



5th International Swifts Conference



Applying citizen-science data and long term studies to swift's conservation in Italy

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Pellegrino I., Pinoli G., Pirovano A., Tinarelli R.**

Tel Aviv, Israel, 11-16/3/2018

***Apus pallidus* and *A. apus* breeding in Italy and Canton Ticino (CH) are facing increasing difficulties and pose conservation and management problems**

What is going on?

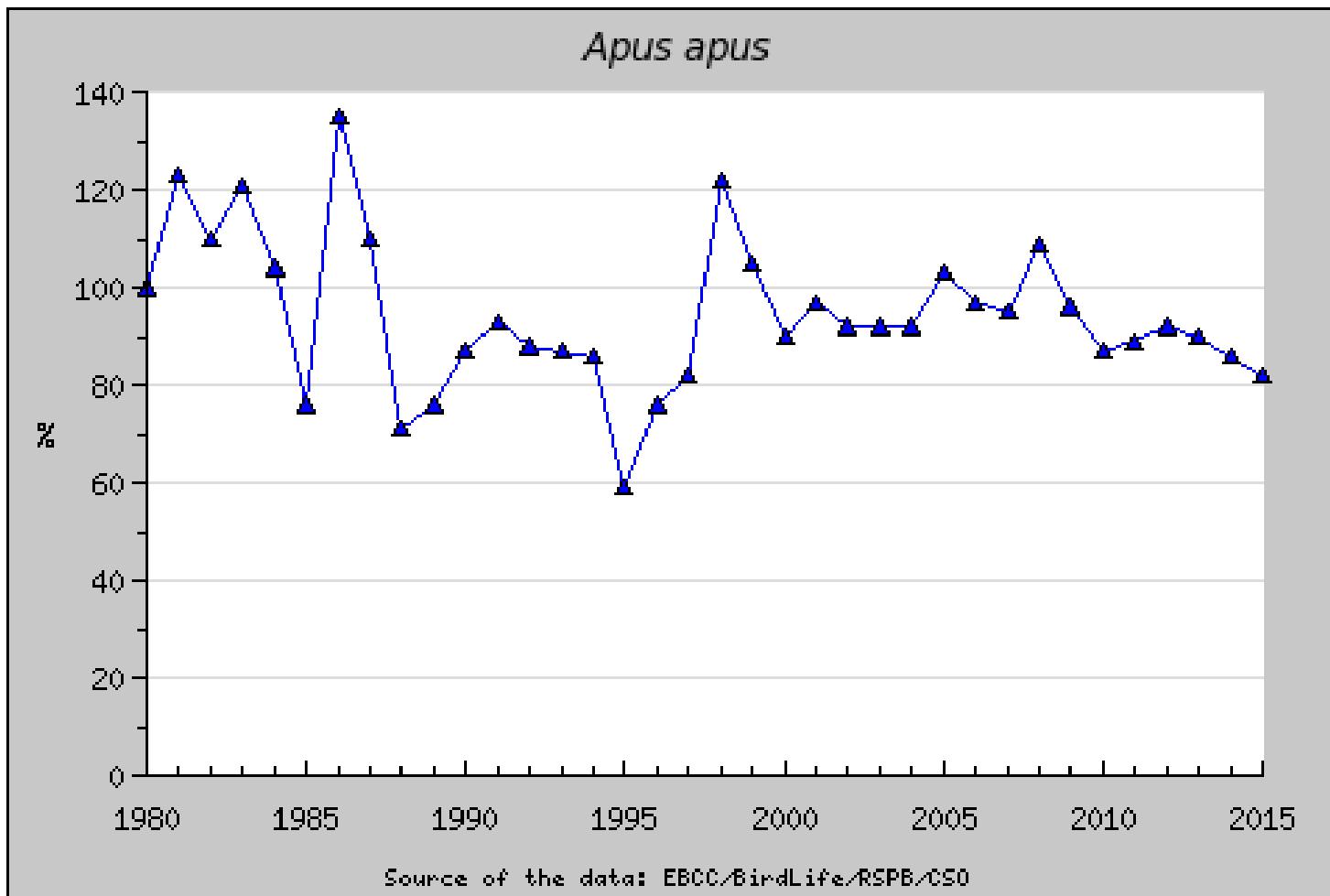
We must analyze official data,
collected using standard methods

Europe: EBCC 1980-2016 – www.ebcc.info

Italy: MITO2000 2000-2016 – mito2000.it

Note - the EBCC method requires point-census in the countryside:
is it suitable for "aerial feeders"? Only indices are obtained ...

