

High spirits: What remains after the death of a giant star

Nina Massey

THE ghostly remains of a giant star reveal a tapestry of colours and waves.

After a massive star's life ended in a powerful explosion around 11,000 years ago, the wispy structure of pink and orange clouds is all that remains.

When the biggest stars reach the end of their lives, they often go out with a bang, in an outburst called a supernova.

The explosions cause shockwaves that move through the surrounding gas, compressing it and creating intricate, thread-like structures.

The gaseous tendrils are heated by the energy that is released, making them shine



Aftermath:
The clouds that make up what remains after the explosive death of the Vela supernova.

PHOTO: REUTERS

brightly, as seen in the image captured in detail with the VLT Survey Telescope, hosted at the European Southern Observatory's (ESO) Paranal site in Chile.

The new 554-million-pixel image provides an extremely detailed view of the Vela supernova remnant, named after the southern constellation Vela (The Sails).

Experts say nine full moons can fit in this entire image, and the whole cloud is even larger.

At only 800 light years away, this supernova remnant is one of the closest known to Earth.

As the star exploded, its outermost layers were ejected into the surrounding gas, producing the spectacular filaments.

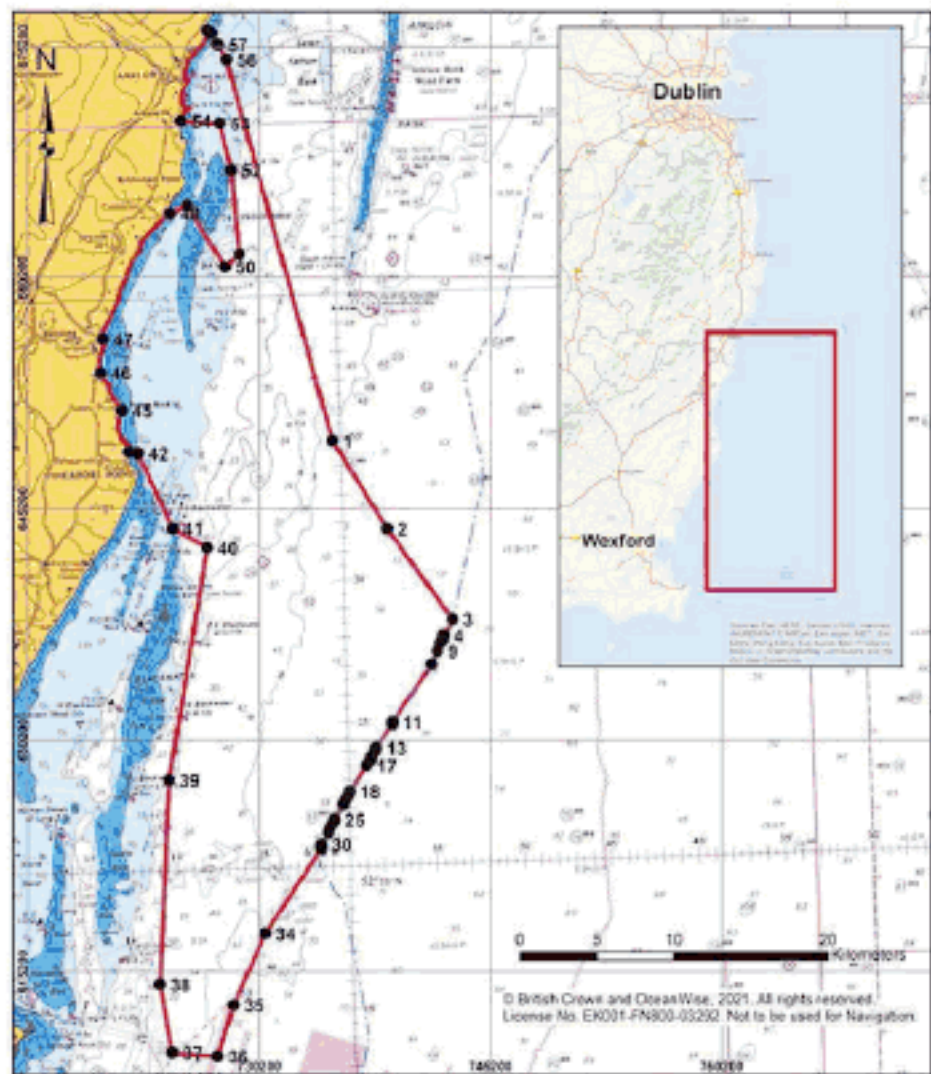
What remains of the star is an ultra-dense ball in which the protons and electrons are forced together into neutrons – a neutron star.

The neutron star in the Vela remnant is a pulsar that spins on its own axis at an incredible speed of more than 10 times per second.

PUBLIC NOTICE INVITATION FOR PUBLIC SUBMISSIONS OR OBSERVATIONS ON APPROPRIATE ASSESSMENT

Notice is hereby given pursuant to Regulation 42(13) of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, of an application for a foreshore licence submitted by Shelmalere Offshore Wind Farm Ltd. in relation to an offshore wind farm under development off the coast of counties Wicklow and Wexford, reference number FS007261.

This application is for site investigation works required to inform the engineering and design of a potential offshore wind farm, Shelmalere Offshore Wind Farm, and associated export cable route. The objective of the site investigations is to gather sufficient geophysical, geotechnical, environmental, archaeological and ecological information to inform development of a potential offshore wind farm and export cable route within the Foreshore Licence Application Area. The Foreshore Licence Application Area is shown on the map below.



