

Social Management in Modern Aviculture

Simon Bruslund, Marlow Birdpark

1. Bird exhibiting – messaging reconsidered
2. Facets of social strategies in bird species
3. Seasonal flocking method
4. Introductions “Howdy-cage” method
5. Dating-aviaries “Lovers-lane” method
6. Common problems in large aviaries
7. Aviary resource



Imagine please...

**A small Taiga
Forest River
exhibit...**

**A unusual species,
of exceptional
beauty**

**Dramatic
breeding
behaviour with
active parent care**

**High activity level
throughout the
day and kept
outdoor all year**



Conservation relevant alternative, the Baer's Pochard is near extinct and is at big Risk to become extinct in the wild in the next decade





Assumptions about social behaviour





Pavo muticus, Nicole Bruslund LPF



Canis lupus, dpa



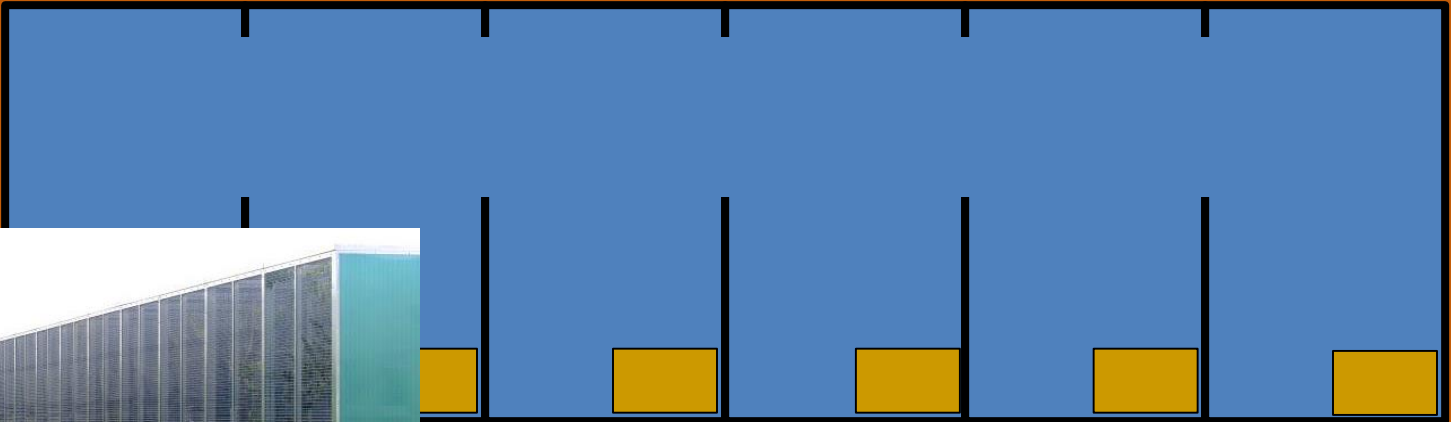




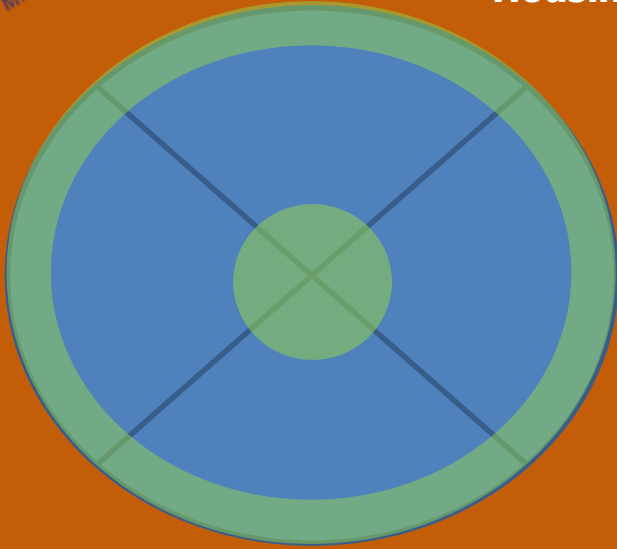
Housing needs for seasonal flocking or communal roosting



