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Jarek Majkusiak

TOBIN





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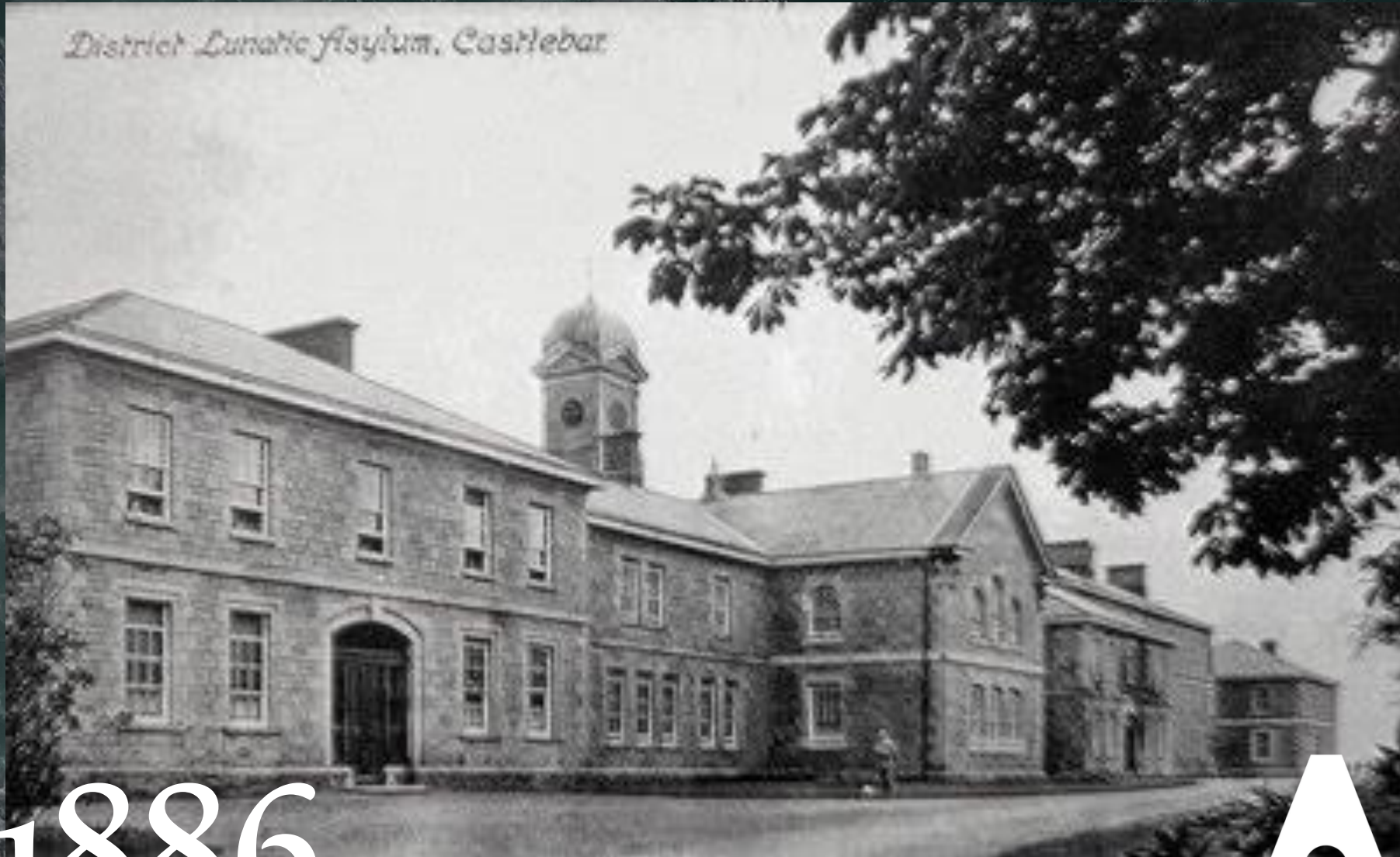
THE HISTORY OF THE COMMON SWIFT RESEARCH PROJECT AT ATU MAYO CAMPUS



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In 1886...



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A photograph of three common swifts in flight against a stone wall. A red gutter runs horizontally across the upper part of the frame. In the bottom left corner, a window with a red frame is partially visible. The text "NATURAL NEST" is overlaid in white serif font.

