

Fig.3 Number of *A. argo* shells found in sections A-D of the study area.

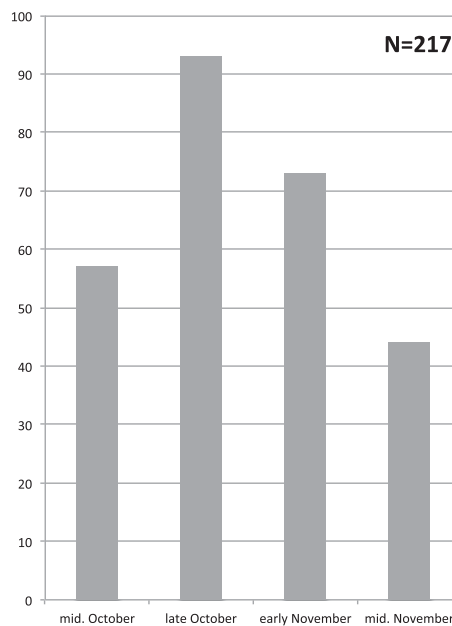


Fig.4 Number of *A. argo* shells washed up on Hamanaka Beach (section A) from October to November in 2012.

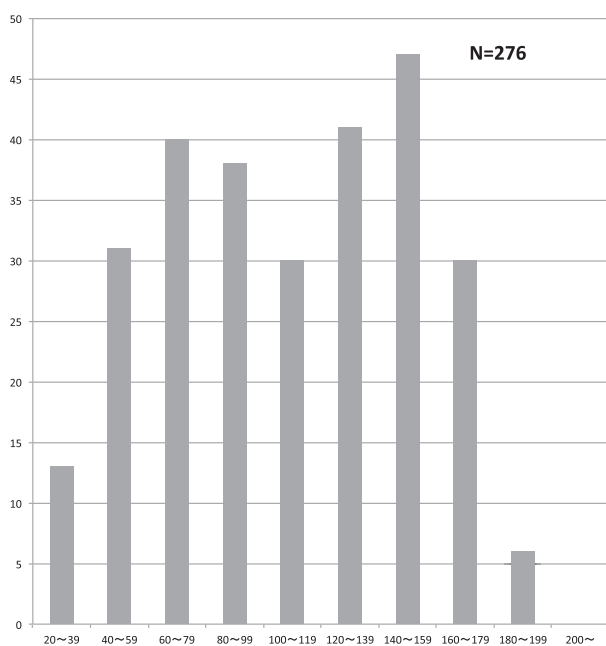


Fig.5 Size-frequency distribution of shell length of *A. argo*.

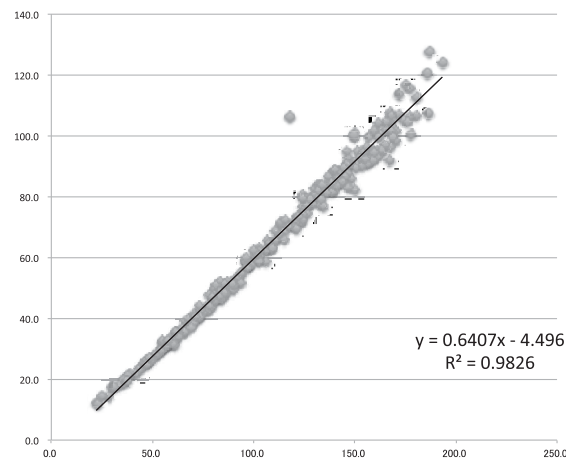


Fig.6 Relationship between *A. argo* shell height and length.

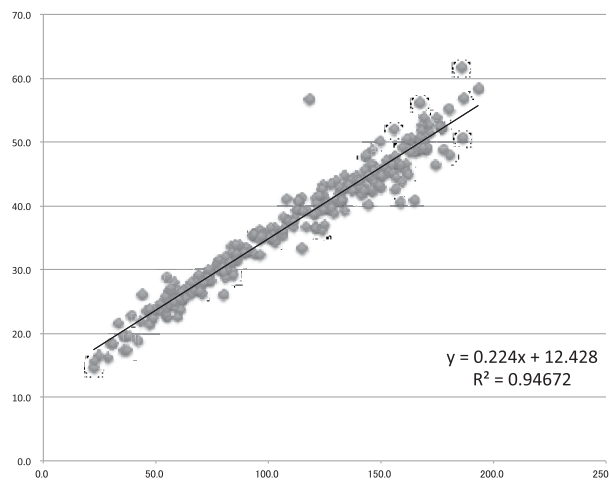


Fig.7 Relationship between *A. argo* shell width and length.

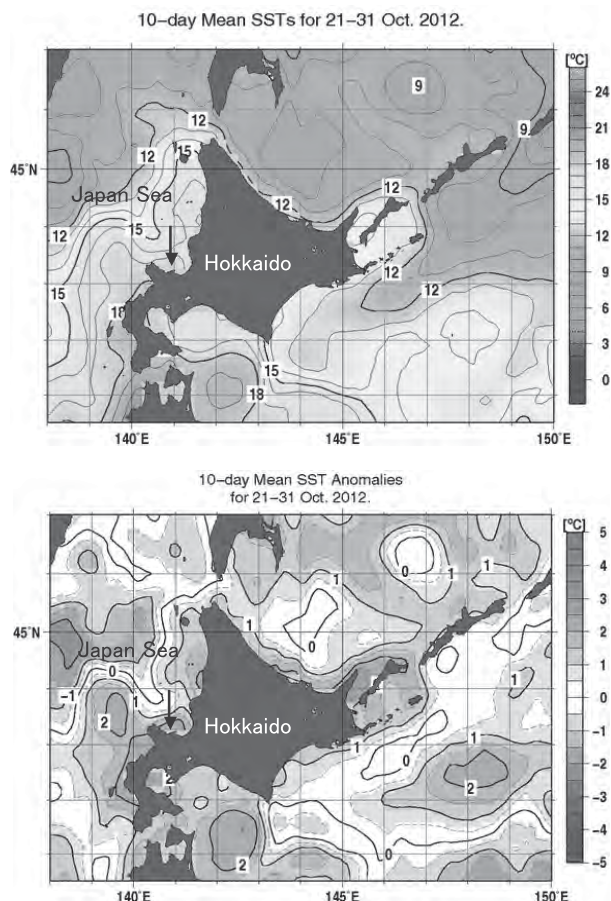


Fig.8 Mean sea surface temperatures (SST) and anomalies in the Japan Sea in late October 2012. Arrows indicate the study area (Japan Meteorological Agency 2012).

coast of Yoichi Bay in the autumn of 2012, were attributed to the combination of an anomalous increase in SSTs and the northwestern monsoon in autumn. In addition, such increases in SSTs in the northern Japan Sea are considered to be accelerating the northward migration of warm-water molluscs into cool temperate and subarctic regions.

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北海道余市湾沿岸における2012年秋のアオイガイの大量漂着

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要 約

2012年10月から11月にかけて、アオイガイが北海道余市湾沿岸に大量漂着した。貝殻は干潮時に採集され、日本海側の北西季節風による暴浪で打ち上げられた漂着物を伴っていた。276個の貝殻の殻長は、20-199mmの範囲にあり、殻サイズ分布では60-79mm及び140-159mmにピークを持つバイモーダル（双峰）分布を示した。さらに殻長と殻高には、 $R^2=0.98$ となる強い相関が認められた。余市湾沿岸のアオイガイの大量漂着は、2010年秋と同様に、2012年秋の北部日本海における海面水温の顕著な上昇と関連していると考察した。