October
February
March

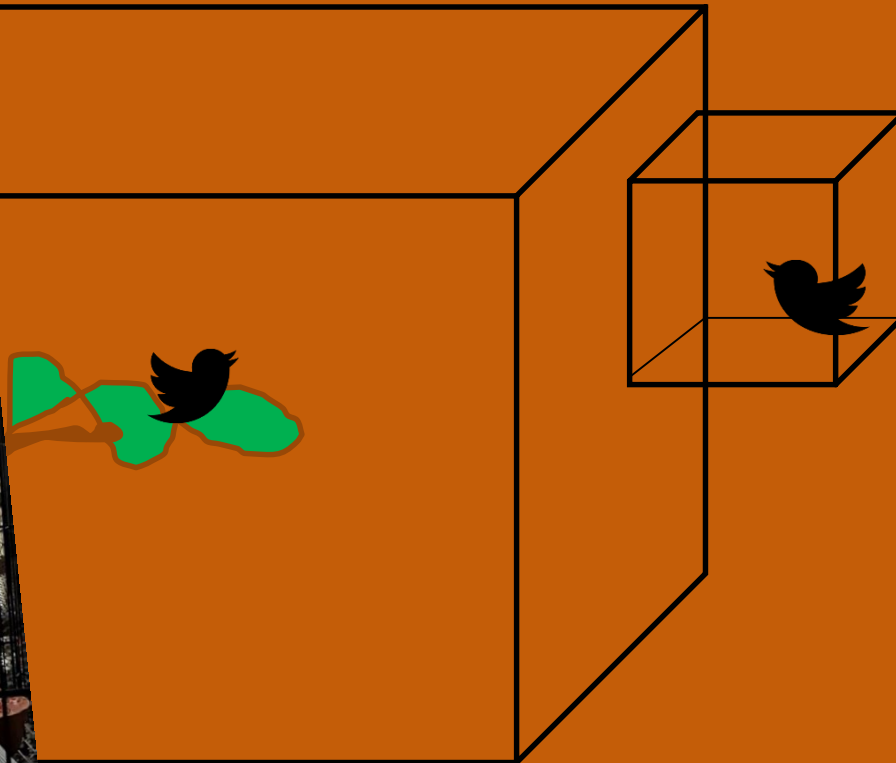


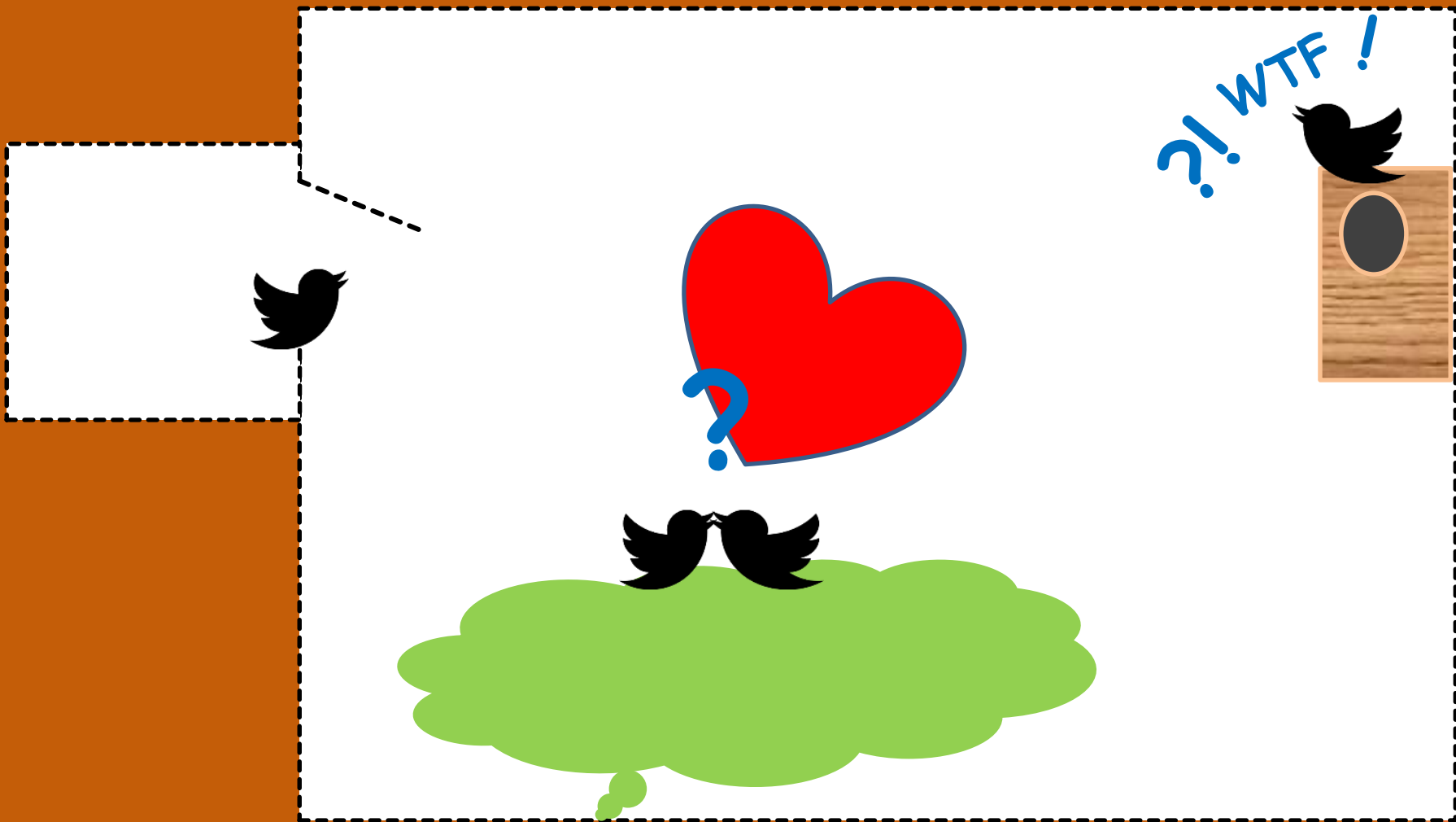
Housing needs for seasonal flocking or communal roosting





Avoid initial aggression incidents with the „howdy-cage“ method





Advantages of free mate choice




Received: 2 May 2018 | Revised: 2 October 2018 | Accepted: 12 October 2018

DOI: 10.1002/zoo.21450

RESEARCH REVIEW

WILEY ZOOBIOLOGY

Improving the sustainability of ex situ populations with mate choice

Meghan S. Martin-Wintle^{1,2}  | Nathan J.P. Wintle²  | María Díez-León³  |
Ronald R. Swaisgood¹ | Cheryl S. Asa⁴

Looked at literature across a wide range of taxa - birds (zebra finch, pigeons, mallards)

Zebra finch: greater number of chicks hatching, decreased mortality of chicks, increased paternal care.

House mice: enhanced survival after exposure to pathogens e.g. salmonella

Giant pandas: dams from preferred pairings more likely to rear their own offspring...