“NATURAL NEST”

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2009



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SWIFT BOXES

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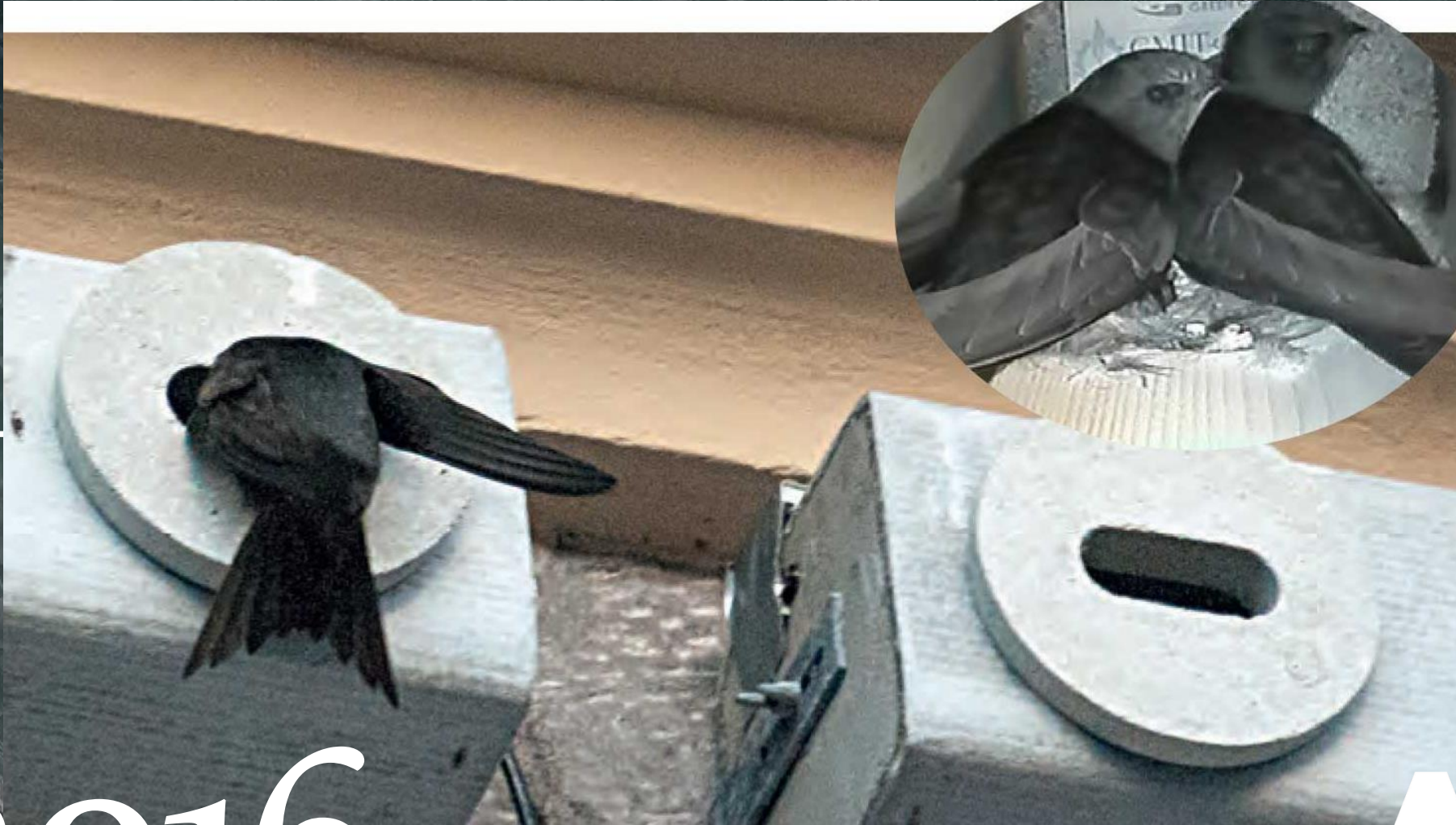
2015



