also ‘sparrow towers’ in thirteenth century Tuscany.

Later, this kind of artificial nest was also used in palaces, farm houses, barns and humble dwellings, even some churches and belfries. In an attempt to date the first period of use, there is in the Church of the Sorrows of Mornico al Serio (Bergamo province), an unusual fresco (Figure 7) painted in 1470 by Maffiolo da Cazzano as an *ex voto*, depicting a ‘swift tower’ similar to many ancient ‘swift towers’ (c.f. above Figure 6) surviving in regions of northern and central Italy and maybe in the Central Alps at the time of the first ‘tower houses’; the above fresco confirms that in 1470 the practice was probably already very stable and therefore much older, and tied to these fortified houses.



**Figure 7: Section in upper part of a mediaeval fresco of 1470 by Maffiolo da Cazzano featuring a tower house with dovecote and two lines of holes for swifts. Church of the Sorrows of Mornico al Serio (BG, Italy)**

(Compare with Figure 6) *Photograph © Mauro Ferri*

To this pictographic testimony is to be added the evidence of terracotta nesting cells in the early sixteenth century as recorded by Antonini (2000), who led a middle-class school to document the construction of dwelling in a dovecote tower in the village of Bojon di Campolongo Maggiore (Venice province).

In Italy, historic artificial nests for swifts were usually in buildings known as ‘swift towers’ but within this term are included ward towers, tower houses, dovecotes, belvederes, etc...and, in not a few cases, clusters of artificial nests can also be found in belfries, apses, bell-towers, palaces, farm houses, etc. (Figure 8) from the fifteenth to



**Figure 8:**

**Many kinds of buildings may host ancient artificial nests for swifts or sparrows.**

*Photographs and layout © Mauro Ferri*

the sixteenth centuries. Some hundreds of these are still observable in the north central Italian regions of Piedmont, Lombardy, Veneto, Trentino, Emilia Romagna, Tuscany, Umbria and Lazio but were also known elsewhere, e.g., the Marche region (Chigi della Rovere et al. 1933). They were so common that they are locally represented in up to 10% of the historical buildings registered in catalogues (Ferri 2014).

The oldest artificial nests for swifts seem to have been made by placing stones and/or bricks in a way that achieved a regular pattern of lines of holes on the outer surfaces of buildings, and cells within. With the emergence of walls of reduced thickness in the sixteenth century, only the holes and the access ducts remained embedded in the walls, while the nesting cells were placed on internal ledges or in cabinets. Initially these were made as complements to dovecotes, i.e. dovecotes with swifts (*colombaje a rondoni*, Spallanzani 1797), whereas the ‘swift towers’ in some areas soon became autonomous and lost any relationship with dovecotes.

Then, up until the twentieth century, very small towers or modified belvederes were put on the roofs of the homes of bourgeoisie in towns and on rural dwellings and even on to religious buildings (e.g., the bell-towers or apses). It is interesting to note also that the use of terracotta bird pots often lasted for centuries, in most cases reduced to the necks for the holes but also sometimes keeping the flasks to host the nests (Figure 9). According to local practices the structures were



**Figure 9: Swift pots partially embedded in the walls of a dwelling, Appennine of Romagna, Italy**      *Photograph © Mauro Ferri*



often characterised from aesthetic and functional points of view, obtaining artificial colonies ranging from tens to several hundred nests.

Sometimes, a large number of new cells was added as in the Castellaro Tower of Guglia, Modenese Apennine (Figure 4), where nests appear to have been added 100 at a time (Ferri 2014), and it was also the case for the Swift Tower of Borgo Vecchio of Carmagnola near Turin, (Figure 10) built at the end of nineteenth century, which expanded three times until the early 1900s to include up to 1,000 nests (Tagini Brandino 1998) at the height of its splendour. The upgrading of the colony's capacity intuitively depended on the success of the structure, i.e. on the increase in number of pairs that settled and, therefore, on the efficiency of its management.