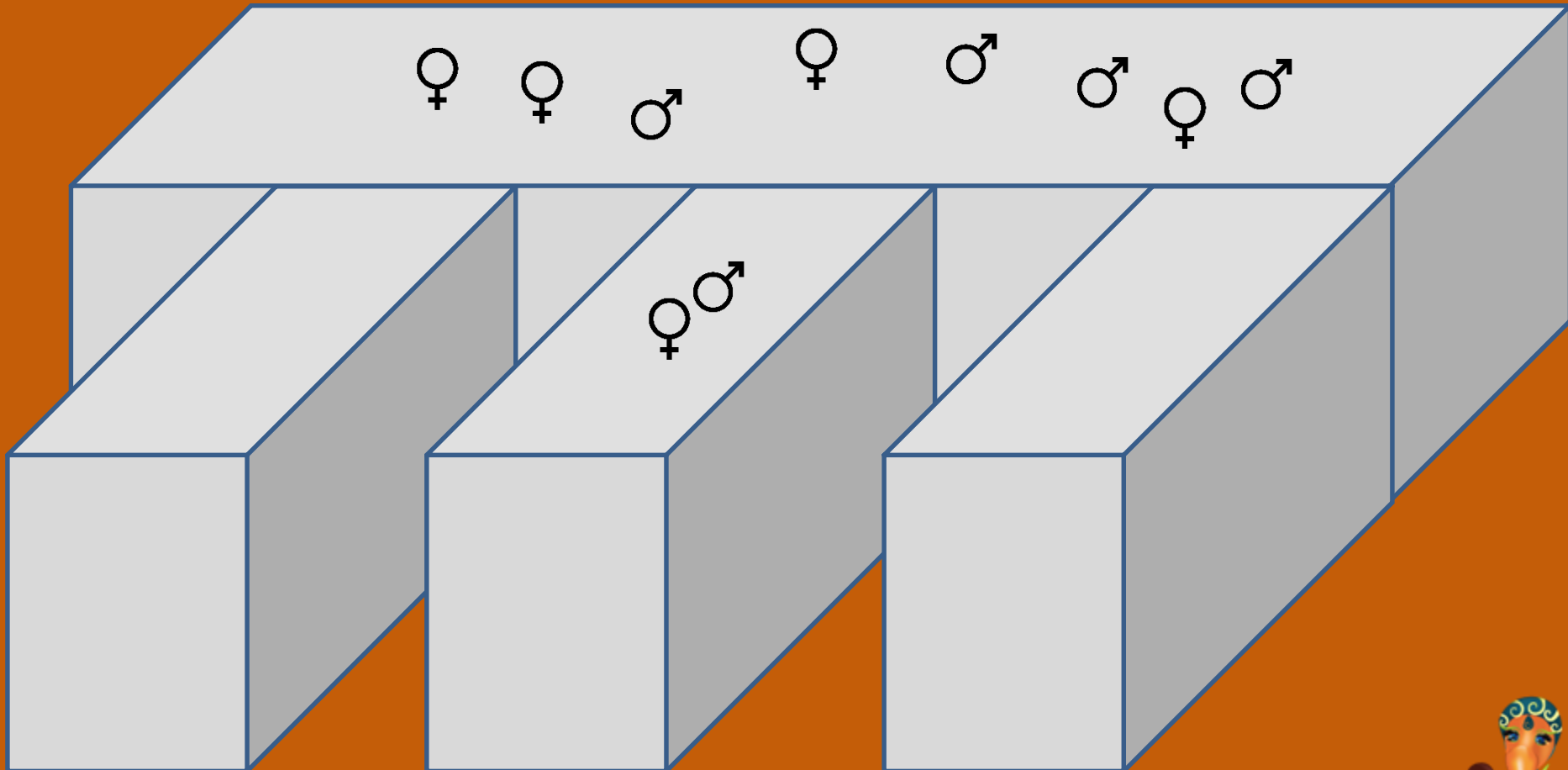
Some bird species that are highly selective about their partner choices

- Nias Hill Myna **CR**
- Ravens **LC**
- Red-billed Blue Magpie **LC**
- Yellow-Crested Cockatoo **CR**
- Blue-throated Macaw **CR**
- Indian Great Hornbills **VU**
- Red-billed Toucan **VU**
- Siberian Crane **CR**
- Northern Brown Kiwi **VU**
- Helmeted Curassow **EN**
- Coscoroba Swan **LC**
- Little Grebe **LC**
- Crowned Pigeons **VU**
- Oystercatcher **NT**
- Peruvian Thicknee **LC**
- Oriental White Stork **EN**
- Blue-bellied Roller **LC**
- Steller's Sea-eagle **VU**
- Red-headed Vulture **CR**
- Nippon Crested Ibis **CR**
- Javan Sparrow **VU**



Flocking in dating aviary...