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SEOIRSE SWANTON

2017



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MORE BOXES

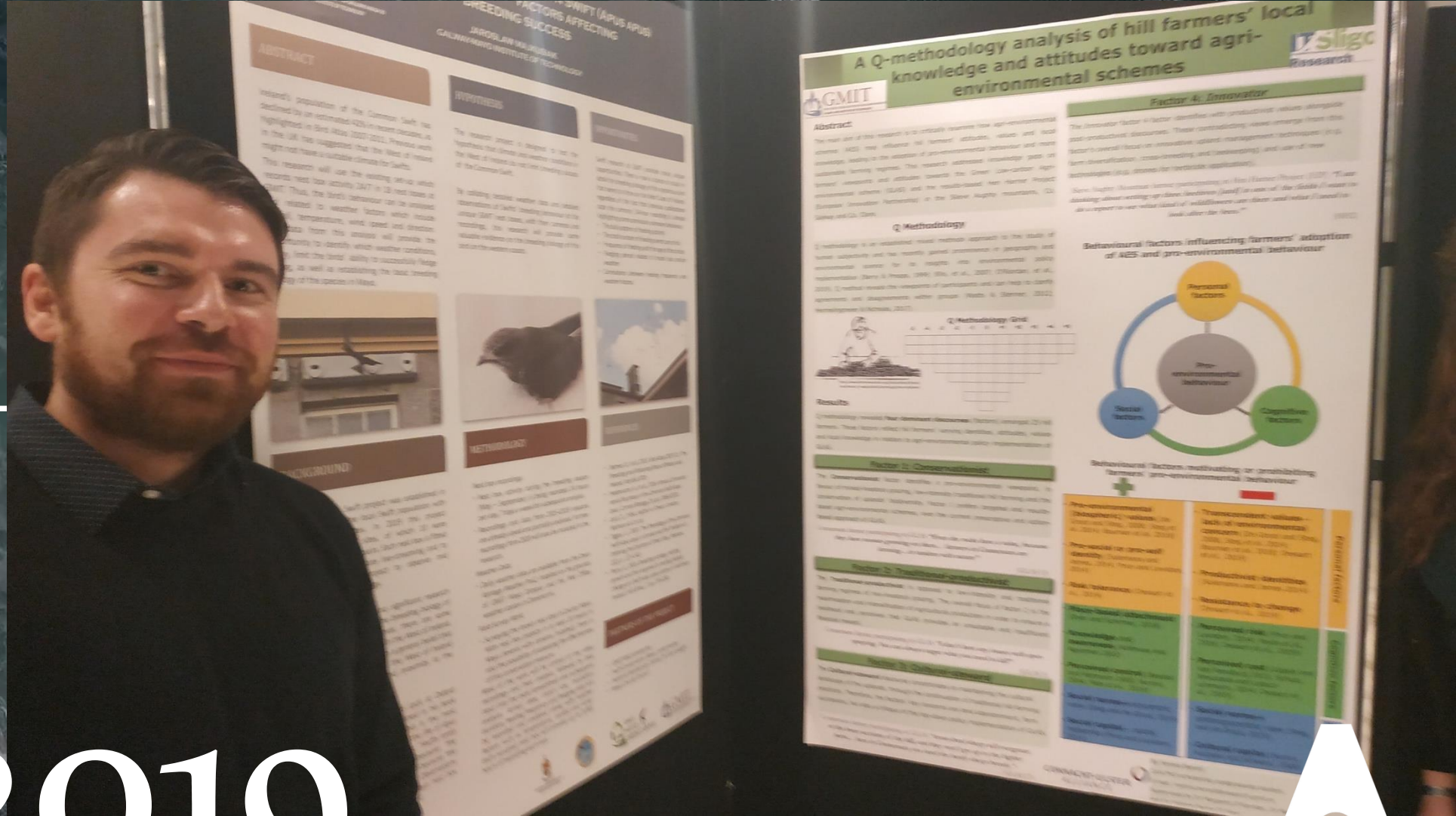
2018



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2019

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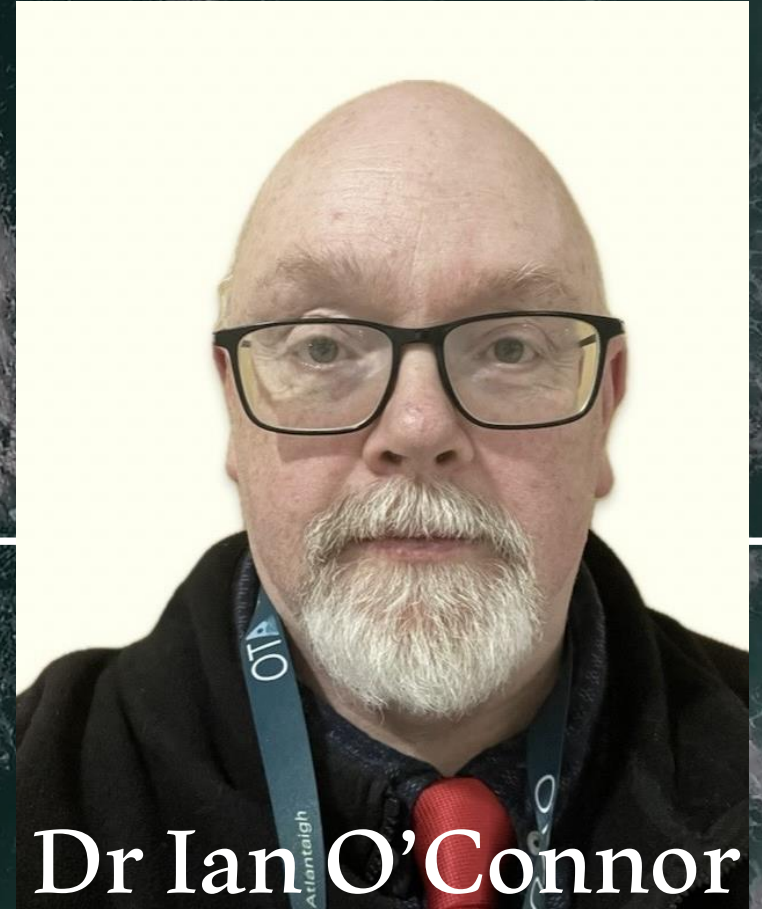
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Fergal O'Dowd



