

PLEASE THINK OF THE BENTHOS?

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### WHAT ARE BENTHOS?

Benthic organisms
(benthos) are creatures
that live on or close to
the seafloor, in what is
known as the benthic
zone.

# A FEW SPECIES YOU MIGHT FIND IN ANTARCTICA:

- Sea stars such as Odontaster validus
- Giant Volcano Sponge
- Glyptonotus antarcticus (an isopod)
  - Plus soft corals, bivalves, and more!

## WHY DO THEY MATTER?

Benthos munch on dead matter, which releases nutrients back into the water for other marine animals.

They also store carbon in their bodies.

# WHY DO THEY MATTER?

Finally, they're pretty tasty themselves and are a food source for many species in the Antarctic food web.

But many are now under threat from...

### WARMING OCEANS

Subsurface waters in the Southern Ocean are warming up, all because it absorbs more heat from the atmosphere than any other ocean in the world [1].

### WARMING OCEANS

For some benthos, this can have dire consequences.

A study of 963 benthic species found that 577 are likely to experience a reduction in available habitat as waters warm [2].

### CHANGES TO THE CRYOSPHERE

Climate change is also causing changes to Antarctica's ice and snow.

For benthos, the biggest issues with this are glacial retreat and decreasing sea ice.

# CHANGES TO THE CRYOSPHERE

This is because more frequent ice-scouring reduces benthic diversity, while decreasing sea ice is altering where certain benthic species live [3].

### ANCHOR DAMAGE

In the 2023-2024 season,
72 tourist vessels
traveled to Antarctica
[4]. That's not counting
the fishing and research
vessels!

Many used anchors to maintain their position.

### ANCHOR DAMAGE

New research suggests that when dropped, these anchors damage and destroy sponge colonies [5].

Their slow-growing nature means that recovery could take decades.

### WHAT CAN I DO?

- Raise awareness of benthos and the importance of Marine Protected Areas in protecting them.
- Make greener choices in your daily life.
- If travelling to Antarctica, use other methods of anchoring.

### REFERENCES

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