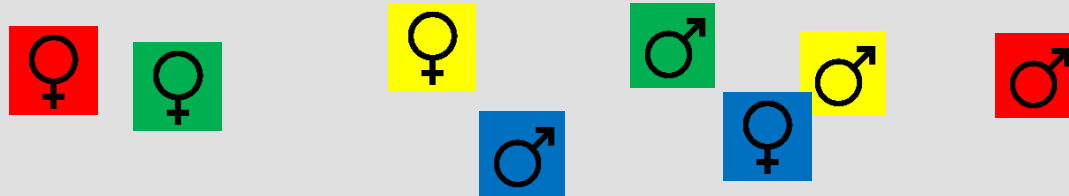
Seperation areas for pair seclution



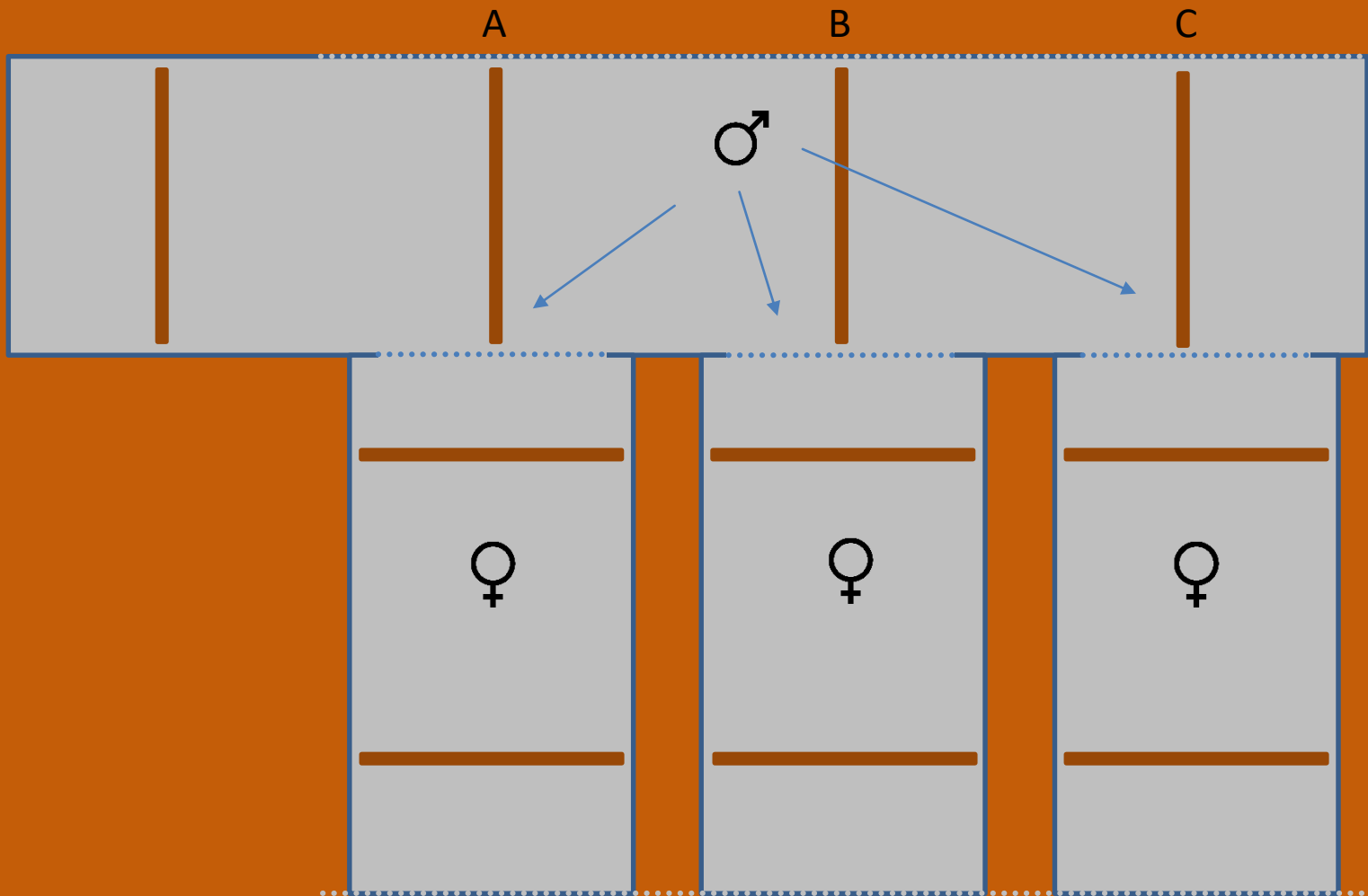
Flocking in dating aviary...