Dr Yvonne McDermott



Dr Ian O'Connor

2019



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Lynda and Chris Huxley

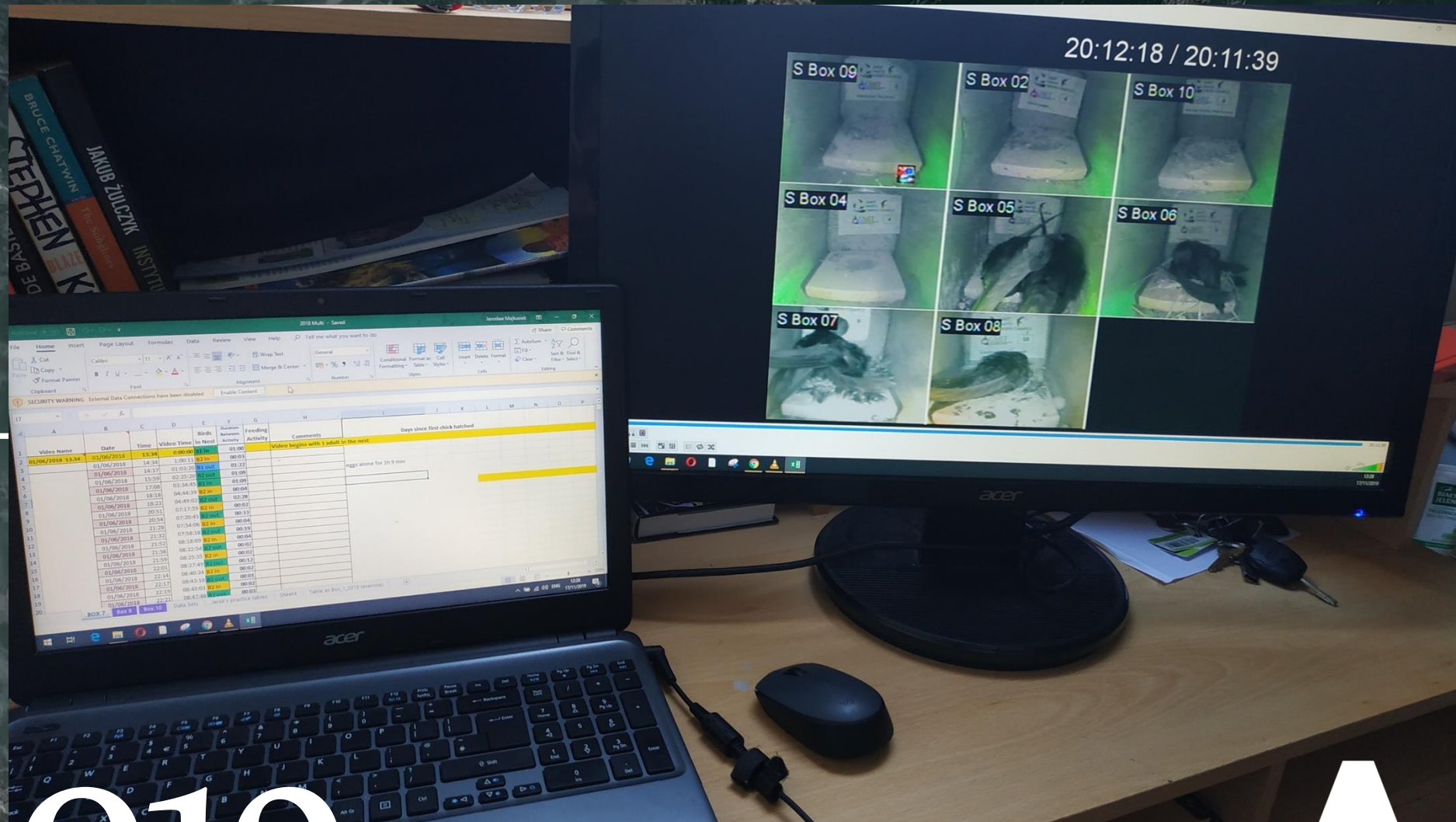
2019



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MAGUIRESBRIDGE

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Coronavirus **COVID-19**

2020



