Alderney Wildlife Trust

Media Release from Alderney Wildlife Trust

Date: 18/09/2024

Drones Enhance Monitoring of Alderney's Gannets

This year, Alderney's gannet colonies became one of the first in the world to be fully surveyed with drones and counted with AI, thanks to a collaboration between the Seabird Watch Project (Oxford Brookes University) and the Alderney Wildlife Trust. With over 1% of the global Northern Gannet population nesting within Alderney's Ramsar site, this cutting-edge drone census marks a critical step in understanding how the populations are recovering from avian flu, as part of ongoing long-term monitoring by Alderney Wildlife Trust.

Historically, the Alderney Wildlife Trust has censused the gannetries of Ortac and Les Etacs using a manned aircraft to capture a series of photographs, with each gannet nest being manually counted by a team of volunteer ecologists. The monumental effort involved meant censuses were only practical to carry out every five years. However, to understand how the population is recovering from the avian flu outbreak in 2022, more regular censuses are needed.

Highly Pathogenic Avian Influenza (HPAI), commonly known as avian flu, devastated seabird populations across the UK in 2022. From manned aircraft censuses, the Trust has calculated that Alderney's Northern Gannets experienced a dramatic 29% decline in breeding pairs across Les Etacs and Ortac, setting the gannetries back to 1980s levels. Understanding how long it will take the populations to recover requires more regular monitoring than manned aircraft censuses allow, which prompted the Trust to explore other options.

This year, researchers from the Seabird Watch Project conducted a drone-assisted census of Alderney's gannets, a method that is both more cost-effective and less logistically constrained than flying an aircraft. The drone systematically flies far above the colonies in a lawnmower-like pattern, capturing a series of high-resolution images in as little as thirty minutes. These images are then stitched together to create both 2D and 3D maps of the nesting sites, and using advanced AI software, the gannets can be automatically counted from photographs, with limited manual verification nonetheless saving hours of work. The precise flight path can be saved and easily replicated in future surveys, ensuring consistent data collection across breeding seasons.

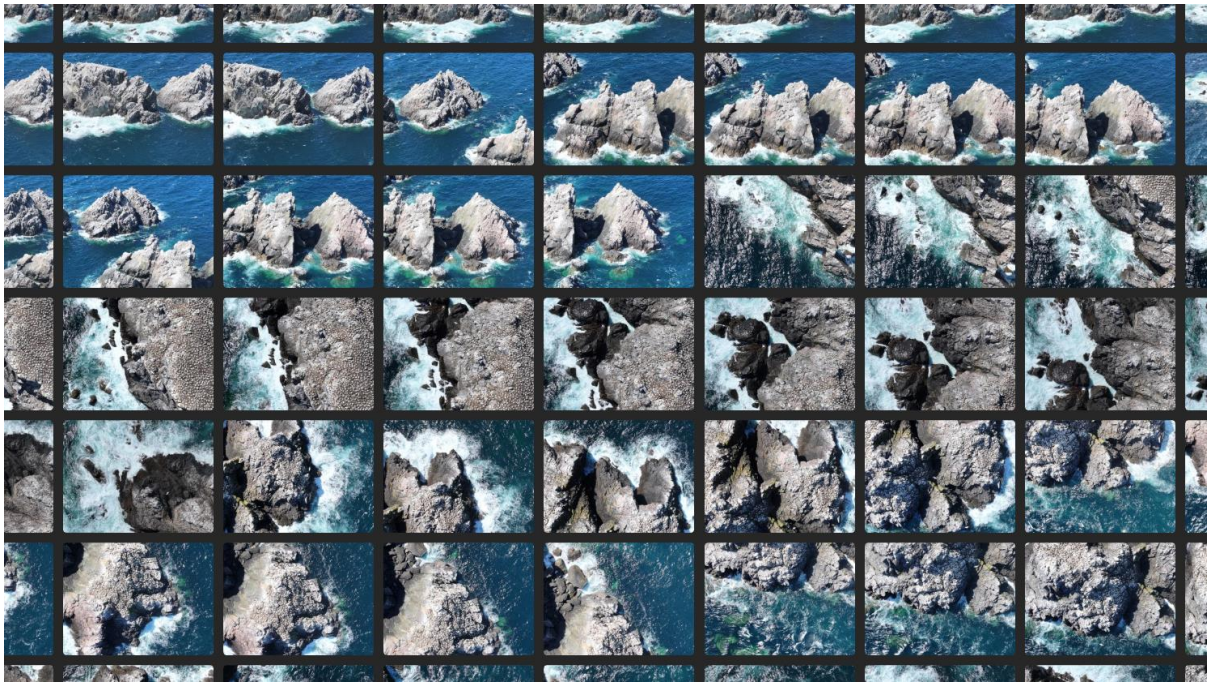
Careful planning as well as strict adherence to international and local guidelines were essential to ensure the drone caused no disturbance to Alderney's gannets or other wildlife. The team secured permission from air traffic control and obtained approval from the States of Alderney and the States of Guernsey vet. Moving forward, Seabird Watch Project will be working with the States of Guernsey Veterinary Officer to draft guidelines that will help the public operate drones responsibly around wildlife in the Bailiwick.