Observation with individual marking

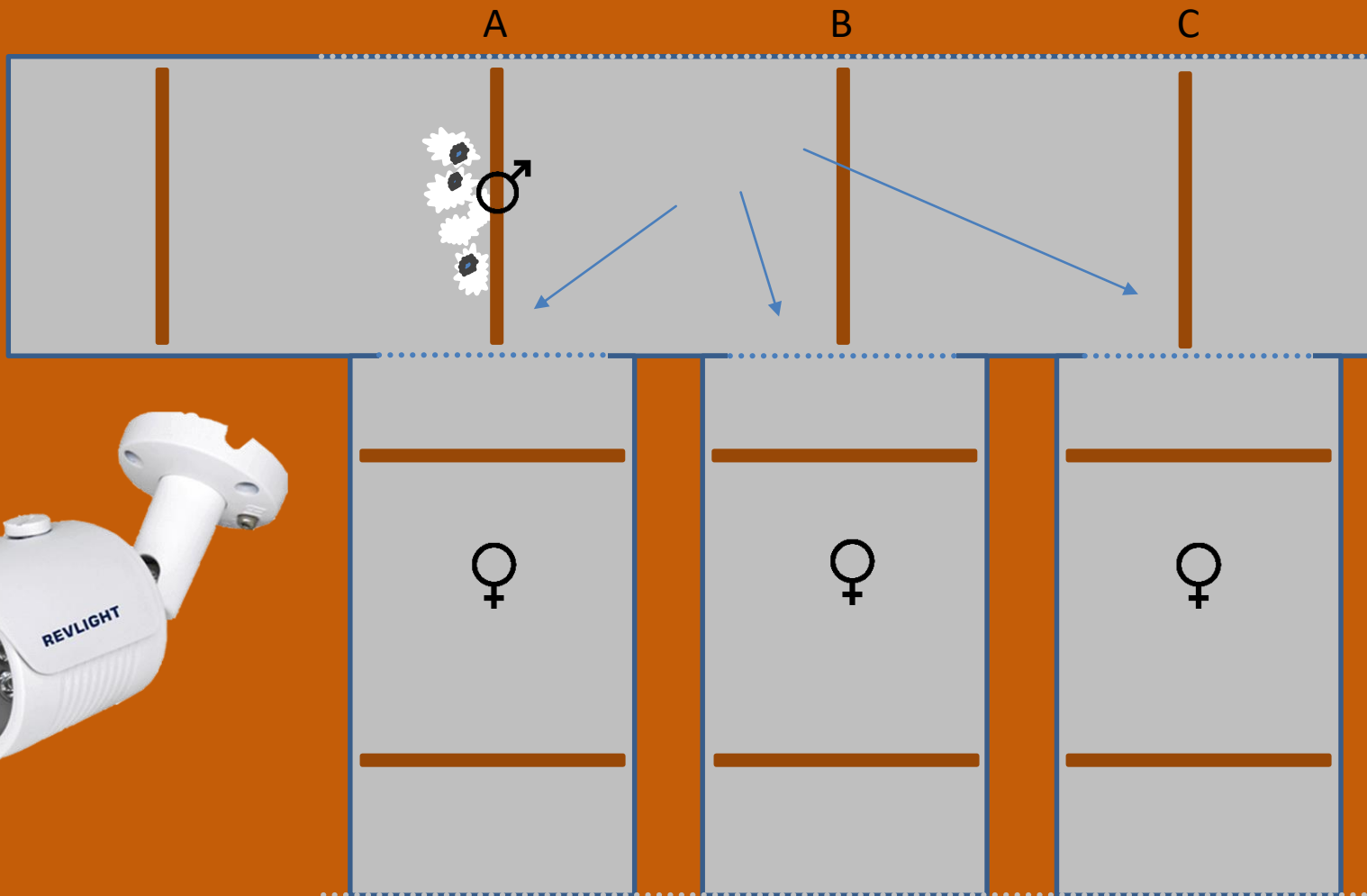
Transponder tracking at feeding station



"Lovers lane" method



"Lovers lane" method



Common problems in large aviaries you should know about when planning.