**Figure 10: The eclectic style of the swift tower of Borgo Vecchio (Carmagnola, TO, Italy) built from late nineteenth century in three phases of 300 nests at time**

*Photograph © Mauro Ferri*

The dimensions of ducts and nesting cells were diverse, such as diameters of 4.5 to 6 cm. of the holes/ducts and 15-25 cm. of the cells, and the shapes, height, width and depth of these varied from site to site, maybe according to the local needs to attract not only the common swift (*Apus apus*) but also the bigger alpine swift (*Tachymarptis melba*), as happened at least in the Apennines of Modena (Spallanzani 1797).

In the plains of Lombardy and Piedmont regions, and maybe elsewhere, there were also specific artificial nests generally similar to those for the swifts, but for Italian house sparrows (*Passer italiae*) and

tree sparrows (*Passer montanus*), as the cells have smaller dimensions and from the outside are distinguished by a pattern of denser lines of holes (Figure 11). In these cases, the cells are never quite embedded in stone walls, but are inserted in diaphragms achieved through a pattern of vertical and horizontal bricks (Figures 12 and 13).



**Figure 11: Sparrow tower, with more or less 600 cells in very little space**

*Photograph © Mauro Ferri*



**Figure 12: Patterned brickwork nesting cells for sparrows,  
seen from the inside**

*Photograph © Mauro Ferri*



**Figure 13: A ruined Sparrows tower. The collapse makes it possible to understand how artificial nests were made, buffering an empty space between load bearing structures**

*Photograph © Giovanni Boano*

These compounds for sparrows were also popular in the farms and rural villages (Mazzoleni 1999) of the Po valley, where there is intensive farming of grains and rice, and are known as ‘sparrow towers’ (*passerère, passeraie*). Sometimes, as happened for swifts, they were inserted also into dovecotes, dwellings and barns (Figure 14), and, as



**Figure 14: A compound for sparrows in a dwelling, blocking a window**

*Photograph © Mauro Ferri*

in Brescia province, where they became of artistic interest (Massetti *et al* 2000). Finally, there are examples of artificial nests for swifts and sparrows that coexist in the same building (Figure 15).



**Figure 15: Two lines of cells for swifts in the upper part and windows blocked for the cells for sparrows**

*Photograph © Mauro Ferri*

In the 1930s the use of swift and sparrow towers was still allowed for those licensed for hunting, and there was an authoritative, more or less forgotten proposal by reputed zoologists that these structures might become important complements of a ‘modern agriculture’ associated with modern bird-gardening to use nest boxes for many species of birds, but particularly important for those species which reared their offspring by subtracting large amounts of insects (Chigi *et al* 1933).

### **Relationship between the Flemish ‘bird pots’ and the Italian ‘bird towers’**

Thus, there seem historically to have been two distinct areas in Europe with regard to the artificial nests used to attract wild birds in artefacts and buildings for use as food: one is centred on the use of bird pots for starlings and sparrows in mediaeval Holland, Belgium and northern France; the second is centred on mediaeval Italy based on the use of cells embedded in walls for swifts and sparrows. There are, of course, rare exceptions to this general rule, such as the ancient Belgian bell tower of the Refugie van de Abdij van Sint-Truiden, Mechelen, with integral built-in nests (Figure 16) (L.P. Arnhem personal information)



**Figure 16: Birds pots emebded in the bellfry of Refugie van Sint-Truiden, Mechelen** *Photograph © Louis-Philippe Arnhem*

and the presence in Piedmont of an area with bird pots (Figure 2), either hung as in ancient times in the farms of Novara (Olina 1622a) or semi-embedded in walls as still observable in Biella (S. Costa personal information). Surprisingly, the earliest testimonials seem to suggest that both European areas started by using these artificial nests for wild birds in the same mediaeval period, with their knowledge evolving along parallel but autonomous lines (bird pots to be hung or embedded cells). It is, however, undeniable that there may have also been an exchange of ideas and perhaps traded artefacts. This last is suggested by the only known testimonies (Olina 1622a,1622b) of terracotta pots in Italy for both starlings and sparrows, expressly inspired by Flemish patterns, even if the Italian method of internal cells on walls with or without pots appears to be older. After all, it is well known that since the twelfth century there had been strong commercial and financial ties between the rich bourgeoisie of Italian, French and Flemish lands.