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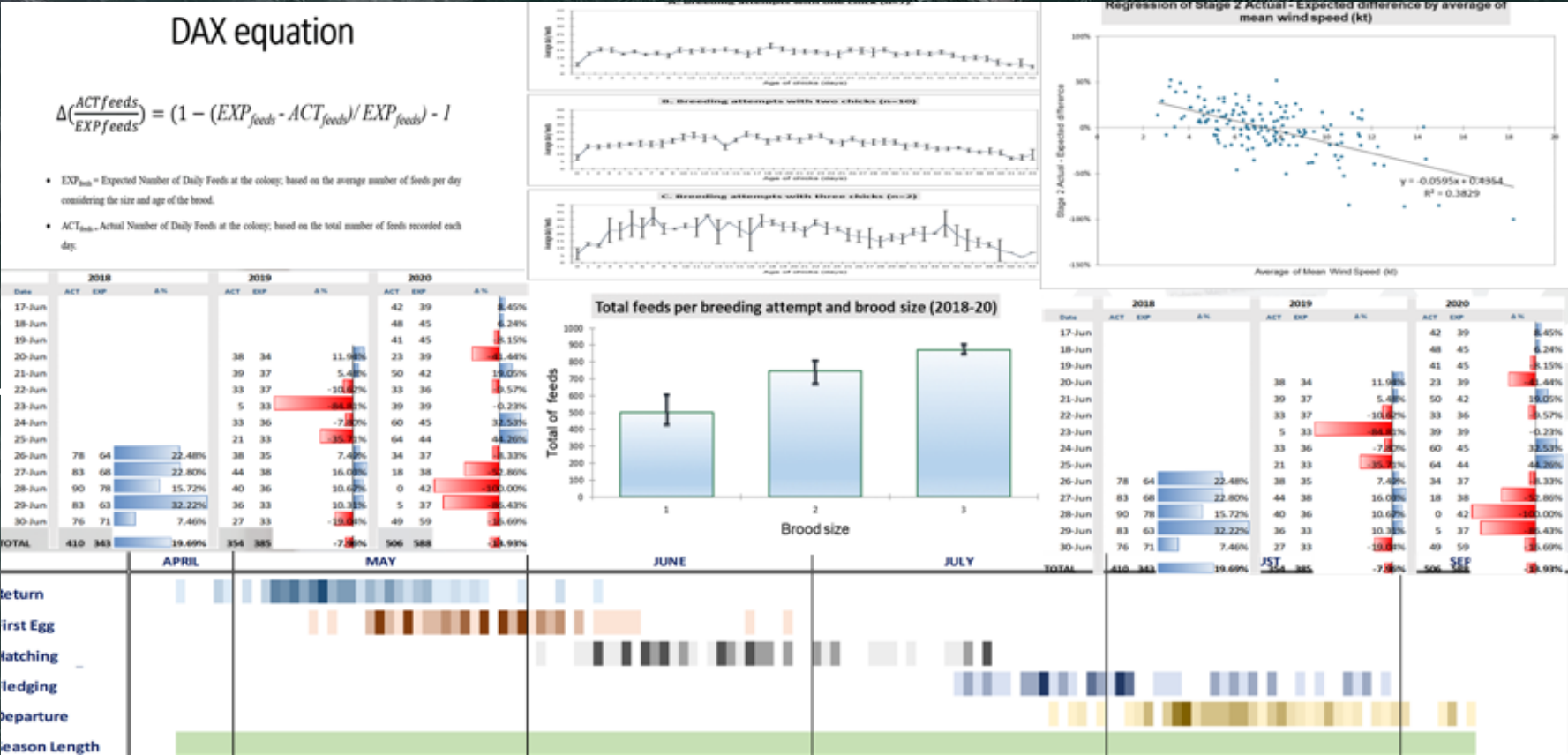
2022



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RESULTS

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RESULTS



- The first detailed study providing baseline ecological data for the species at the northwestern extremity of its breeding range.