1. Monitoring
2. Capture and introduction
3. Training and research (also opportunity)
4. Detecting and preventing social stress and aggression
5. **Breeding sustainability** (both too little but also too much breeding)
6. Natural density of avian biomass in 1ha Rainforest = 1,4 kg

In one 4500 m² tropical house the reality was >100 kg

AVIAN BIOLOGY RESEARCH 5 (2), 2012 75–80

Have we met before? Pigeons recognise familiar human faces

Claudia Stephan^{a,*}, Anna Wilkinson^{a,b} and Ludwig Huber^{a,c}

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ABSTRACT

Despite growing evidence for the recognition of conspecifics, studies on heterospecific recognition are scarce. There is some evidence that birds living in urban habitats are able to distinguish between humans, depending on their previous experience with them. Nonetheless, the features by which they actually discriminate among humans remain unclear. This study investigated whether pigeons are capable of performing such a sophisticated categorisation and the features relevant to making this discrimination. Results revealed that pigeons are able to discriminate reliably between familiar and unfamiliar human faces. This provides evidence that facial features are important for this recognition. Furthermore, our results suggest that the ability to discriminate between individual heterospecifics is not restricted to bird species that are considered highly cognitive.



The image shows the interior of a large, modern conservatory. The roof is a complex, arched structure made of dark metal beams and large glass panels, allowing natural light to fill the space. The floor is covered with a dense collection of tropical plants, including various types of palm trees, ferns, and broad-leafed shrubs. The plants are lush green, with some showing signs of aging or damage. The overall atmosphere is bright and airy, typical of a large indoor garden.

Masoala hall = 0,01 km²



The take home message:

**ADD MANAGEMENT AREAS AND OFF
EXHIBIT BREEDING SPACE TO
LARGE FREE FLIGHT PROJECTS!**

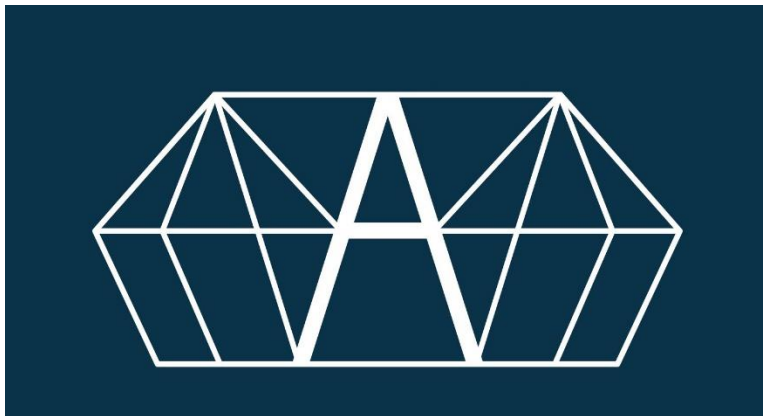
JUST DO IT, NO DISCUSSION!





Aviary Database

Andrea Bračko, Zagreb zoo



www.aviarydatabase.com


Advantages of aviaries and the Aviary Database Project: a new approach to an old housing option for birds

A. Bračko, C. E. King, International Zoo Yearbook, September 2013, Wiley

Aviary Database



aviarydatabase.com

HOME PAGE ABOUT AVIARY LIST ADD RECORD


AVIARY DATABASE

Powered by Zoo Zagreb


Welcome to Aviary Database. Site is currently in developing/test stage. Here you can find information about free flight aviaries in EAZA zoos.

For any questions contact:
andrea@zoo.hr , ema.stanic@zoo.hr , zoran.petkovic@zoo.hr


[AVIARY LIST](#)




Zoo Zagreb – African birds enclosure
by zgzoocom_admin | Mar 12, 2019
Name of Zoo: Zoological Garden Zagreb
Name of Exhibit: Aviary for African birds
Opening Date: 16.10.2016.