Perhaps in one or both cases a mediaeval ‘invention’ took over and refined a practice of native populations, perhaps from Silesia or, who knows, perhaps even from the Middle East (see below). Perhaps the network of commercial and financial exchanges may have favoured a parallel evolution of a whole technology with strong analogies and hence broad possibilities for reciprocal engagement. Perhaps we might one day gain answers from a more careful study of miniature codes, letters, drawings and paintings, as well as from the work in Flemish and

French-speaking areas, such as by Labbé (2009), who investigated bird pots in museums, galleries and collections.

**For what food uses were the birds collected in these artificial nests?**

Unfortunately, the sources for the use as food of the starlings, sparrows and swifts, captured in these ancient artificial nests are scarce, though the practices were very widespread. Many things are uncertain, but some aspects are precise. First of all, the objects of interest were mainly the chicks, because before leaving the nest these are of the same size as the adults but of greater weight and fat consistency. Based on the weights made by Spallanzani (1797), an adult swift was about 67% of the weight of a nearly ready-to-fly-away chick, and it is known that this important weight difference is attributable to fat reserves that the young have to put on in their early life in the nest, as they brusquely cease getting any feed from their parents once they leave. Indeed, for Spallanzani, the young swifts were ‘*small butter pancakes*’, which means that they were considered a delicacy.

However, we do not find references to their culinary use in the famous large collections of recipes, but there may be more information in the so-called ‘grey literature’ or in private papers, including old family recipes, inventories, letters and so on. When, many years ago, interviewing a few elderly people who had continued the activity of ‘swift keeper’ until a few decades ago, I learned that often they were in charge of the maintenance of ‘dovecotes for swifts’, owned by wealthy families, who lived elsewhere. So, they had the use of the dovecote products, that is, the guano and the chicks (Latin: *pipiones*: the chicks of the doves), while the swifts were reserved for the owner under strict rules, such as that the adults were not to be harassed and always the pairs had to be left to raise one chick. The swift chicks that were taken were immediately prepared and cooked in pans, usually adding pork fat, and then were placed still hot in small terracotta jars with a large opening, filled with hot fat and then left to cool, or they were sometimes preserved in vinegar.

After that, the small vessels were sent to the owners of the tower, who kept them in their pantries, or underground cellars, which more recently were equipped with factory ice reserves and before that packed with pressed snow and ice in winter. During the Christmas period,

these preserves were mainly used for family lunches and dinners, but were also sent as valuable and expensive presents to friends and honoured acquaintances. Why would these delicacies have been so expensive? A compound for swifts had to be built, substantially modifying the walls of a whole room or gable; it had to be kept and managed carefully by a swift keeper and the eventual results were less than two chicks of each seasonal brood of 1-4 chicks per pair. This, therefore, did not provide much return financially, but was afforded for a tradition of gastronomic gifts of great value.

Small rural swift towers and those in humble dwellings were, on the other hand, managed directly by owners who preferred consuming the birds within the family, or selling them as expensive specialties; in such families the consumption was probably more flexible with recipes fitting individual tastes, and based on summer preparations soon after collection of the chick. It was claimed (Olina 1622b) that only the chicks of the sparrows were appreciated, especially the chicks of the tree sparrows (*Passer montanus*), but eggs were also collected to prepare (together with sparrow brains) an unlikely treatment for impotence. While adult meat was not recommended as food, we learn from interviews with elderly sparrow keepers and their families, that they were very happy to collect a large amount of chicks from hundreds of nests, sparing either the first or the last of their seasonal 3-4 broods. The chicks were then sold for their meat and were mainly intended to be cooked on a skewer over a fire or in a sauce served with the traditional hot porridge (*polenta*) of boiled cornmeal.