EUROPE - *Apus apus* according to EBCC



Base year	Slope	Slope SE	Trend classification
1980	-0.9969	0.0037	-18% Stable

Stable ←

***Apus apus* according to EBCC**

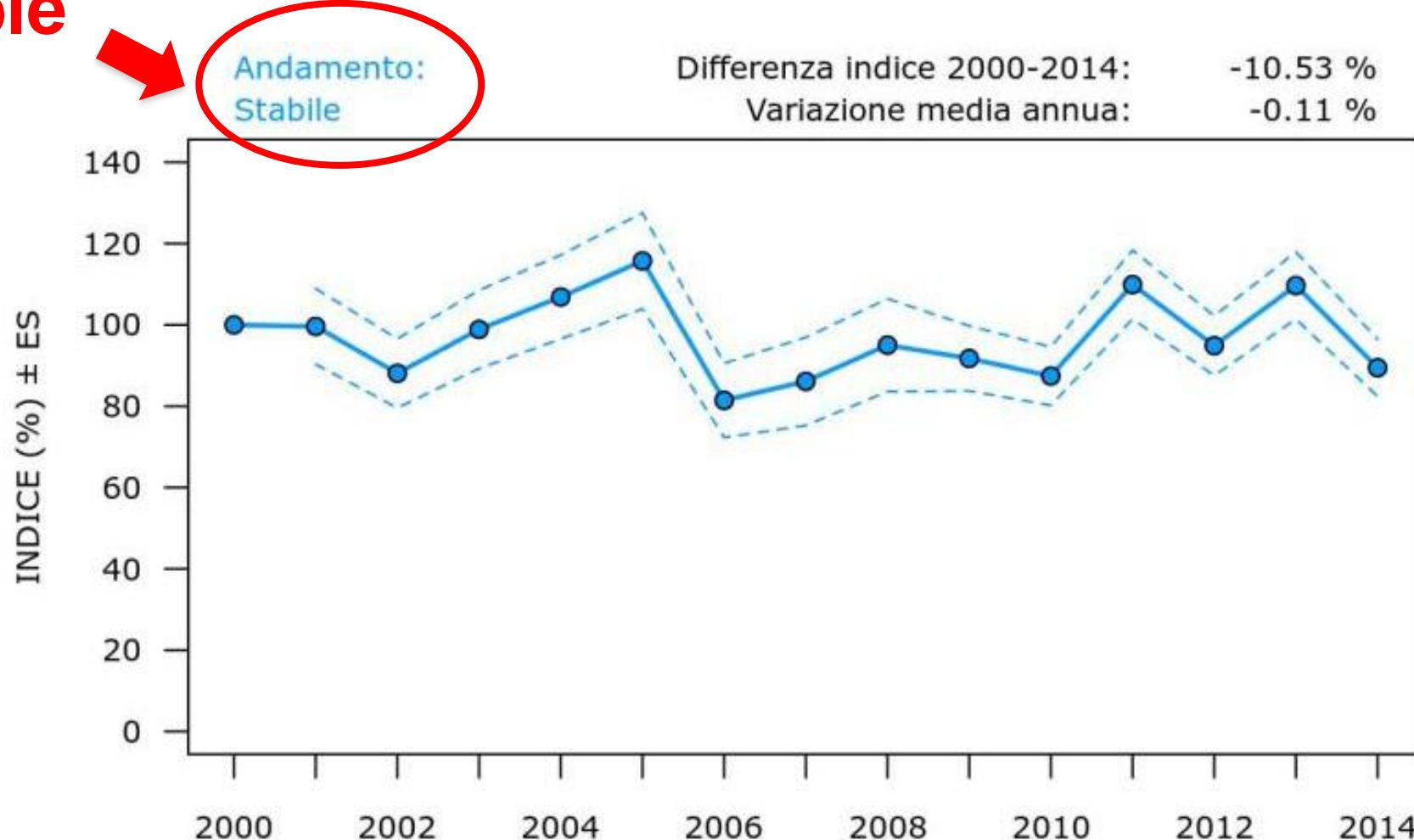
<http://www.ebcc.info>

Trend classification

- * **Strong increase** - increase significantly more than 5% per year (5% would mean a doubling in abundance within 15 years). Criterion: lower limit of confidence interval > 1.05.
- * **Moderate increase** - significant increase, but not significantly more than 5% per year. Criterion: $1.00 < \text{lower limit of confidence interval} < 1.05$.
- * **Stable** - no significant increase or decline, and most probable trends are **less than 5%** per year. Criterion: confidence interval encloses 1.00 but lower limit > 0.95 and upper limit < 1.05.
- * **Uncertain** - no significant increase or decline, and unlikely trends are less than 5% per year. Criterion: confidence interval encloses 1.00 but lower limit < 0.95 or upper limit > 1.05.
- * **Moderate decline** - significant decline, but not significantly more than 5% per year. Criterion: $0.95 < \text{upper limit of confidence interval} < 1.00$.
- * **Steep decline** - decline significantly more than 5% per year (5% would mean a halving in abundance within 15 years). Criterion: upper limit of confidence interval < 0.95.

ITALY *Apus apus* according MITO

Stable



Conclusion & doubts

- is everything really good (stable) for *Apus apus* in Europe and in Italy?
- what about the other species of Swifts?

Three species ..



- Common swift *Apus apus*
- Pallid swift *Apus pallidus*
- Alpine swift *Tachymarptus melba*

European Union (EIONET)

MS	Breeding Population							
	Population		Trend					
	Size&Unit	i	% MS	Period	ST Trend	Period	LT Trend	i
AT	30000 - 60000 p	0.2	2001-2012	0	1980-2012	x		
BE	20000 - 50000 p	0.2	2000-2012	+ (5 - 27)	1980-2012	0	#	
BG	8000 - 20000 p	0.1	2001-2012	- (28 - 28)	1980-2012	0		
CY	15000 - 60000 p	#	0.2	2001-2013	- (25 - 75)	1980-2012	x	
CZ								
DE	215000 - 395000 p	1.5	1998-2009	- (23 - 38)	1990-2009	- (30 - 48)	#	
DK	15000 - 15000 p	#	0.1	1999-2011	- (20 - 33)	1980-2011	- (20 - 33)	#
EE	70000 - 150000 p	0.5	2001-2012	0	1980-2012	0		
ES	13860020 - 19426978 p	#	86.2	1998-2012	- (26.22 - 26.22)	1980-2012	-	#
ESIC	1 - 50 p	#		2001-2012	x	1980-2012	+	#
FI	14000 - 26000 p	#	0.1	2001-2012	0	1983-2012	- (38 - 62)	#
FR	350000 - 650000 p	2.5	2001-2011	0	1989-2011	0	#	
GIB	2000 - 2000 p			2000-2012	0	1980-2012	- (50 - 50)	
GR								
HU	3000 - 5000 p			1999-2012	x	1980-2012	x	
IE	25520 - 130540 i	#	0.2	1998-2011	- (33 - 60.10)	1980-2011	x	#
IT	500000 - 1000000 p	3.8	2000-2011	0	1980-2011	0		
LT	50000 - 100000 p	0.4	2001-2012	0	1980-2012	0		
LU	2000 - 3000 p			2000-2012	- (- 20)	1980-2012	- (20 - 50)	

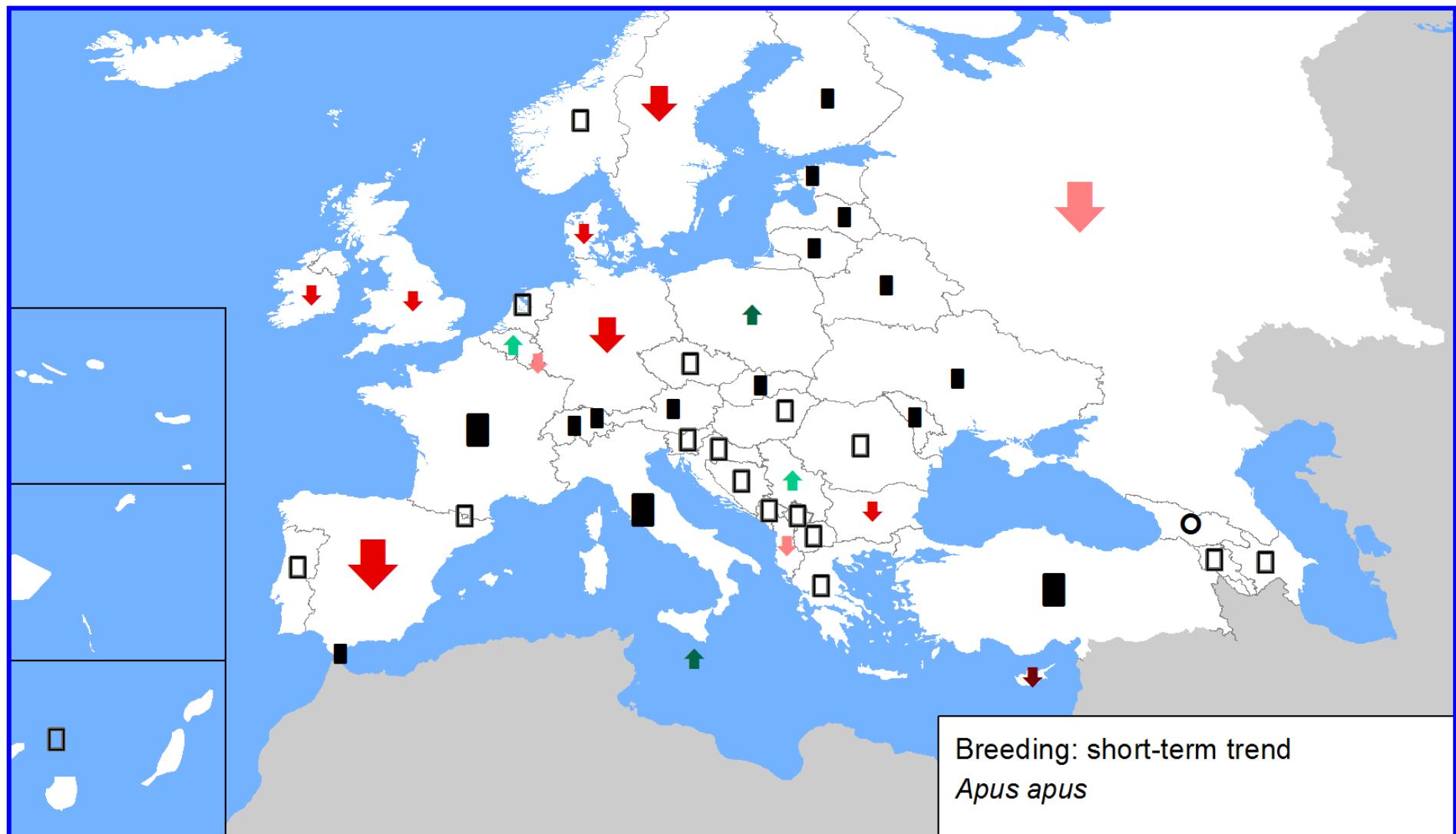
Apus apus Report on Directive 147/2009/CE (Birds Directive)

