

Something to keep in mind when cleaning fossils...

Voltaire, François-Marie (1694-1778) – French Enlightenment writer, historian, and philosopher famous for his wit and advocacy of civil liberties, including freedom of religion, freedom of expression, free trade, and separation of church and state. Voltaire was a prolific writer, producing works in almost every literary form, including plays, poems, novels, essays, and historical and scientific works. He wrote more than 20,000 letters and more than 2,000 books and pamphlets. He was an outspoken supporter of social reform.

Voltaire had the best advice for the fossil preparator:

Better is the enemy of good. (Voltaire ascribes this saying to an unnamed “Italian sage.”)

Cleaning Products

Basic /Manual/Inexpensive

- Mild soap & water
- 70% alcohol – When you don't want to completely wet something.
- Dental picks
- Water picks
- Compressed air
- Vinegar solutions – Used to dissolve limestones for their vertebrate components.

Automated/Expensive

- Air scribes (pneumatic needles)
 - Example...“Mighty Jack” and “Micro Jack” series from PaleoTools.com.
 - MMNS also uses the PaleoAro, probably the best investment for someone who has never purchased a pneumatic tool before. A good all-purpose pneumatic needle.
- Abrasive blasters (“sand”-blasters)
 - Bicarbonate of soda, talc, ground pecan shells, etc.
 - Example...A. E. Aubin's (aeaubin.com) **Model 2100VAB** – *Portable bench-top abrading station for abrasive blasting of small parts.*
- Ultrasound cleaner / sonicator – bryozoans, corals, tiny echinoids, etc.

Bonding Agents & Preservatives

- Great line of adhesives, cohesives, preservatives, etc. at PaleoBond.com—“one-stop shopping!”
 - A selection of viscosities, from the very viscous Jurassic Gel to the superfast formulas for penetrating bone and rock.
- **Butvar-76** – “Industry standard” for preserving fossils.
 - Solvent is acetone.
 - Mix thick and use as a glue.
 - Mix thin and use as a preservative, consolidant, and sealent.
 - Easily reversible (cyanoacrylate glues are not).
 - From what I've heard, does not yellow and craze/crack with age, although it may peel some.
 - Museum Services Corporation: Main page → Supplies → Coating Materials → Butvar resins at bottom of page.
- Future Floor Wax (Pledge Premium Finish with Future Shine) – A clear acrylic paint used by the Pink Palace Museum (Memphis) for preserving and stabilizing fossils in the field and lab. Miscible with water and can be buffed to dull the usually shiny finish.