Rare 1-in-100-million ‘ghost’ lobster named Casper informs DNA research at University of New England

Rare white lobster will join first-of-its-kind study exploring the genetic basis of unusual lobster coloration



"Casper", the ghost lobster, at University of New England

BIDDEFORD, ME, UNITED STATES, September 21, 2026 / EINPresswire.com/ -- A rare white lobster estimated to occur in just 1 in 100 million such animals has arrived at the University of New England in Maine, where it will join ongoing research into the genetic causes of unusual lobster coloration.

Fittingly named Casper, the lobster was donated to UNE by the Maine State Aquarium in Boothbay, Maine. White lobsters, sometimes referred to as “ghost” lobsters, are considered the rarest among the unusual color variations found in the species.

Casper will now reside at UNE’s Arthur P. Girard Marine Science Center in Biddeford and become part of a research project led by Markus Frederich, Ph.D., professor of marine sciences at UNE, to better understand why some American lobsters develop rare shell colors.

The project uses noninvasive techniques to collect and analyze genetic material without harming the lobsters. UNE researchers are examining differences in gene expression that may help explain the molecular mechanisms behind rare coloration.

UNE launched the research initiative in 2024 after becoming home to a growing collection of rare-colored lobsters, including orange, yellow, blue, purple, calico, and split-colored varieties. The research expanded after Peaches, a 1-in-30-million orange lobster, produced offspring displaying a range of colors, providing researchers with a unique opportunity to investigate how coloration may be inherited.

Researchers have since collected genetic material from the juvenile lobsters and are analyzing more than 15,000 genes as they work to identify differences associated with shell color.

> Animals like Casper capture people's attention because they are so rare and beautiful. But, for us, they also provide an amazing opportunity to ask fundamental biological questions."
>
> *Markus Frederich, Ph.D., professor of marine sciences at UNE*

Casper is the rarest-colored lobster to join the research effort to date.

"Animals like Casper capture people's attention because they are so rare and beautiful. But, for us, they also provide an amazing opportunity to ask fundamental biological questions," said Frederich, director of the Invertebrate Physiology Lab at UNE. "What makes this research especially rewarding is that our undergraduate students are involved in every step of the process, from working with these incredible animals to analyzing their genes and helping uncover the mechanisms behind their unusual colors.

"That combination of discovery, hands-on research, and student mentorship is really at the heart of what we do at UNE," Frederich said.

About the University of New England
The University of New England is Maine's largest independent university, with two beautiful coastal campuses in Maine, a one-of-a-kind study-abroad campus in Tangier, Morocco, and an array of flexible online offerings. In an uncommonly welcoming and supportive community, we offer hands-on learning, empowering students to make a positive impact in a world full of challenges. We are the state's top provider of health professionals and home to Maine's only medical and dental colleges, physician assistant program, and pharmacy school, in addition to a variety of other interprofessionally aligned health care programs and nationally recognized programs in the marine sciences, the natural and social sciences, business, the humanities, and the arts. Visit www.une.edu.
#####

Alan Bennett
University of New England
+1 207-210-8537
email us here

This press release can be viewed online at: https://www.einpresswire.com/article/943976009

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.
© 1995-2026 Newsmatics Inc. All Right Reserved.