LV	79622 - 177426 p	0.6	2005-2012	F	1994-2004	0
MT	1 - 33 p	#	2001-2012	+ (- 3200)	1997-2012	+ (- 3200)
NL	10000 - 100000 p	0.2		x	2001-2011	x
PL	86000 - 150000 p	#	0.6	2000-2012	+ (30 - 110)	x
PT			2001-2012	x	1980-2012	x
RO	15000 - 60000 p	0.2		x		x
SE	218000 - 408000 p	#	1.6	- (23 - 39)	1980-2012	- (43 - 60)
SI	3000 - 5000 p		2001-2012	x	1980-2012	0
SK	30000 - 60000 p	#	0.2	2000-2012	0	1980-2012
UK	64000 - 111000 p	#	0.4	- (34.40 - 34.40)	1980-2012	x

!!! Several RED flags !!!

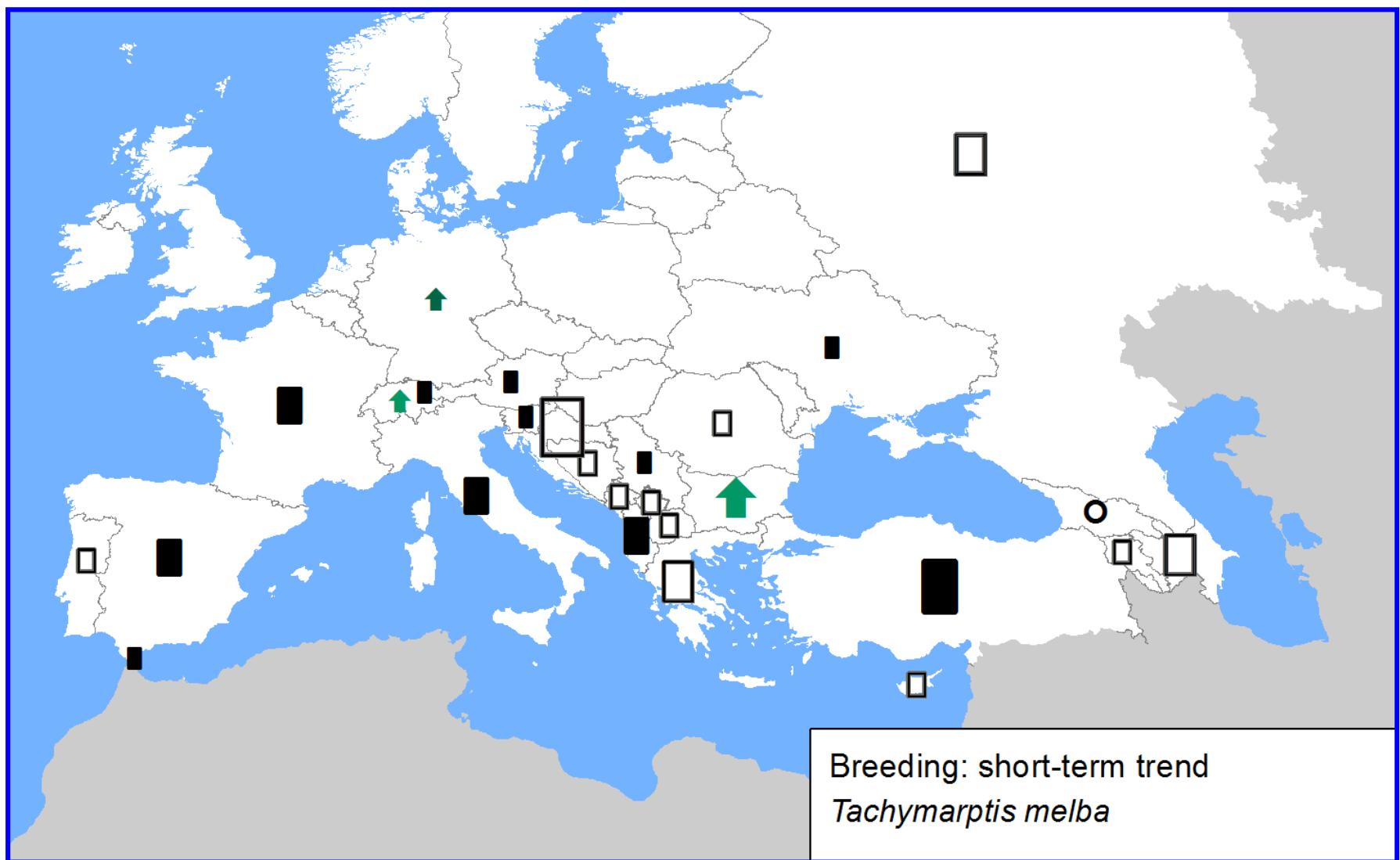
**Birdlife International
Redlist**

Common swift *Apus apus*



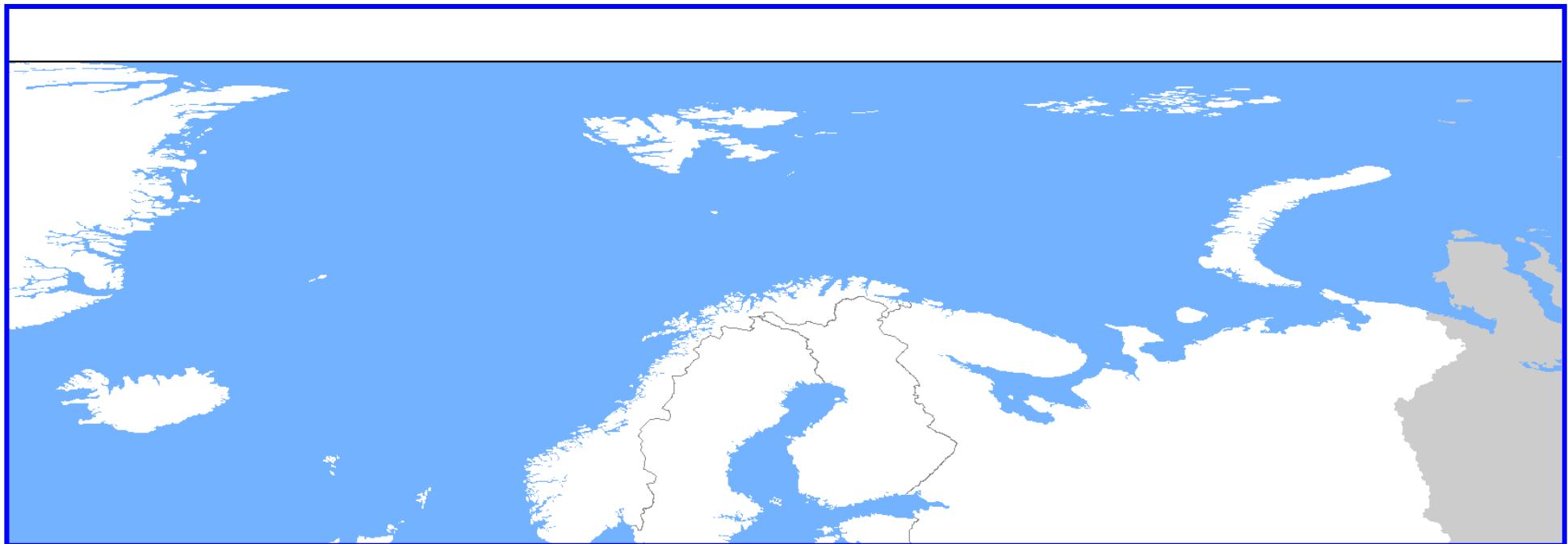
**Birdlife International
Redlist**

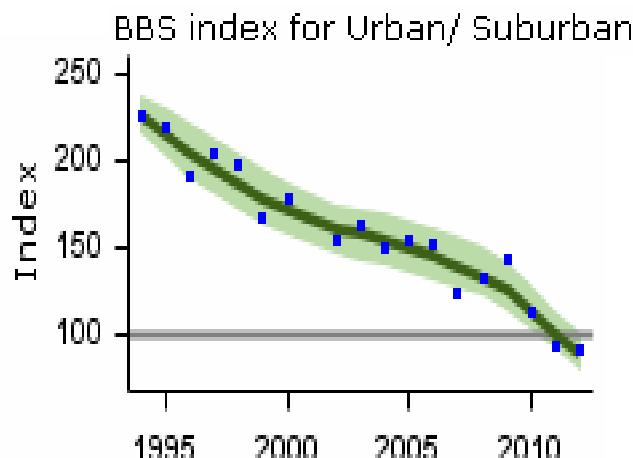
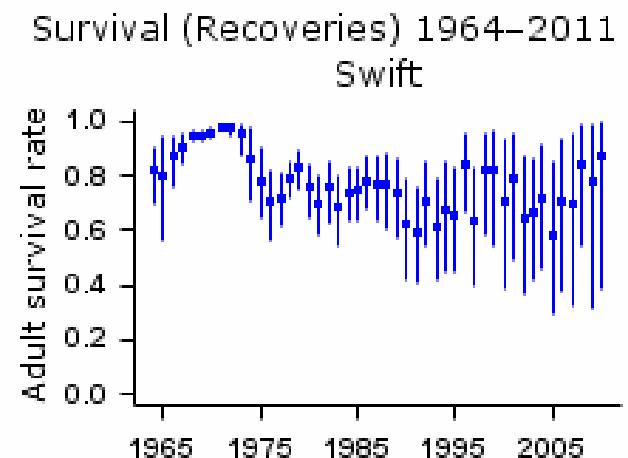
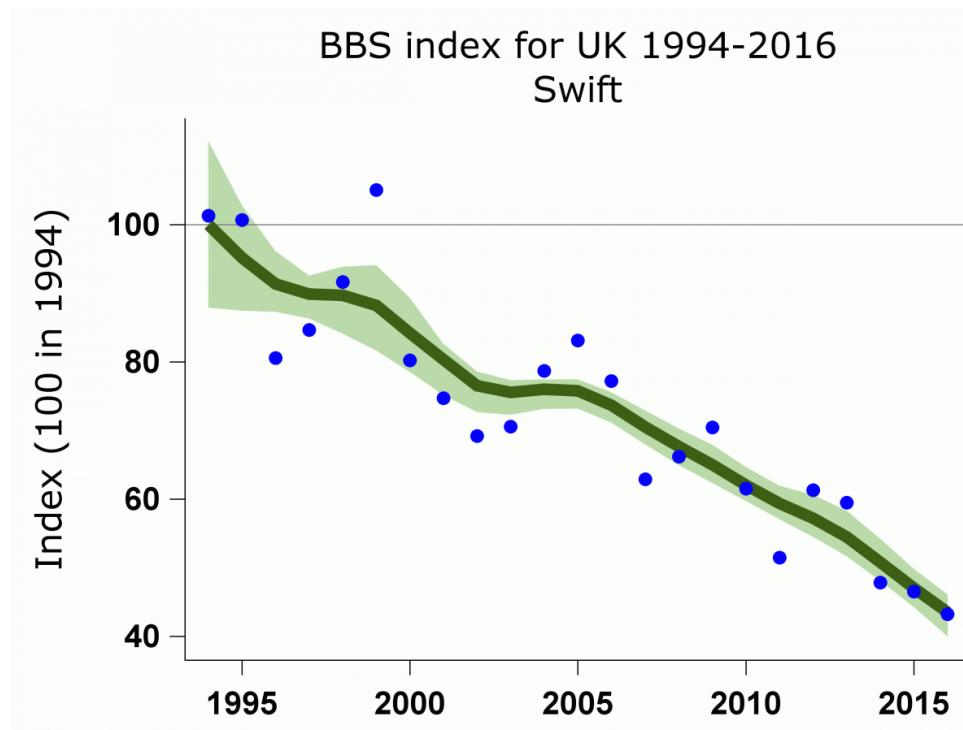
Alpine swift *Tachymarptis melba*