- The mean clutch size of 2.3–2.4 eggs is consistent with that reported for temperate regions.

- This is the first study to quantify brood feeding events throughout the entire breeding season across varying brood sizes.

2022

- The study identifies the effects of adverse weather conditions on food delivery rates.



“Common Swift is well adapted to breeding in the challenging climate of the west of Ireland, as long as suitable nesting opportunities are provided”

2022



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SEGOVIA 2022

2022



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THE FUTURE OF
SWIFT
RESEARCH IN
IRELAND

TRIESTE 2024

2024



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Breeding calendar of the Common Swift *Apus apus* in Ireland

Jarek Majkusiak¹, Lynda Huxley², John Young³ & Chris Huxley²

¹ Spencer Park, Castlebar, County Mayo

² Carra James, Castlebar, County Mayo

³ Maguiresbridge, County Fermanagh

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Keywords: Common Swift, *Apus apus*, breeding calendar, nest boxes



The breeding calendar of the Common Swift was studied between 2016 and 2023 at two swift nest box projects in Castlebar, County Mayo, and Maguiresbridge, County Fermanagh. In Castlebar, the mean dates for all recorded events in the breeding calendar were: arrival on 12 May (± 0.66); first egg on 27 May (± 1.13); first hatching on 23 June (± 1.72); first fledging on 4 August (± 1.73); adult departure on 16 August (± 0.79); and an average length of nest occupancy of 99 days (± 1.33). In Maguiresbridge, the mean dates were: arrival on 13 May (± 0.51); first egg on 26 May (± 0.74); first hatching on 14 June (± 0.66); first fledging on 25 July (± 0.71); adult departure on 16 August (± 0.62); and an average length of nest occupancy of 101 days (± 1.04). This research provides empirical evidence of the breeding season duration for the Common Swift in Ireland, highlighting the need to avoid disturbing known nest colonies between 20 April and 20 September. It is crucial to refrain from any form of disturbance or renovation work in buildings hosting swifts during this period. Overall, both nest box colonies proved to be valuable sources of information, affirming the reliability of swift box projects in providing insights into the breeding calendar of the Common Swift in Ireland.

Productivity analysis of the Common Swift *Apus apus* at two nest box projects in Ireland – Castlebar, County Mayo and Maguiresbridge, County Fermanagh

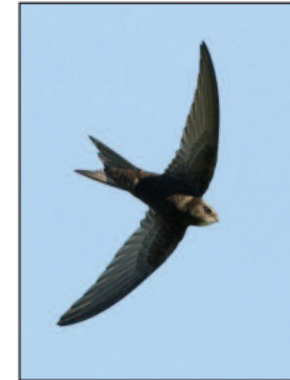
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Keywords: Common Swift, *Apus apus*, nest box, productivity, egg loss



The population of the Common Swift is experiencing a decline across Europe. In Ireland, this trend has led to the classification of the Common Swift as a species of concern on the Red List. Addressing the decline of a threatened species requires the development of achievable and sustainable conservation strategies. This baseline study aimed to shed light on the ability of Common Swifts to breed successfully in the nest box projects and to contribute to understanding the reasons for their decline in Ireland. A detailed analysis was carried out of the productivity of the Common Swift in two artificial nest colonies located in Castlebar, County Mayo, and Maguiresbridge, County Fermanagh. The data collected in this study resulted from video analysis of footage recorded at both colonies. Over the study period (2016-2023), 69 clutches were laid in Castlebar and 158 in Maguiresbridge. On average per breeding attempt, the colony in Castlebar produced 2.29 eggs, 1.48 hatchlings, and 1.36 fledglings, while the colony in Maguiresbridge produced 2.53 eggs, 2.30 hatchlings, and 2.13 fledglings. A significant difference in productivity between the two colonies was observed, mainly due to considerable egg loss in Castlebar attributed to poor nest box features – small and shallow nest moulds. This study shows that the Common Swift can breed successfully in Ireland with the provision and maintenance of suitable nesting opportunities. The mean averages of clutch size, hatchlings, and fledglings per breeding attempt are comparable to regions with stable or slowly declining swift populations.