The final census results for both Les Etacs and Ortac will be published in the Alderney Ramsar Annual Review alongside other valuable data on gannet breeding success, gannet mortalities resulting from plastic entanglements and other crucial research carried out within Alderney's Ramsar site.

"We are thrilled to have the opportunity to update Alderney's monitoring methods and contribute to international research efforts. This innovative approach allows us to gather finer spatial and temporal data on Alderney's gannet populations in a cost-effective and non-invasive manner. We are incredibly grateful to the States of Alderney, States of Guernsey Vet, as well as Guernsey and Alderney Air Traffic Control for their support in facilitating this project.", Dr. Tara Cox, Ecologist at the Alderney Wildlife Trust.

Ends

Drone image of Ortac. Credit Seabird Watch & Alderney Wildlife Trust



Multiple aerial drone images of Les Etacs taken in a lawn-mower fashion. Credit Seabird Watch & Alderney Wildlife Trust

Background

Ramsar

About the reserve

The West Coast and Burhou Islands Ramsar site comprises the western coast of Alderney and adjacent shallow waters and islets in the strongly tidal, high-energy system of the northern Channel Islands. It achieved the Ramsar designation in 2005 through regionally, nationally and internationally important populations of seabirds. In particular, the islets of Ortac and Les Etacs support over 1% of the world population of Northern Gannet. It also provides a habitat for a seal colony to the north of Burhou Island and some fish and shellfish species such as Lobster, Ormer, Bass and Plaice. The site hosts about 100 species of seaweeds, which play a significant role in supporting all marine fauna and thus the large seabird population. Besides commercial and non-commercial fishing, tourism is the main activity: there is a visitor centre that provides both educational measures for children and information materials for the public. Since designation data has been collected on 10 seabird species for population size and productivity success rates; marine habitat mapping is carried out in new locations each year and terrestrial surveys are a large part of the monitoring work. The recording of this data is continued and expanded each year by the AWT in order to better understand the ecological processes of the Ramsar site and conserve its diversity within the convention guidelines.

Key species in Alderney's Ramsar Site:

- Northern gannet
- Puffin
- Fulmar
- Shag
- Razorbill
- Ringed plover
- Oystercatcher
- Guillemot

About the Alderney Wildlife Trust

The Alderney Wildlife Trust is one of the 46 Wildlife Trusts working across the British Isles. We are the youngest of the Wildlife Trust, forming over 20 years ago and since then the AWT has received incredible support from a dedicated team of wildlife enthusiasts, what we like to think of as the 'TeamWilder'. This team isn't just limited to residents and AWT members, it includes people from all walks of life who have an interest in our island's wildlife, as well as supporters and organisations from around the world. We work with the local community to engage them with their natural environment in order to protect Alderney's wildlife for the future.

Our mission is to study, protect and champion Alderney's wildlife. We wish to see a thriving natural island where wildlife and natural habitats play a valued role in addressing our island's future and the climate and ecological emergencies that face us.

Alderney is a very special place and by helping the work of the Alderney Wildlife Trust you can make a difference. After all, if you love where you live, you'll want to look after it **- Dr. George McGavin, Patron AWT**

Notes to Media

For further information, please contact:
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