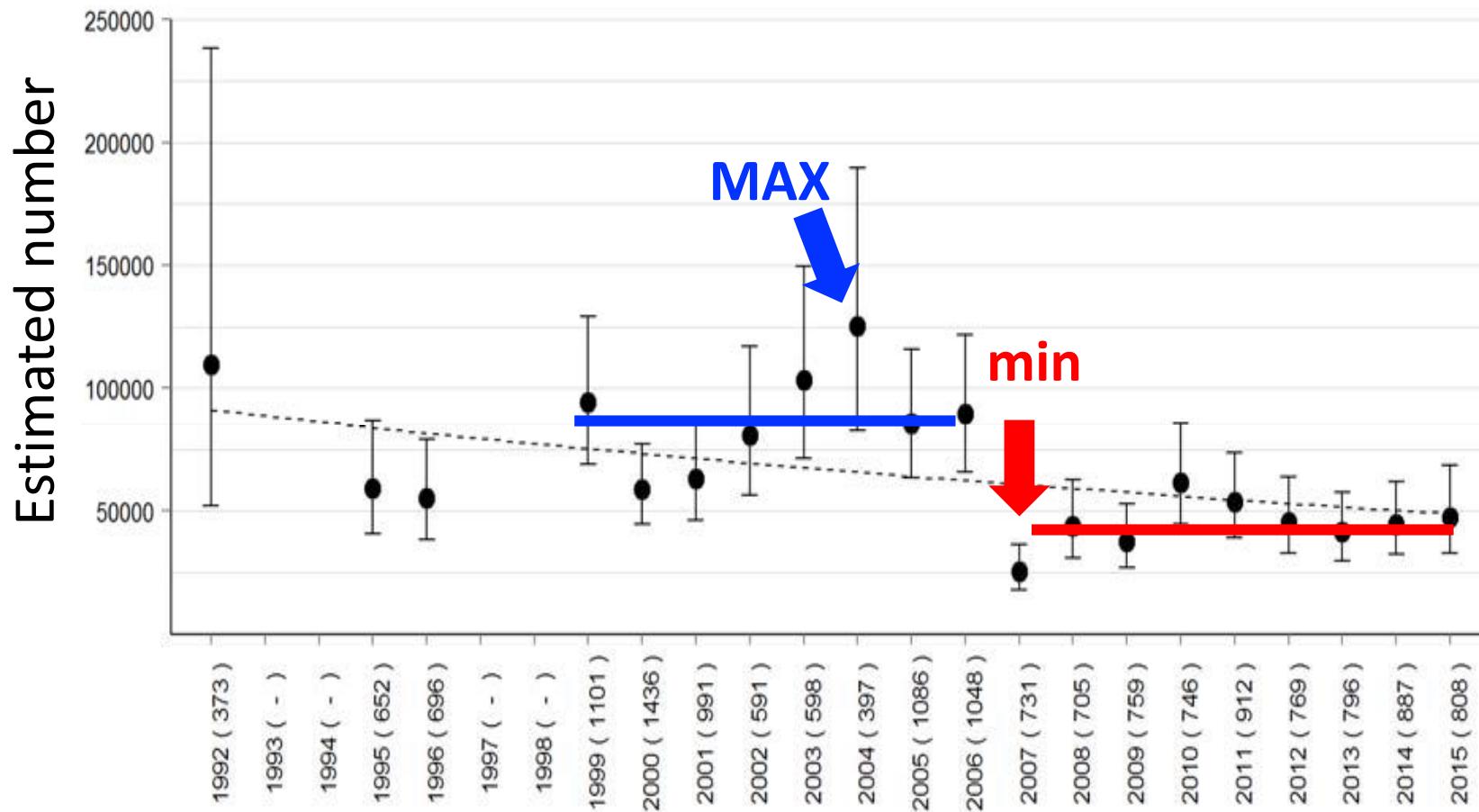
**Birdlife International
Redlist**

Pallid swift *Apus pallidus*





**Brexit for
the Swifts
too?**



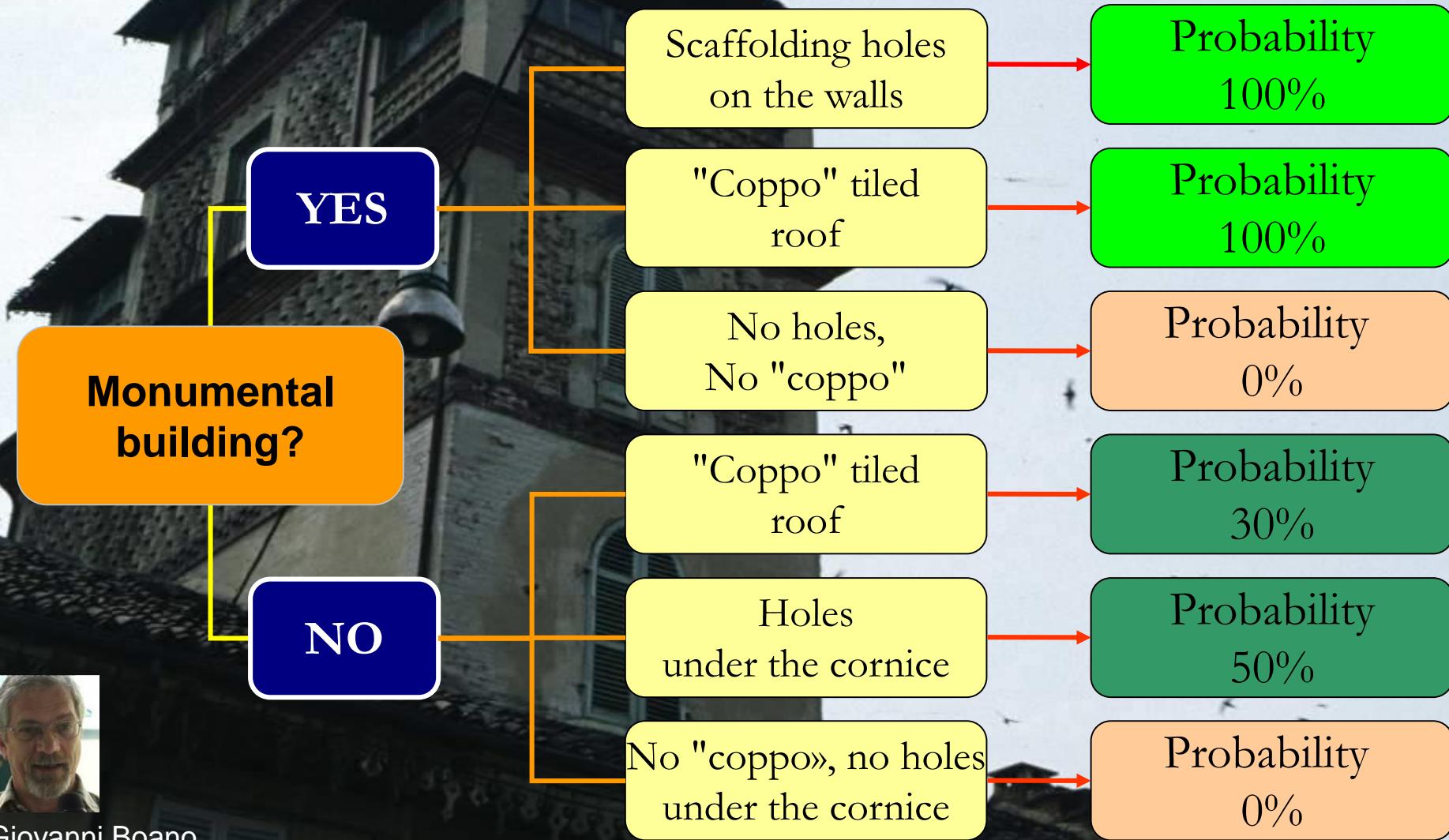
Italy - The longest series: Lombardy

Threats – the nest cavity

Both the Common *Apus apus* and the Pallid swifts *Apus pallidus* utilizes as nest cavities the roof tiles and holes that are found on buildings.

