Swift Towers in the Netherlands

Occupancy and their role as mitigation measures

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Swift Conference Segovia 25 May 2022

Swift Towers: what are they?

- Construction on poles
- Contain nestboxes for swifts
- Aim: alternative breeding sites for swifts
- Design is diverse:
 - The come in different forms and sizes

General idea of fauna tower (in this case: not for swifts)



Swift Towers in the Netherlands







Amersfoort



• Sambeek: a 'real' tower

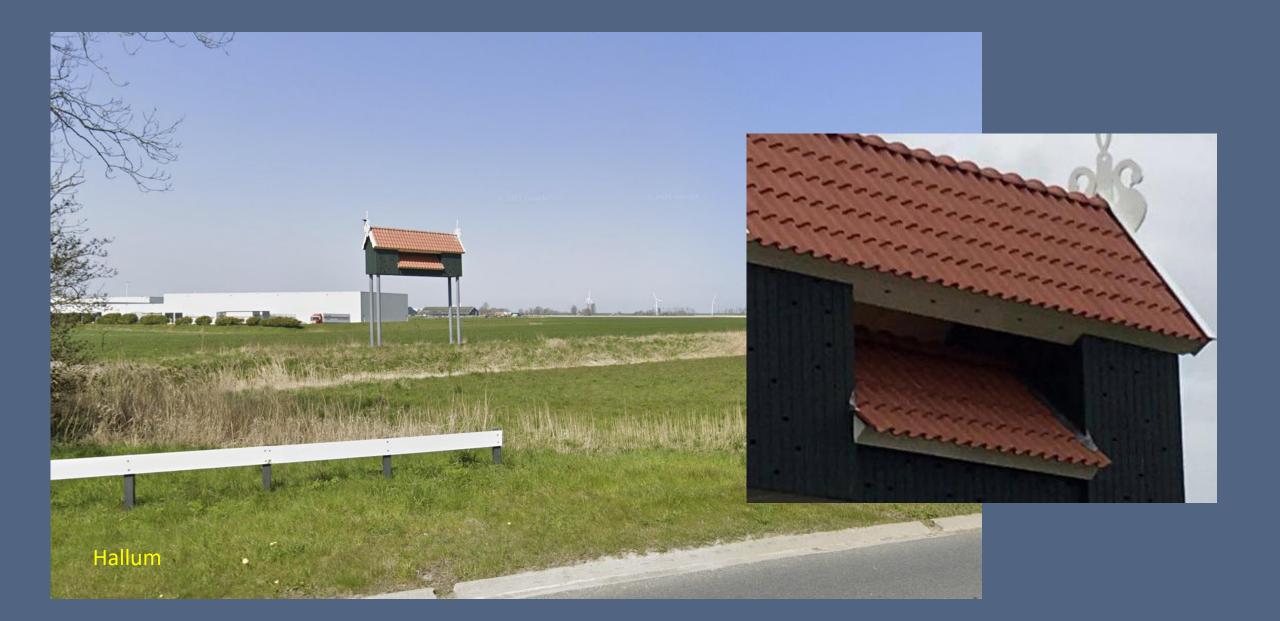




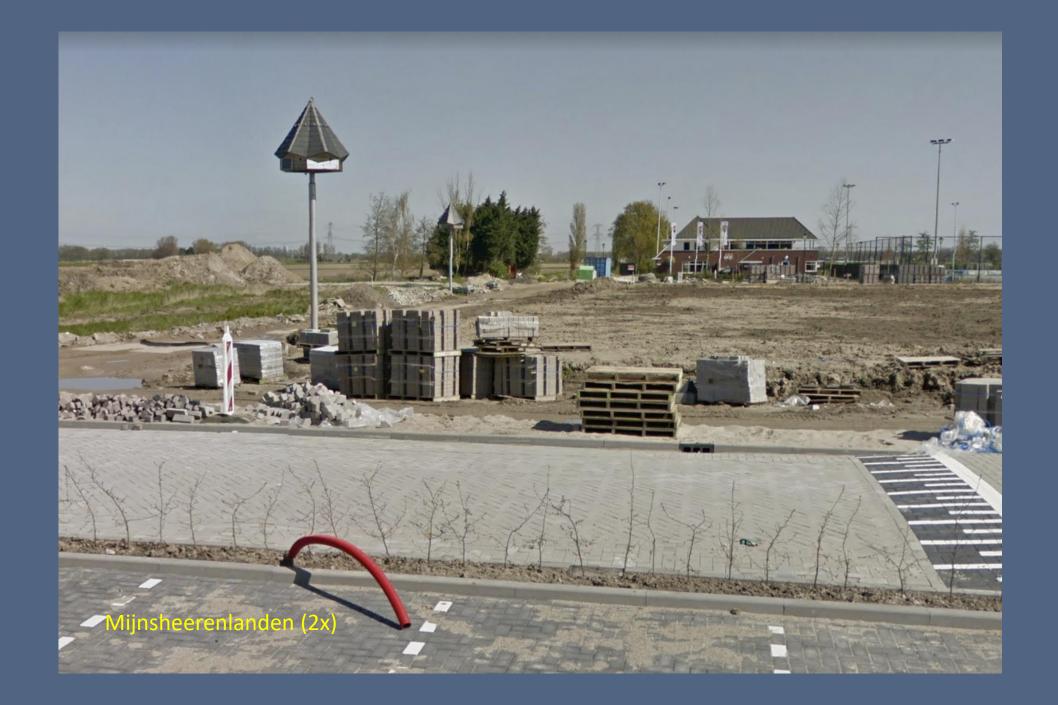
• Joure (2x)













