

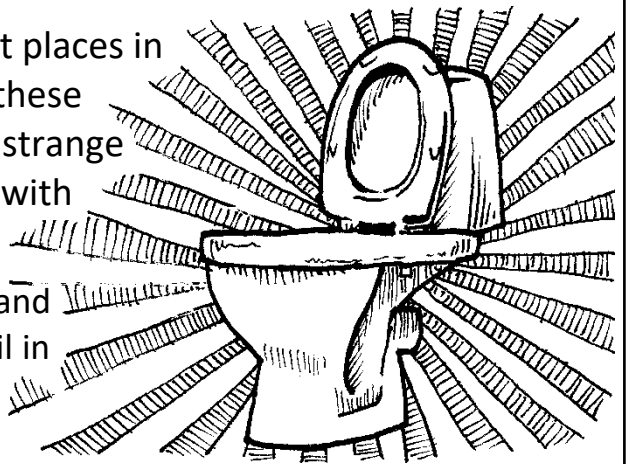
Geology fact sheet:

DON'T LEAVE YOUR FOSSILS IN THE TOILET

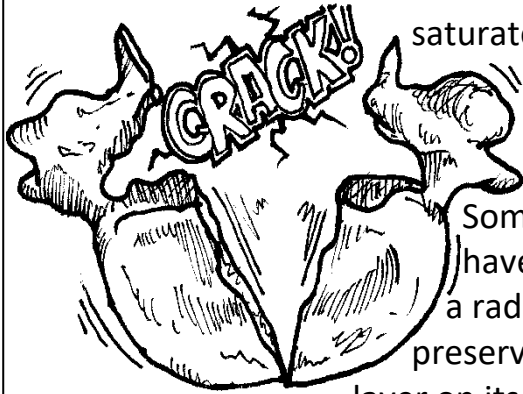
Myth-busting outdated and odd palaeontological preparation practices!

Norfolk's *Deep History Coast* is one of the best places in The country to find fossils. Many people find these palaeontological treasures, but there is some strange and outdated advice out there on what to do with them once you've found them!

This fact sheet aims to myth-bust, inform, guide and advise the best course of action if you find a fossil in Norfolk and want to preserve it into the future.



One commonly heard urban myth is that the best way to get rid of salt from fossils found on the coast is to leave them in your toilet cistern! Suddenly submerging salt saturated fossils in toilet water does get rid of salts, but the abrupt change from salt to fresh-water can lead to problems whilst drying. Cracking and fragility can be an issue down-the-line.

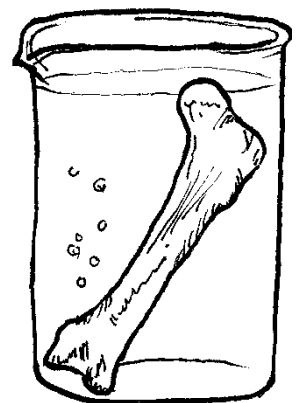


Some fossils found on the *Deep History Coast* don't have any salt in them, so gradual drying (no-where near a radiator or other heat-source) is the best way to preserve them. If a fossil starts to show a whitish, powdery layer on its surface as it begins to dry, then it probably has salt in it from seawater. Outlined below is the best way to deal with salty fossils – using a saline or salt 'ladder':

Saline Ladder

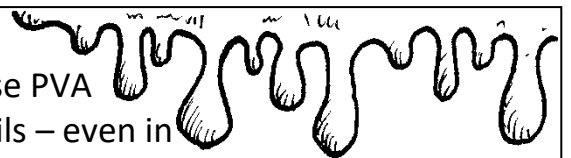
Fully submerge the fossil in water as salty as the sea (six teaspoons per litre), after a couple of days, change the water so it's less salty (five teaspoons), keep doing this every couple of days until you've got pure water (tap is fine).

This will make sure all the salts are leached out, and you won't get so many problems down-the-line. Dry it out slowly (not next to a radiator), again, over a number of days or weeks.

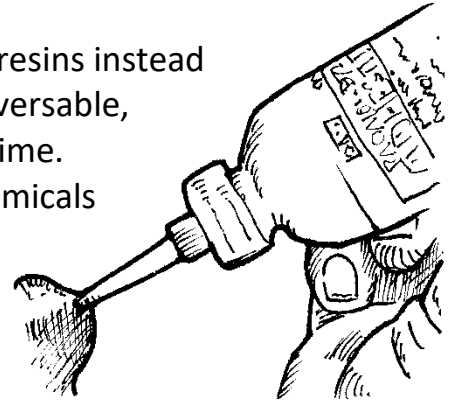


Getting in a Mess with Glue

About 30 years ago it was common practice to use PVA glue to consolidate (stabilize) and fix broken fossils – even in museums. This was because at the time there was nothing on the market that was better, and the product hadn't been tested for decades into the future. Now we know that PVA can damage fossils, yellow over time and can be very difficult to remove.



Professional organisations such as museums use acrylic resins instead of PVA to fix breaks in fossils, ceramics and glass. It is reversible, durable, non-yellowing and stable over long periods of time. However, for home use it isn't really appropriate, as chemicals can be harmful if used incorrectly. Always seek professional advice before attempting to glue or fix any fossils.



Palaeontologist or Plumber?

In the past, plumbers' epoxy putty was used by amateurs and professionals alike to fill large missing areas in fossils. This unforgiving material dries extremely hard, doesn't expand and contract and is almost impossible to remove without damaging the fossil.

Most fossils are fine as they are, and gaps can actually help us to see anatomy which might be difficult to spot if there wasn't a hole there! Others can be stored slightly apart in such a way that suggests the missing piece.

If you absolutely have to fill a gap in a fossil, then seek professional advice.

Fossils with a Disease!

Most fossils from the *Deep History Coast* are stable once they have dried out. Avoid sudden changes in temperature and humidity and keep them away from direct heat (such as radiators, stoves or fireplaces) and they should last indefinitely. However, if there's a sudden change in temperature, they may crack.

If there's a change in humidity, then some fossils from what's known as the 'Cromer Forest-bed Formation' can suffer from 'pyrite rot'. This sounds like a nasty disease, but it is a real problem in fossils! Essentially, stable iron minerals decay with exposure to moisture in the air to become brittle, yellow iron sulphate. This shows up as a crumbly, bright yellow powdery substance that smells like rotten eggs! The best cure is prevention, and if your fossils are stored in a low-humidity environment (such as in the house, not in a shed or damp garage), then they should be fine.

If your fossils are kept in a stable environment – not too damp and not too cold or warm – and especially without any sudden changes in humidity or temperature, then they should last forever.

Remember, if in doubt, ask us at *Norfolk Museums Service* for advice! There are a lot of myths and obsolete practices out there, but we aim to give the most up-to-date and relevant advice to keep our fossil heritage safe and stable into the future.

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