For Britain, the situation is well described by Cooper (2004), who first reminds us that from 1532 to the nineteenth century the sparrows were considered as pests and vermin, and rewards were paid for their collection by officers. This also affected the management of the pots for birds, used to collect indifferently adults, chicks and eggs to be submitted as heads and as eggs for the payment of the rewards which produced an income, to be added to any benefits derived from the rest of the bodies as food. That author also refers to the sale of live sparrows to the numerous falconers of the time, who needed to feed and train their popular sparrow hawks.

So, consistently until the First World War, in U.K. the birds were an appreciated protein integrated into the normal daily diet of the lower

classes, as well as a delicacy also for the gourmets of the upper classes. Both liked the popular sparrow pies and tarts flavoured in many (unspecified) ways and they liked them served with white sauce. Meanwhile, in the Netherlands the widespread use of pots to attract starlings and sparrows, to be used in the kitchen, does not seem to have left any indication of culinary use, except for some suggestions on the internet of their use in soups and pies (Flemish: *spreeuwensoep* and *spreeuwenpastei*).

### **Ottoman <Bird houses>**

Finally, it is interesting to go elsewhere, to the Middle East, to find an interesting ancient practice of artificial nests, strictly intended only for devotional and compassionate purposes, spread throughout Ottoman influence in Anatolia and of course in Istanbul, where Ottoman-style mosques and dwellings (Figure 17) are frequently decorated with fantastic ‘bird houses’ (*Kuş Köşkleri, Kuşların Sarayları*). These buildings were built or renovated from the fifteenth and sixteenth



**Figure 17:**

**A bird house in an old Ottoman dwelling: those in religious buildings are generally in excellently conserved condition (c.f. pictures in Aksoy 2015 and Akay and Yogurtcu 2017)**

*Photograph © Mauro Ferri*



centuries onwards, although it seems that continuous refurbishments and embellishments have left only examples of more recent ‘classical’ styles. Possibly the continuous remakes could have erased the testimonies of a more ancient practice. Anyway, these ‘Ottoman bird houses’ (*Kuşlar için Osmanlı sarayları*) (Aksoy 2015, Akay and Yogurtcu 2017) are fantastic, often very stylised with far from a naturalistic approach, but sometimes their holes (often very similar to those for sparrows in a popular catalogue for modern bird-gardening, Anonymous 2017-18) seems to be suitable for sparrows and swifts, little passerines and even turtledoves (*Streptopelia decaocto*) or jackdaws (*Corvus monedula*), depending on the size of the artefacts.

What possible ancient contacts for bird nests were there between this Asian ‘third pole’ and the two European ones? Certainly, contacts between the Middle East, Anatolia and Europe had been steady and growing ever since the end of the Early Middle Ages and the merchant ships encouraged the exchange of goods, travellers and ideas along a network of routes. Also, since classical times, with the trades that had already spread from the Middle East, it is likely that the interest in dovecotes also spread as facilities designed to attract pigeons with artificial nests, to make them breed and protect them in order to exploit their droppings as fertilizer and the delicate meat of the young doves (Latin: *pipiones*, the chicks of the doves) as food. The doves would leave the colony free to mate and feed themselves by wandering out in the wild. In summary, there are close analogies in the know-how and management of a dovecote, a bird tower and bird pots, and in this perspective, as in others, Italy was at the centre of the routes.

### **Sustainability of the ancient practices of exploiting birds for food, using artificial nests**

Therefore, the purpose of exploiting the meat of birds taken from the towers was often similar in the two European areas and the analogies relate to the objective of not harming the colonies but increasing them. In this respect a resource considered important was protected in a way which today would be called a ‘sustainable approach’.