Swift Towers: what are they used for?

- To increase awareness with the public
- To increase biodiversity
- To give the population of swifts a boost
- To mitigate the loss of nest sites elsewere
 - Legal obligation
 - Sometimes temporary measure only
- Imago of village of company



Swift Towers: occupied by?

- Common swift (target)
- Starling
- House sparrow
- Great tit
- Blue tit











• How does this work out in the Netherlands?

Swift Towers: Data

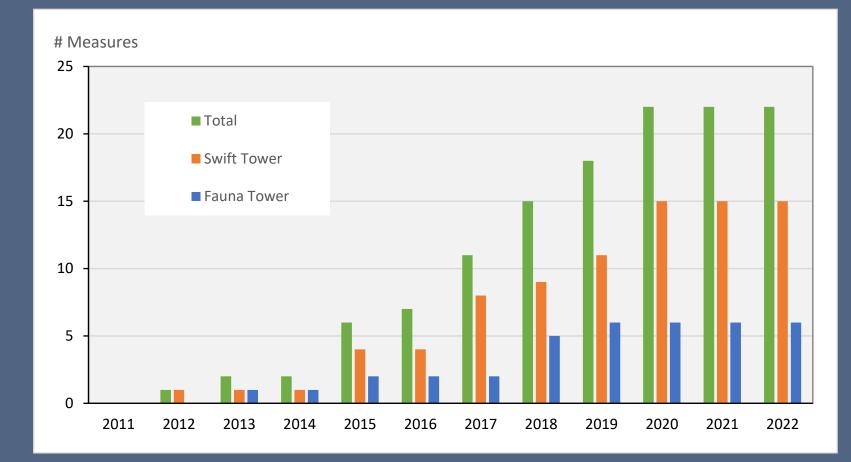
- Jaap Langenbach did the data surveys
 - First results published in Dutch Swift Magazine
 - Website: https://gierzwaluw.website/Tillen.html
- Difficult to find reliable occupancy data
- Not monitored consistently
- Best available data
- Period: 2011 2021

	Plaats	Start jjjj-mm	Aantal kasten	1e jaar met broedgeval	Broedgevallen		
					2017	2018	2019
12	Puttershoek **	2019 - 6	48		nvt	nvt	
11	Hallum **	2018 - 3	85	2019	nvt	-	2 #
10	Oud-Alblas	2018 - 2	44	(4	nvt	(a)	1.46
9	IJlst	2017 - 5	36	2018	1.00	18	2.6
8	Waddinxveen	2017 - 5	14		1.00		1.71
7	Leiden	2017 - 3	30	12	(a)	0.42	141
6	Neede	2017 - 4	48	2018		1\$	1\$
5	Amersfoort	2015 - 6	15	-			
4	Mijnsheerenland-Z	2015 - 4	40	2017	1 ^		
3	Mijnsheerenland-N	2015 - 4	40	-	-	-	1
2	Moergestel **	2013	45		0.00		
1	Den Helder	2012-7	16	2017 *	2	2	5 @
		Totaal	461				10

• How does this work out in the Netherlands?