Zoo Zagreb – Vulture aviary
by zgzoocom_admin | Apr 2, 2019
Name of Zoo: Zoological Garden Zagreb
Name of Exhibit: Vulture aviary
Opening Date/Year: 1999




GaiaZOO – TAIGA aviary
by zgzoocom_admin | Apr 2, 2019
Name of Zoo: GaiaZOO
Name of Exhibit: South-America aviary
Opening Date/Year: 01-01-05




Allwetterzoo Munster – Geelvoliere
by zgzoocom_admin | Mar 6, 2019
Name of Zoo: Allwetterzoo Munster
Name of Exhibit: Geelvoliere
Opening Date/Year: 01-01-74




Artis – Vulture aviary
by zgzoocom_admin | Mar 11, 2019
Name of Zoo: Artis
Name of Exhibit: Vulture aviary
Opening Date/Year: 01-01-05




South-America aviary
by zgzoocom_admin | Mar 11, 2019
Name of Zoo: GaiaZOO
Name of Exhibit: South-America aviary
Opening Date/Year: 01-01-05




Vogelpark Avifauna – Cuba aviary



Zoo Antwerpen – Swampaviary




Ouwehands Dierenpark – Urucu

HOME PAGE ABOUT AVIARY LIST A

Zoo Zagreb – Vulture aviary

by zgzoocom_admin | Apr 2, 2019 | Zoo Zagreb | 0 comments



General info

Name of Zoo: Zoological Garden Zagreb
Name of respondent: Andrea Brakos; Ema Stanic
E-mail address of respondent: andrea@zoo.hr; ema.stanic@zoo.hr
Name of Exhibit: Vulture aviary
Opening Date/Year: 1999


Dimensions

Height: 10m
Length: 10m
Width: 10m
Volume: 1000m³
Roof: domed

Construction

Frame:
1) placement main support structures: external
2) materials main support: metal, specify type steel
3) special supports/protection for:
(a) interface net/mesh and main support:
(b) protection from main supports rotting in ground;
4) secondary supporting structures: cables and beams
5) lowering or removal of top when snow or severe winds expected possible: no
6) constructor:
Material sides:
1) solid (rock, brick wood etc): 0
2) glass: 0
3) piano wire: 0
4) netting/mesh: 4
a) material: galvanized wire (galvanized after welding)
b) name manufacturer:
c) supplier:
d) product name:
e) opening size: 100 x 100 mm
f) diameter: 2.5 mm
g) color:

Birds and impact-accidents on glass

HOME PAGE ABOUT AVIARY LIST ADD RECORD

Substrates

Vegetation

Predator protection

Supplemental lighting

Permanent introduction/catching area present

Indoor enclosure

attached to aviary: yes
dimensions:
I. length: N.A.
II. width: N.A.
III. Height: N.A.
average number of nights used per year: 60
average number of days used per year: 60
direct access to main outside enclosure: yes
direct access to alternative outdoor area: no
substrates (specify): wooden chips
usable water area present for bathing: no
possibility to subdivide area if need to: yes
keeper access area not shared by birds: yes
natural sunlight received: yes
number of hours of artificial light: 12
heating supplied: heat lamps
please describe ventilation system: no
visitor viewing: yes

Dispersal





experienced: yes, specify N.A.
handling snow experienced: yes, specify N.A.
excessive mortality and/or accidents with one or more species: no
other health issues, e.g. foot lesions: no
frequent replacement or repair of materials: no
husbandry issues e.g. cleaning, heating, moving birds: no

Dissatisfaction

Visitor: no
Keeper: yes, specify: crows should get rid off

Cost

Enclosure data submission

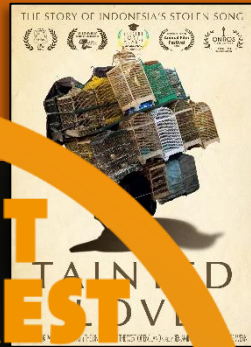


1 2 3 Next

ZOO
Zagreb



Silent Forest Campaign



**SILENT
FOREST**

**AN
BIRD
SIS**

www.silentforest.eu