They prefer monumental towers, castles, churches located mainly downtown, or special towers that were built centuries ago solely to favour breeding of swift.

NW-Italy - key for Swift's presence on buildings



The role of citizens

In the last decades, there is an increasing pressure on swifts due to removal or obstruction of nest cavities to prevent the utilization by feral pigeons. In order to contrast this problem, we have developed four projects for the conservation of swifts involving **citizens**, birdwatchers and scientists collaboration.

- (1) **Festival** - Swifts & Fun: festivaldeirondoni.info
- (2) **Website** for collection of bird data in Italy – www.ornitho.it
- (3) **Association "Progetto Natura"** conservation project for the city of Milano.
- (4) **Association** for the protection of "**Living monuments**" - monumentivivi.it

The activities include conservation and monitoring of swift colonies, as well as educational events with schools and general public and development of “good practices” with architects and stakeholders who operates on building restoration.

(1) FESTIVAL

The Swifts & Fun is a festival aimed to encourage citizens participation through events organized near large swift colonies. The festival occurs in late June.

First edition: [2013](#)

Last edition: [2017](#) with 80 different events.



R. Tinarelli



Mauro Ferri

www.festivaldeirondoni.info

[2018 programma](#)

[2017 programma](#)

[COSA e CHI](#)

[Riunione di Piacenza 2016](#)

[2015 - programma](#)

[2015 cosa è stato fatto](#)

[2016 programma](#)

[MONUMENTI VIVI](#)

[ORNITHO_IT](#)

[DOCUMENTI scaricabili](#)

[Foto + Video](#)

[notizie BELLE e BRUTTE](#)

[contattami](#)

[swift\(s\) graphic](#)

[Europa](#)

[Soccorrere rondoni](#)

[2016 aderire](#)

[2014 - programmi](#)

[Informazioni sui rondoni](#)

[MALE PRATICHE](#)

[BUONE PRATICHE](#)

[Laudato si](#)

[Swifts and Fun 2017](#)

[Tel Aviv 11-16 Marzo 2018](#)

DOVE I RONDONI VANNO A DORMIRE

80 iniziative, in 5 Paesi
giornamento: [12 Luglio 2017](#)

FESTIVAL DEI RONDONI - SWIFTS & FUN 2018



Swifts & Fun: *website, facebook, youtube*

Festival dei Rondoni Swifts & Fun 2018



Renato Carini Parma 18 giu 2017

14 visualizzazioni • 8 mesi fa

Mauro Banfi Pavia 2017

34 visualizzazioni • 8 mesi fa

Andreina Bergamaschi S Colombano

10 visualizzazioni • 8 mesi fa

Rondoni a Melegnano

26 visualizzazioni • 8 mesi fa

Torino Piazza Castello 2012

23 visualizzazioni • 8 mesi fa



Carpi Torrione Spagnoli 28 giu 2015 zoom

7 visualizzazioni • 8 mesi fa



Carpi Torrione Spagnoli 28 giu 2015

6 visualizzazioni • 8 mesi fa



Rondonara Castellaro Ph_Arnh 30 giu 2013

25 visualizzazioni • 8 mesi fa



Riomaggiore (SP) , i rondoni della chiesa di S. Giovanni

35 visualizzazioni • 8 mesi fa



Rondoni a Castell'Arquato 27 giugno 2015 A

21 visualizzazioni • 8 mesi fa



Rondoni a Castell'Arquato 27giugno 2015 B



Torre rondonara del Castellaro. Rondoni sfioratori



I rondoni sfioratori della torre rondonara del Castellaro



(2) **Website** for collection of bird data in Italy – www.ornitho.it

With over one million records per year, Ornitho.it is the main platform for collection of bird data in Italy. The management team has included a special window for the input of detailed data in case of swift colonies.

The screenshot shows the homepage of www.ornitho.it. At the top, there is a header bar with a search bar containing "www.ornitho.it", a "Cerca" button, and a home icon. Below the header are several bird-related logos: a flock of birds in flight, the logo for "CENTRO ITALIANO STUDI ORNITOLOGICI CISO", the LIPU ONLUS logo, the EBN Italia logo, and the GPSO logo. The main content area features a banner with the text "Benvenuti su www.ornitho.it". Below the banner, a large text block explains the platform's purpose: "Ornitho.it è la piattaforma comune d'informazione di ornitologi e birdwatcher italiani e di molte associazioni ornitologiche nazionali e regionali che hanno come obiettivo lo studio, la conservazione degli uccelli, il birdwatching e la loro promozione. Una parte delle osservazioni, specialmente le più recenti, potrebbero essere non ancora verificate. Ornitho.it si sta rivelando un prezioso strumento di lavoro per la realizzazione dell'Atlante degli uccelli nidificanti in Italia e per quello degli Uccelli in inverno. Dall'ottobre 2014 la piattaforma è utilizzata anche per Rettili, Anfibi (in accordo con SHI), Libellule (in accordo con odonata.it) e Mammiferi terrestri, Mammiferi marini, Chiroterri (in accordo con ATIt).". To the right of this text, there is a sidebar with information about the sun and moon phases for Turin on March 2, 2018, and a link to the XML feed of recent observations. A footer at the bottom includes links to "EURO BIRD PORTAL" and "Tutti i miei dati".

[Ornitho.it](#)

The project code "**MV**"
(i.e. **Monumento Vivo**)
is designed for any indication of
buildings of special interest for
animal conservation.

2013-2016: 194 sites
2017: many more!

Roberto Lardelli



The screenshot shows a web-based form for reporting bird observations. At the top, there is a row of icons representing different animal groups. Below this, the 'Specie' (Species) field is set to 'Rondone pallido' (Pallid Swift). The 'Numero totale d'individui' (Total number of individuals) field contains the value '1'. A large red arrow points from the text '2017: many more!' to the 'Codice progetto' (Project code) field, which is currently set to '[MV] Monumento Vivo'. Other optional fields shown include 'Numero' (Number), 'Sesso' (Sex), 'Età' (Age), and various behavioral status checkboxes like 'Dato protetto' (Protected data) and 'Animale morto o ferito' (Dead or injured animal).

3) The **Association Progetto Natura** has developed **SOS Rondoni**, a conservation project for the city of Milano

Milan is the 2nd largest city in Italy, after Rome. The urban area is the largest in Italy and includes 7-8 million persons.

The activities include conservation and monitoring of swift colonies, as well as educational events with schools and general public and development of “good practices” with architects and stakeholders who operates on building restoration.



www.sosrondoni.it



Actions

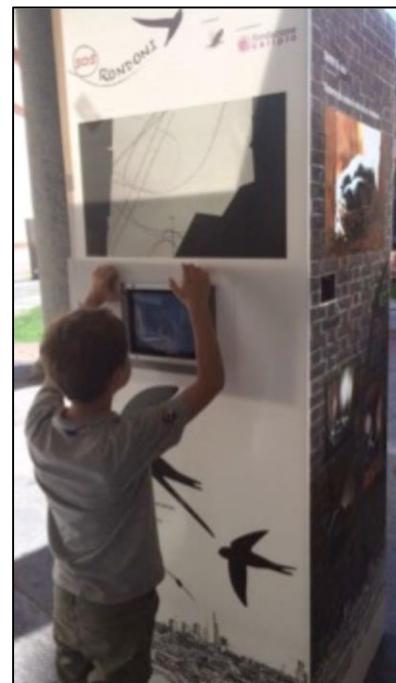
- mapping colonies in Milan

- buildings: study group with architects, bishop and city-major delegates: good practices and regulations.

