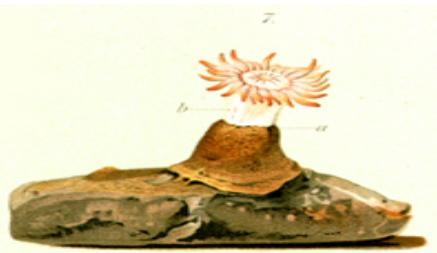


Comparing Sea Anemone Diversity in the Arctic and Antarctic

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❖ Sea anemone diversity

- Sea anemones are benthic marine animals found in every ocean and at all depths
- Sea anemone diversity in the Arctic and Antarctic has never been measured

Number of Recorded Benthic Species for Certain Groups in Arctic and Antarctic (Barry & Grebmeier, 1991)

Group	Antarctic	Arctic
Mollusks	875	224
Polychaetes	650	300
Isopoda	299	49
Sponges	300	200

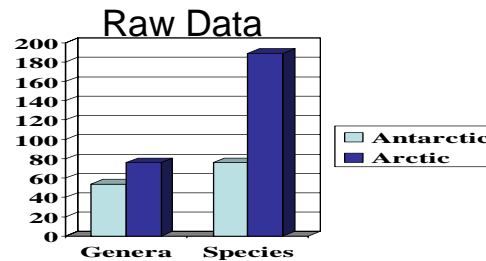
“The Antarctic has much higher species richness... [than] the Arctic” (Dayton, et al., 1994: p. 90)

❖ Data on sea anemone localities were taken from Hexacorallians of the World website



<http://hercules.kgs.ku.edu/hexacoral/anemone2/index.cfm>

❖ The number of species and genera recorded for the Arctic outnumber those for the Antarctic



BUT:

- According to *Oceanography*, the Antarctic Ocean is 4 times bigger than the Arctic Ocean (Garrison, 1996)

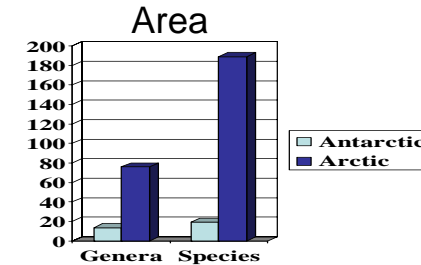


- There have been 2.3 times as many publications on sea anemone taxonomy in the Arctic than in the Antarctic
- There have been more 4 times as many expeditions to the Arctic Ocean than the Antarctic Ocean

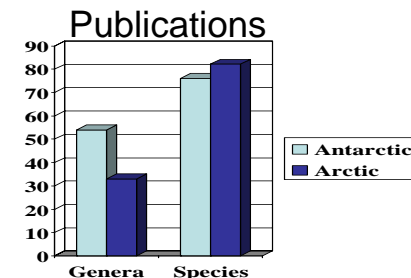
❖ Acknowledgments

- US NSF grant 9978106 (PEET)
- All the researchers from the lab of Dr. Daphne Fautin at the University of Kansas

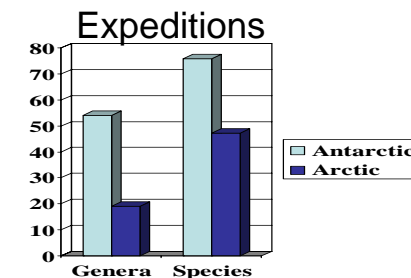
❖ So what will happen when these factors are taken into account?



- The number of Antarctic species was divided by 4 based on the size of the two oceans



- The number of Arctic species was divided by 2.3 based on number of publications



- The number of Arctic species was divided by 4 based on the number of expeditions to the two areas

❖ Final conclusion:

Unlike other taxa of the polar oceans, sea anemones seem to be much more diverse in the Arctic than in the Antarctic