The Minister for Housing, Local Government and Heritage is responsible for making a decision on the application and the Minister may either grant, approve or consent to the application with or without covenants, conditions or agreements, where applicable, or refuse the application.

The Minister has determined, in accordance with Regulation 42(6) of the European Communities (Birds and Natural Habitats) Regulations 2011, that an Appropriate Assessment is required in respect of the proposed plan or project. A copy of the Screening for Appropriate Assessment is available at:

<https://www.gov.ie/en/foreshore-notice/a43ef-shelmalere-offshore-wind-farm-site-investigations-off-counties-wexford-and-wicklow/>

The Minister will make a determination as to whether or not the proposed plan or project would adversely affect the integrity of a European site in accordance with Regulation 42(11) of the European Communities (Birds and Natural Habitats) Regulations 2011 and, in doing so, shall have regard to the matters in Regulation 42(12).

In this regard, in accordance with Regulation 42(13), any person may make a submission or observation to the Minister concerning the proposed project within 30 days of the date of this notice. The Minister shall have regard to any submissions or observations received during the public consultation.

A copy of the application, map of the proposed project, the determination that an Appropriate Assessment is required in respect of the project, the Natura Impact Statement, and the other information and documentation relevant to the application, are available for inspection for 30 calendar days, between 1 November 2022 and 30 November 2022, free of charge at:

- Wexford County Council, County Hall, Carricklawn, Wexford, Y35WY93. Open 9am–1pm & 2–5pm Mon to Fri.
- Arklow Municipal District Council, Castle Park, Arklow, Co. Wicklow, Y14FX63. Open 9am–4pm Mon to Fri.
- Wexford Garda Station, Mulgannon, Wexford, Y14H392. Open 24/7.
- Courtown Harbour Garda Station, Ballintra Lower, Courtown Harbour, Co. Wexford, Y25P239. Open 10am–1pm Mon to Fri & 10am–1pm Sat & Sun.
- Rosslare Garda Station, Station Road, Rosslare, Wexford, Y35AY79. Open 10am–6pm Mon to Sun.

This documentation and information is also available on the Department's website, at:

<https://www.gov.ie/en/foreshore-notice/a43ef-shelmalere-offshore-wind-farm-site-investigations-off-counties-wexford-and-wicklow/>

Members of the public who wish to make a submission or observation in writing concerning the proposed project may do so between 1 November 2022 and 30 November 2022 (quoting ref: FS007261) to the Minister for Housing, Local Government and Heritage, Foreshore Section, Department of Housing, Local Government and Heritage, Newtown Road, Wexford, Co. Wexford or foreshoreORE@housing.gov.ie. The closing date for submissions is close of business (17.30) on 30 November 2022.

Take notice that material to which the Minister shall have regard in making the Appropriate Assessment determination will be published on the Department's website. In this regard, the Department wishes to draw attention to its policy on defamatory material that may be contained in submissions it receives, which may be found at:

<http://www.housing.gov.ie/planning/foreshore/public-participation-foreshore-consent-process>

Dated this 1 November 2022

'Other parties can put real baby in live crib next year', says Green councillor

Seoirse Mulgrew

A GREEN Party councillor has suggested that next year a Fianna Fáil mayor can "put a real baby" in the crib outside Dublin's Mansion House "or whatever" they and opposition parties think "defines Christmas".

Claire Byrne, a member of Dublin City Council, rowed in behind Green Party colleague Lord Mayor Caroline Conroy's decision to cancel the live animal Christmas crib in the city centre.

The move to scrap the traditional line-up of sheep, donkeys and goats has faced a backlash.

As it emerged that the mayor will face an emergency council motion seeking to overturn the move, Ms Byrne yesterday shared online a statement from the National Animal Rights Association (NARA) asking people in favour of the decision to write to their local councillors and ask for the ban to be made permanent.

"Next year will be a @fian-nafailparty Mayor & they can bring back dancing monkeys & put a real baby in the live crib or whatever they & @Fine-Gael think defines Christmas," Ms Byrne tweeted.

Ms Conroy, has defended the decision and insisted it will not be reversed.

However she is likely to come under pressure at the next meeting of Dublin City Council where Fine Gael coun-

cillor James Geoghegan said he will table an emergency motion seeking to overturn the move.

Ms Byrne's tweet also included a sample draft letter devised by animal-rights group NARA for people opposed to the live crib to use.

The sample letter read: "Dear Councillor, it is unacceptable to use live animals as entertainment. These are farm animals, brought to Dublin city centre, put in an enclosure and forced to endure noise, lights and the endless gaze of people.

"How could that possibly be a valid way to celebrate Christmas? There is an attempt to create a false narrative that this decision is either an attack on children, religion or both – when in reality it is neither.

"Animals should not be used in a political game, there are many other ways to celebrate the festive season without using animals like inanimate props, and I'm sure you know this."

Meanwhile, OPW Minister Patrick O'Donovan pledged to "do everything we can to facilitate a crib for Christmas with Mary, Joseph and all the animals.

"Like most people I was so disappointed with the decision of the Lord Mayor," he said.

"After everything that's happened for the last two years it was a terrible thing to do, when so many children would be looking forward to Christmas."