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County Mayo

Survey

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NATURAL NESTS

2024

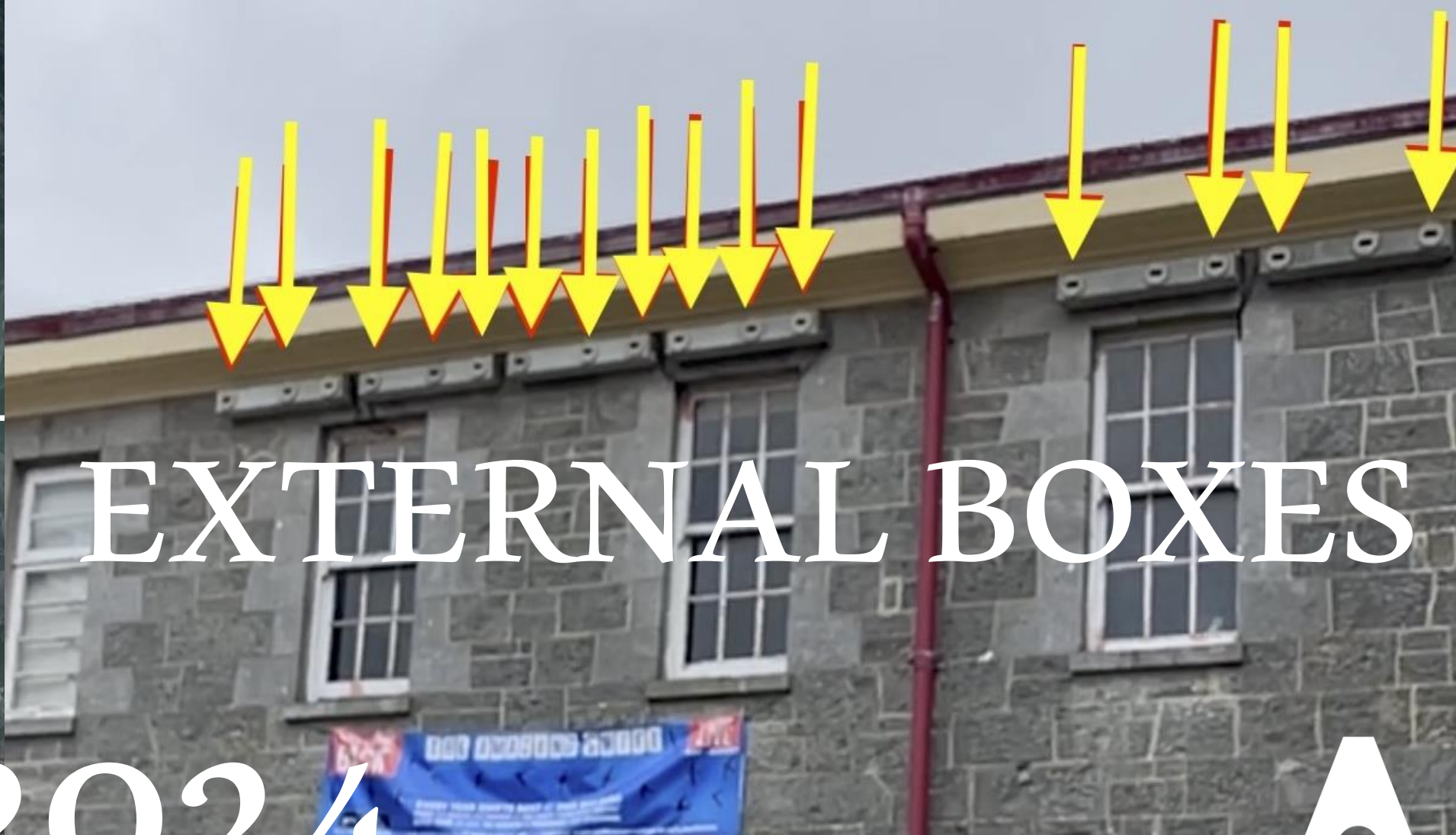
County Mayo Survey



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EXTERNAL BOXES

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BUILT-IN BOXES

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307 Nests

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BT YOUNG SCIENTIST AWARDS

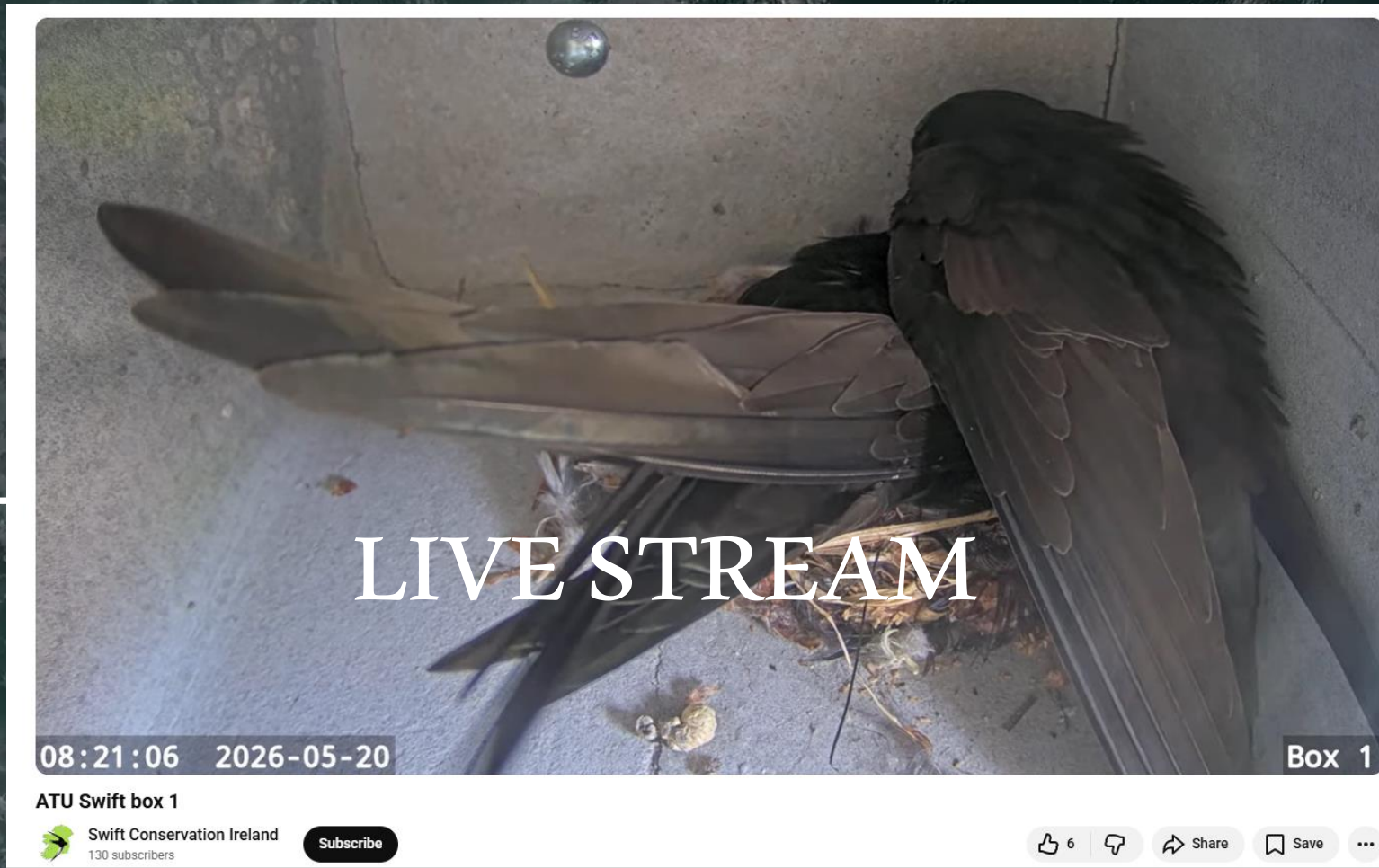
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FUTURE



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FUTURE RESEARCH (PLACEHOLDER)



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LARRY MITCHEL

Longford

Swift Heroes



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DERMOT DORAN

Kildare



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JAMES DALY

Kerry



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Micheál Casey

Sligo

(PLACEHOLDER)

Swift Heroes



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NOEL LENIHAN

CORK

(PLACEHOLDER??)

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JAMES O'NEILL

Cork



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LYNDA HUXLEY

Mayo



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ACKNOWLEDGMENTS



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THANK YOU



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