

Sustainable Earth

College of Science



Lorelei Crerar, PhD

Term Associate Professor, Department of Biology

Education

PhD, Biology, George Mason University

Key Interests

Steller's Sea Cow | Population Genetics | Student Research | Microsatellites | Narwhals | K Ancient DNA DNA Extraction from Bone

CONTACT

Phone: 703-993-5609 | Email: lcrerar@gmu.edu Website: https://science.gmu.edu/directory/lorelei-crerar

SELECT PUBLICATIONS

- > Crerar, L.D., et al. (2014). Rewriting the history of an extinction - was a population of Steller's sea cows (Hydrodamalis gigas) at St Lawrence Island also driven to extinction? Biology Letters, 12(5).
- > Crerar, L.D., et al. (2017). Illegal trade of marine mammal bone exposed: Simple test identifies bones of "Mermaid Ivory" or Steller's sea cow (Hydrodamalis gigas). Frontiers in Marine Science, 3(272).
- > Crerar, L.D., et al. (2016). Correction to: Rewriting the history of an extinction - was a population of Steller's sea cows (Hydrodamalis gigas) at St Lawrence Island also driven to extinction? Biology Letters, 12(5).
- > Warner, J.F., et al. (2017). Microsatellite analysis for identification of individuals using bone from the extinct Steller's sea cow (Hydrodamalis gigas). In Molecular Profiling, pp. 205-217. Humana Press, New York, NY.

Research Focus

My research centers around understanding the last populations of Steller's sea cows. These animals are related to the Florida manatee and were driven to extinction in only 27 years. By understanding what happened to that population, we can perhaps preserve populations of other endangered animals. I also work mostly with undergraduate students because I feel that the undergraduate degree does not allow them sufficient opportunity for research. These are skills our students not bound for medical school find vital in procuring a job.

Current Projects

- Extraction of microsatellite DNA from Steller's sea cows.
- Extraction of quality DNA from narwhal tusks.
- Population genetics of Steller's sea cows.