- education: package of activities for schools.



Andrea Pirovano – Guido Pinoli



1° anno di monitoraggio Identificate 58 colonie
Rondone comune:

Castello Sforzesco

San Satiro

San Lorenzo

con il contributo di

Azione A1: identificazione delle colonie

Rondone comune:

S. Ambrogio

San Celso

S. Marco

4) Association for the protection of Living monuments Monumentivivi.it

Living monument: a building that houses animal species of conservation interest.

The association manages a website who provides: data, localities, information and documents utilizable for the conservation of swifts, bats and other animals living on buildings.



Ideas

- (A) Not only swifts, inclusion of other species who have similar interests
- (B) Three lines for actions
 - biology
 - architecture
 - green tourism



Marco Cucco – Irene Pellegrino

- **Biology**: ranking the sites, citizen science, education

BIOLOGY OF CONSERVATION

- Definition of Living Monument (according to the species and number of animals housed)
three levels:
 - *** GOLD: monument of exceptional wildlife importance
 - ** SILVER: monument of high wildlife importance
 - * BRONZE: monument of wildlife interest
- Preparation of cards on urban biodiversity (hard copy and website);
- Preparation of sheets on animal species:
 - 3 species of swifts, 3 species of swallows, 2 species of hawks
 - 20 species of bats
 - 4 species of reptiles (lizards and geckos)
- Website. Interactive map with:
 - Sites already identified
 - Ability to report new sites by citizens
- IOS and Android app: to report the animals seen during a visit to the sites, and ability to report new Living Monuments by citizens
- Citizen science: possibility for citizens to contribute to scientific research, with subsequent validation of the observations by a Scientific Committee.
- Environmental education: creation of educational materials and a network of contact persons of the project; actions to publicize the project and to involve schools, associations, groups, etc.

Swift's conservation in Italy

ARCHITECTURE

- Guidelines for the construction of new facilities that can favour the presence of animal species;
- Good practices: information and/or requirements for the maintenance of the Living Monument in case of renovation or restoration of the building;
- Cards about architecture/history/art of the monument: preparation of material to be used for the Web site, and brochures, printed guides.
- Provisional rules to avoid the use of the Living Monument by feral pigeons.

TOURISM

- Website: interactive map with already identified sites. This part is related to an architectural description/history of the monument;
- Nature tourism - green tourism: people (nature guides) to accompany tourists interested. Nature guides are provided with the necessary equipment for the observation of birds (binoculars, telescopes) and cryptic species such as bats (bat-detector, digital recorders, infrared camera);
- Planning of tourist routes: along one or more days tourist may visit different Living Monuments and sites of ecological importance in the surrounding areas;
- Brochures and multilingual guide: preparation of tourist guide in the form of a brochure or book (guide);
- IOS and Android app: to locate the monuments, download information, report their visit to the site and make a judgment;
- Certification of Excellence (alike trip-advisor, green-tourism.com) for commercial services, restaurants, farms, etc. located near a living monument;
- Labels, stickers: material to be provided to commercial service owning the Certificate.

Where? – Maps

Dove sono – Cartografia | Dove sono – Cartografia <> ... | Full Background Manager ... | +

www.monumentivivi.it/dove-sono-cartografia/ | Cerca | Ciao, admin |

Monumenti Vivi

HOME CHI SIAMO DOVE SONO – CARTOGRAFIA FAUNA ARCHITETTURA TURISMO NATURALISTICO COLLABORA ANCHE TU COOKIE POLICY BLOG

Articoli recenti

- Fiera del Birdwatching
- Festival dei Rondoni Swift & Fun 2016

Archivi

- aprile 2016

Categorie

- Eventi

aprile: 2016

L	M	M	G	V	S	D
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Meta

- Amministra sito
- Esci da questo account
- RSS degli Articoli
- RSS dei commenti
- WordPress.org

Dove sono – Cartografia

Mappa dei siti già indicizzati

A map of Northern Italy and parts of Switzerland and France, centered on the Po River valley. Major cities labeled include Milan, Turin, Genoa, Piacenza, Parma, Modena, Bologna, Vicenza, Padua, Verona, and Trento. Numerous green location markers are placed on the map, indicating indexed sites. Labels for major roads like A1, A26, A31, A35, A45, E45, E62, E70, and E71 are visible. The map also shows the Matterhorn in the background.

Citizen Science

The **form** can be filled from desktop PC, tablets, phones.

Segnala un Monumento Vivo

Localizzazione e descrizione di un nuovo Monumento Vivo

Compila il modulo riportato qui sotto per la segnalazione di un nuovo Monumento Vivo.

Il tuo nome (*richiesto*)

La tua email (*richiesto*)

Edificio - denominazione della struttura: (*richiesto*)

Località precisa (indirizzo stradale, numero civico) (*richiesto*)

Comune: (*richiesto*)

Regione: (*richiesto*) Valle d'Aosta 

Coordinate geografiche (lat. long.) (*opzionale*):

SPECIE ospitate: (*richiesto*)

- Rondone comune
- Rondone pallido
- Rondone maggiore
- Rondine
- Balestruccio
- Civetta
- Assiolo
- Allocchio
- Barbagianni
- Taccola
- Gheppio
- Grillajo
- Falco pellegrino
- Chirotteri
- Rettili
- Altro

Conteggi o stime della quantità ospitata, per specie, eventuali citazioni bibliografiche sul fenomeno (*opzionale*)

Descrizione del sito: dettaglio delle particolarità architettoniche che ospitano le varie specie, eventuali minacce o rischi (colombi che occupano le stesse nicchie, restauri in progetto, altro), link a siti personali con foto dell'edificio (*opzionale*)

Ulteriori riferimenti del segnalante, per contatti (*opzionale*)

Future? Work in progress!

Swift & Fun – more cities

Ornitho – more sites

Sos rondoni – a good example for local activities

Monumenti Vivi – more sites

... and ...

Science

- **New data on breeding biology.** Some colonies have been studied for decades and have provided detailed long-term data on survival, moult, breeding success and swift' behaviour.
- **Long term trends.** We need to pay particular attention to the most important sites, with the largest colonies. There we can go back to the same sites after some years to monitor trends on swift's abundance.

