Effects of Climate Change on Black Sea Biodiversity

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Black Sea biodiversity is very sensitive to climate change, especially increases in sea temperature. Black Sea temperature change and its biodiversity effects are investigated. The Black sea water temperature and introduction of exotic species increased for last decades. Most exotic species in the Black Sea have been introduced in ballast waters from shipping. The wide habitat diversity of biotopes and the low local species diversity provide favourable conditions for some exotic invaders, which can disrupt the stability and functioning of ecosystems and represents the biggest threat to biodiversity in the Black Sea. Their settlement process is accelerated by global climate change. The introduction of species like: Lagocefalus spadiceus, Lithognathus mormyrus, Serranus hepatus, Callinectes sapidus shows that the distribution of thermophilic species is extending, which can also be an important indicator of the process of warming and Mediterranization of the Black Sea.

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