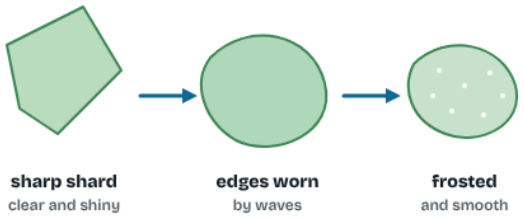
That is why

How is sea glass made?

Waves grind the edges round, and water slowly pulls soda and lime out of the surface, leaving it frosted.

A From bottle to pebble



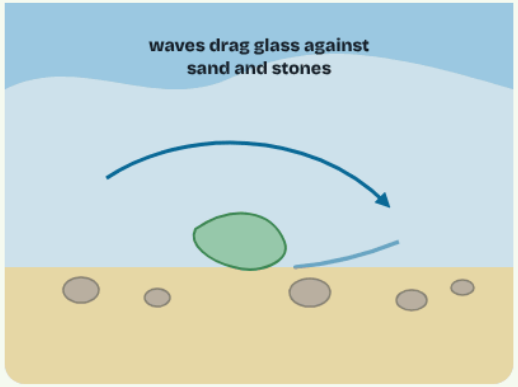
Decades in the surf: 40 to 100 years by one estimate

Where it starts

Bottle glass is melted from silica sand, soda ash and limestone at about 2,860 °F. Silica makes up about three quarters of the mix.

Given enough time, sea glass keeps shrinking until it turns back into grains of sand.

B The tumble



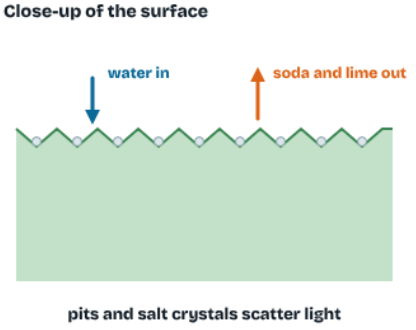
1 Pebbles grind faster

Coarse pebbles wear glass down faster than soft sand.

2 Measured on beaches

Tagged marbles tumbled on two Italian beaches lost 2.4% and 8.5% of their weight in two months.

C Why it turns frosty



1 Silica stays

Water pulls soda and lime out first, leaving pitted silica behind.

2 Salt speeds it up

Seawater holds about 100 times the chloride of fresh.

The ocean files the edges and frosts the surface, one wave at a time.

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