Main colonies

Moncalieri - Santa Maria della Scala cathedral



Main colonies

Moncalieri – Cathedral: distribution *A. pallidus*

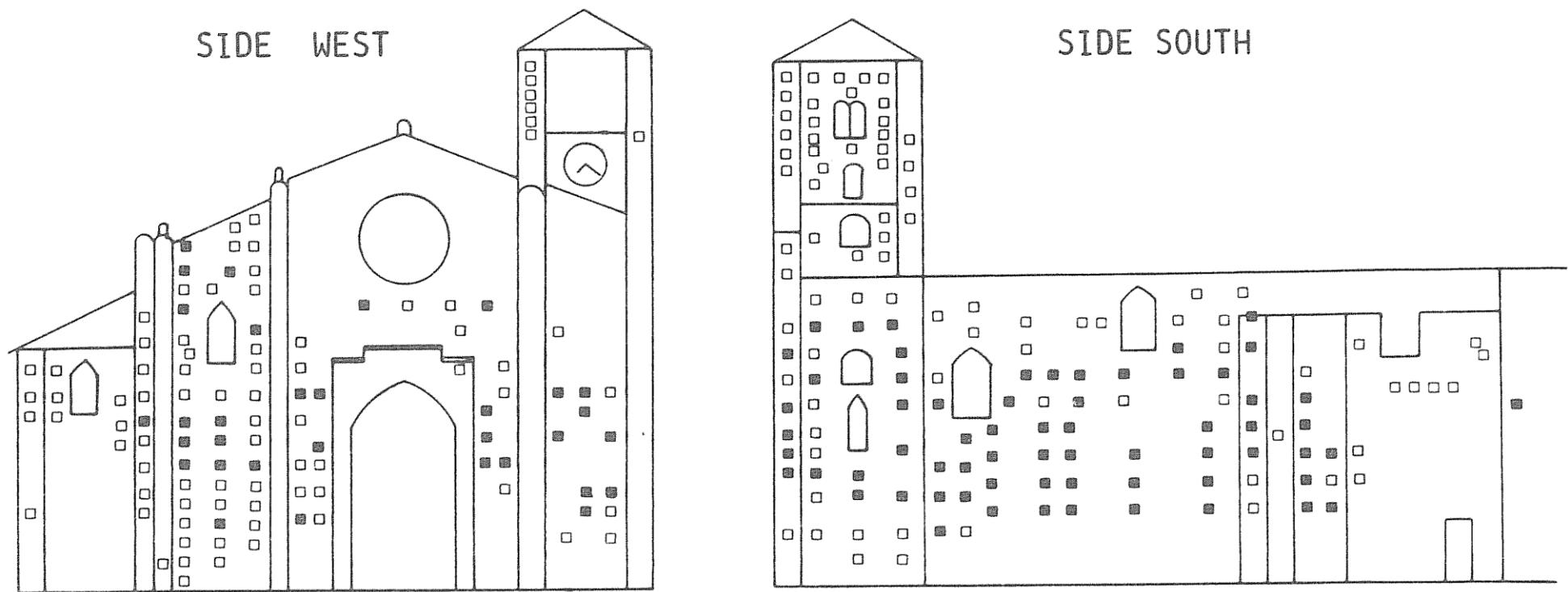


FIGURE 1. Distribution of the Pallid Swift (black squares) in the colony of Moncalieri (sides South and West).

Main colonies

Torino – Piazza Castello

West side & tower 1



May 1949



Main colonies

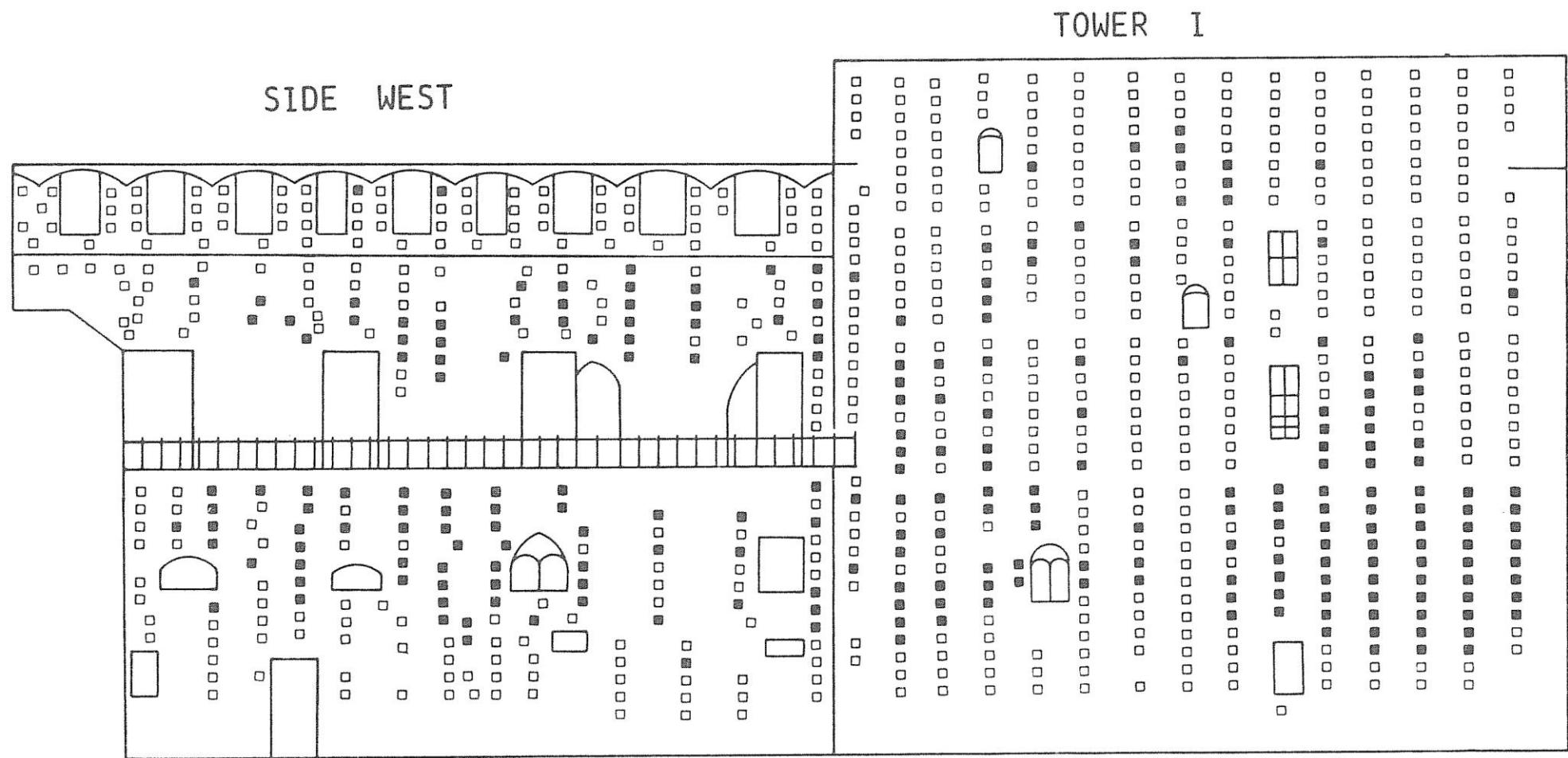


FIGURE 2. Distribution of the Pallid Swift (black squares) in the colony of Torino (side West and tower I).

Main colonies



Saluzzo - Cathedral

Jerusalem – Western wall



Map of swift nesting sites in Western Wall, the Old City of Jerusalem, the holiest Jewish site (Ulrich Tigges 2002)

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