

Perlemoen

Abalone shells connect us emotionally to our ancient distant past — as we are spellbound by their wondrous beauty our early human ancestors must have been as profoundly moved — could the abalone’s mother of pearl be an imaginary gateway to a state beyond time and space?

The marine snail called abalone, in the family Haliotidae, connects us emotionally to our ancient prehistoric past. This sea creature clings steadfast to rocky surfaces with their broad, muscular foot — submerged by water in the intertidal zone beyond the low-tide mark and below. With its myriad of ecological niches — such as tidal pools, estuaries, sandy shores and rocky coastlines and none the least coral reefs — coastal marine life is especially rich and abundant in the intertidal. Once the abalones thrived along the rocky shores of much of the temperate zone, and their flesh and shells were highly appreciated by indigenous communities worldwide.¹ To gain insights into our ancestors' behaviours and adaptations to their environments, archaeologists study early human settlement patterns that include coastal marine habitats. During the Middle Stone Age (MSA), humans mainly collected high ranked mid-intertidal shellfish presumably having been planned to coincide with extremely low tides. This suggests that the gathering of marine foods was influenced by changes in the coastal environment. The shift in dominance between different shellfish colonies also reveal changing climatic and environmental conditions around 14 000 to 7 000 years ago.² Some archaeologists bring forth evidence that our ancient human relatives collected sought-after species of living shellfish from the seafloor — gatherings that must have required wading and diving in shallow water. Studies of the external ear canal in Neanderthal remains indicate that they spent a lot of time collecting aquatic resources by breath-hold underwater diving: “The technical competence, capacity for innovation and broad knowledge of the environmental resources have a greater time depth among non-modern humans than commonly acknowledged.”³ In South Africa, archaeologists have found traces of shellfish from the MSA in layers of cave sites that date to as long ago as 164 000 years. At the archaeological site, Blombos Cave in South Africa, excavations of abalone ‘toolkits’ reveal that abalone shells were used as containers for storing ochreous pigments that date to 100 000 years ago.⁴ Another marine snail, the tick shell (*Nassarius kraussianus*), is found to have been used for adornment in the form of shell beads in levels that date to 75 000 years.⁵

Commercial abalone fishery was thriving in the 1940s, but today it is illegal to remove abalone from the sea several places in the world. Nevertheless, in the Far East, abalone flesh is considered a delicacy and aphrodisiac and on the black market the marine snail is a costly treat. Poaching is a menace to the abalone as they have become a highly threatened species.⁶ Ocean warming, acidification, decreased carbonate saturation and their inter-active effects are other threats, as these factors are likely to impair the process of skeleton formation as reduced pH erodes their shells.⁷ At current rates of carbon dioxide production, it is predicted that abalones will become extinct in the wild within 200 years.⁸

1 (Schiel, 2007)

2 (Langejans et al., 2012)

3 (Villa et al., 2020)

4 (Henshilwood et al., 2011)

5 (Henshilwood et al., 2004)

6 (The South African National Biodiversity Institute (SANBI), 2020; Two Oceans Aquarium Cape Town, 2020)

7 (Byrne et al., 2011)

8 (The Ocean Portal Team, 2020)

In South Africa, the common name for abalone is *perlemoen*, which comes from the Dutch term *paarlemoer* meaning “mother of pearl”. In the system of naming species of living things, this snail’s binomial name is *Haliotis midae*. The artwork “**Perlemoen**” was conceived and has come to life in collaborative spirit between archaeologist, Petro Keene and artist/landscape architect, Elin T. Sørensen. The shells were photographed on location by Petro Keene and Mark Callanan at Smitswinkel Bay, Cape Town in South Africa, during the summer of 2020.

Concept and animation by Elin T. Sørensen based on photographs by Petro Keene and Mark Callanan. Editing by Jon Gorospe. Sørensen © BONO 2020. “**Perlemoen**” is part of the installation “**The Abalone Toolkit**” adapted for an exhibition at The University Museum of Bergen in 2021 with the artistic research project “**Matter, Gesture and Soul.**”

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