

Special Issue

Mitochondrial Markers in Aquatic Animals: Evolution, Adaptation, and Conservation

Message from the Guest Editors

Mitochondrial markers provide a critical lens into understanding evolutionary processes, adaptive mechanisms, and physiological functions in organisms. This Special Issue aims to compile and highlight recent progress in the mitochondrial and population genomics of aquatic animals, spanning comparative genomics, evolutionary mechanisms, conservation genetics, and management practices. We invite original research articles, comprehensive reviews, and communications to advance the field of aquatic animal mitochondrial and conservation genomics, addressing but not limited to the following topics:

- Comparative mitogenomics in aquatic animals, elucidating phylogenetic relationships and adaptive evolution.
- Effects of mitogenome variation on aquatic animal health, adaptation, and environmental responses.
- Mitochondrial–nuclear genome interactions and their functional roles in aquatic animal physiology and development.
- Population genomics for animal conservation, including demographic reconstruction, effective population size, adaptive introgression, and hybridization risk assessment.
- Applications of eDNA and genomic tools in monitoring, conservation, and management of aquatic animal diversity.

Guest Editors

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Dr. Lei Xu

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

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