Scientists have discovered a massive "galactic underworld graveyard" filled with corpses of former suns turned black holes and neutron stars.

Moreover, the galactic graveyard is three times the height of the Milky Way, and much of the remnants are three times larger than our own sun. The findings were published in Monthly Notices of the Royal Astronomical Society.

David Sweeney, the study's lead author and a Ph.D. student at the Sydney Institute for Astronomy at the University of Sydney, noted that the stars ran out of fuel and collapsed to become black holes.

"These compact remnants of dead stars show a fundamentally different distribution and structure to the visible galaxy," Sweeney said in a statement. "The 'height' of the galactic underworld is over three times larger THAN the Milky Way itself. And an amazing 30 percent of objects have been completely ejected from the galaxy."

Sweeney and his team at the university were able to recreate maps indicating where the black holes and neutron stars reside in the galactic graveyard. The models themselves detail how the stars were born, died, and how they left the galaxy.

The researchers noted that the older <u>black</u> <u>holes</u> and fallen suns were more difficult to track down compared to the younger ones.

Peter Tuthill, a professor at the Sydney Institute for Astronomy, worked alongside Sweeney and noted that the process of tracking down the stars "was like trying to find the mythical elephant's graveyard."

"The bones of these rare massive stars had to be out there, but they seemed to shroud themselves in mystery," he said in a press release. "The oldest neutron stars and black holes were created when the galaxy was younger and shaped differently, and then subjected to complex changes spanning billions of years. It has been a major task to model all of this to find them."

Researchers estimate that billions of similar stars were formed during the beginning of the galaxy, but the newly discovered carcasses were likely flung out of the galaxy by a supernova.

Could these black holes be the sought "dark matter"?

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