How was the ‘sustainability’ of the exploitation guaranteed for swifts, sparrows and starlings as food? The answer is easy: as in the case of doves, it was by wisely taking only some of the chicks and

sparing some of them. As regards the Netherlands and Silesia, Campbell and Lack (1985) reported that only the first starling and sparrow broods were taken, leaving their parents free for subsequent reproduction. Labbé (2009) also mentions similar points in favour of sparrows in the largest area where bird pots spread. In Italy, the situation was similar for the collection of both sparrows and swifts.

Interviewing some old farmers about sparrows provided information that the collection of chicks lasted till early July and then the accesses to the nests were closed, and the pairs were left in peace to grow a substitute brood till the young sparrows flew away. Or else, the first brood was spared and the following broods exploited (personal interviews). About the collection of swifts, according to Savi (1827) we know that in Tuscany in any single seasonal brood (of 1-4 eggs) one chick had to be spared so that the parents were not upset, and the same habit was reported in the Emilia Romagna region during personal interviews with old farmers who were still swift keepers until the 1960s. Notoriously, the difference between common *Apus apus* and pallid swifts (*Apus pallidus*) was not known by the time the tradition of the swift towers started to fade, nor are there precise references for the removal of alpine swifts (*Tachymarptis melba*). There were also areas where the collection of young swifts was indiscriminate (Bassi 2002, 2006, 2008), but where this happened the structures and consequently the colonies seem to be generally smaller in size than in areas with scrupulous management.

### **What is the future of bird pots and Italian bird towers?**

Centuries of hanging bird pots or maintaining bird towers to collect starlings, sparrows and swifts for their meat faded in just a few decades during the twentieth century in parallel, just as they were started in parallel in Mediaeval times, both in north western Europe and in Italy, at first because the attitudes of contemporary people about trapping swifts changed. Then, the use of starlings and sparrows as food generally became rare and more or less disappeared, as little wild birds ceased to be considered as food. Only much later did laws reflect this change of attitude and establish prohibitions.

So, the bird pots disappeared from dwelling walls and were destroyed and erased from the collective memory, but fortunately

something of their legacy is still alive. Today, for naturalist purposes, some craftsmen in Europe and North America have started making old fashioned and new shaped terracotta pots and flasks (Figure 1) to be used as artificial nests, in addition to many other kinds of modern artificial bird nests, in order to help the reproduction of more and more species of wild birds in gardens, parks and buildings.

For the bird towers, the situation and the future, however, are much more complicated since the ancient ones are often large and expensive to maintain, repair, restore and manage. Consequently, most of them lie abandoned, sometimes in ruins or are transformed for other uses, with irreparable loss of knowledge, beauty and anthropological and historical aspects, that had developed over at least seven to eight centuries. How can one be happy when hundreds of these ancient and efficient *rondonare* (swift towers) or *passerère* (sparrow towers) are condemned to ruin (Scaglioni 1982) or, at best, disappear transformed into dwelling rooms, without any plan for conservation of at least those that could be available for public access? Moreover, these artefacts have defied the centuries by providing optimal conditions of comfort, thermal insulation and shelter from storms, humidity and predators to



**Figure 18: A new generation of swifts, (*Apus apus*) over 40 days old, weighing approximately 60 grams, on the point of departure for Central, Eastern and Southern Africa and two years of permanent restless flight**

*Photograph © Mauro Ferri*

hundreds of generations of huge colonies of swifts and sparrows, helping to keep them in our countryside, villages and cities, while modern design and maintenance of buildings are wiping out their existence. When I look at young swifts (Figure 18) inside ancient 200 to 500 year old artificial nests but still managed sufficiently to maintain a colony (Ferri 1992, Minelli and Ferri 1992; Minelli et al. 2014), I hope that many owners of the structures not yet damaged or transformed decide to restore them and reopen them for use, adding more interest (Ferri 2012) to modern beautiful swift towers raised in recent years in urban parks of half of Europe and to the use of nest boxes in gardens and dwellings too.

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