

WARMING AND SEA-ICE DECLINE IN THE ARCTIC:

What are the impacts of rapid climate change on marine life?

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17:00 - 18:00 Uhr (Vorträge + Q&A)

Bitte melden Sie sich per Email an polarstunde@polarforschung.de bis spätestens 17 August an. An alle Teilnehmenden wird der entsprechende (kostenlose) Zoom-Link rechtzeitig am Tag der Veranstaltung verschickt.

Large parts of the Arctic Ocean are covered by "perpetual" ice-

this old school wisdom is losing its validity with unexpected speed. Global climate change is nowhere on Earth more evident in its impacts than in the high northern latitudes. Because warming is particularly strong there, the Arctic sea ice is melting even faster than predicted in climate models: not in the next century or two, but in about 30 years, (almost) the entire Arctic Ocean could be ice-free during summer! The ecological significance of this upheaval can hardly be overestimated. A fundamental finding of marine research in recent decades has been that sea ice not only represents a special habitat in its own right, but is also of great importance, directly or indirectly, for other marine habitats in the open water and even on the sea floor. It is therefore certain that its disappearance will fundamentally affect all life in the Arctic seas.

In addition – and directly or indirectly related to – sea ice decline, there are further climate-driven biological and ecological changes propagating through all levels of marine food webs. The first part of the talk will introduce to the general setting of Arctic marine ecosystems and the ecological importance of sea ice, to prepare the stage for the second part that will present an outline of what science currently knows about the ecological footprints of the profound climate change and rapid sea-ice decline in Arctic seas.



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