Number of Swift and Fauna Towers

• Increase in number of Towers



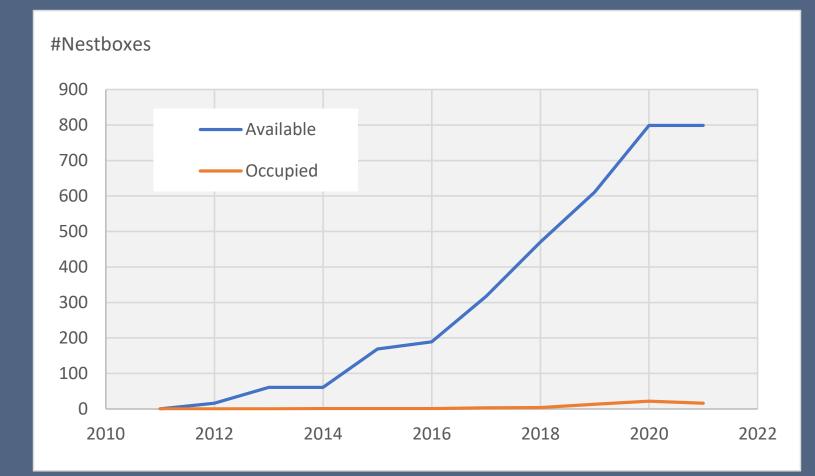
Location of Swift Towers included in this study

 Probably more towers exist



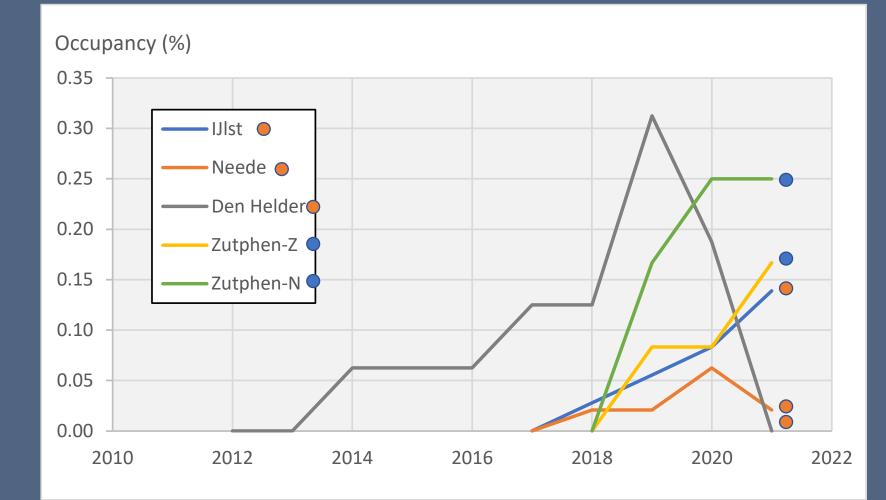
Increase in number of swift towers

• The number of occupied nest boxes stays very low

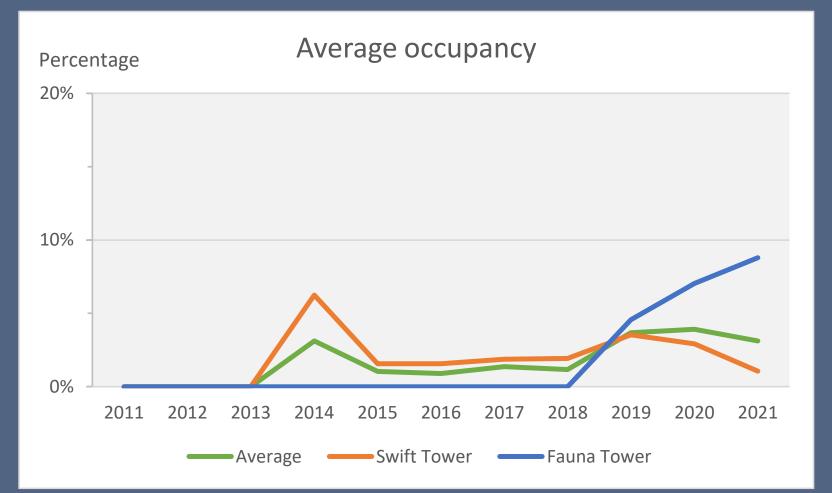


Increase in number of occupied nests...

- The number of occupied nest boxes stays very low
- Also for 'old' towers
- Some seem to perform better than others



Average occupancy of nest boxes



- Swift towers: Average occupancy very low (<10%)
- Hardly effective as mitigation measure

Discussion

Swift Towers

- Multiple designs
 - Which one really works? All?
- Swift sounds not in all cases used in the beginning

Position

• Often not situated near or between buildings



• Hardly suitable habitat for swifts (or what they are used to anyway)





Conclusions

- Occupancy of Swift Towers in the Netherlands is very low (<10%)
- Most of them are situated 'sub-optimally' (in the wrong places)
 - Not in Swift habitat
 - Limited space within urbanization
- Placement of Fauna Towers: multiple target species require different environmental conditions
- Swift calls not always used
- Swift Towers are very costly compaired to common mitigation measures such as built-in nestboxes

In this way:

• Swift Towers are not effective to mitigate disappearing 'natural' nest sites

