



# **A review of palaeontological preparation equipment**

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# Palaeontological Preparation Equipment

- Current and traditional tools
- Modern tools
- Research potential
- The future



# Palaeontological Preparation Equipment

- Bulk matrix removal
- Air hammers

# Palaeontological Preparation Equipment







# Palaeontological Preparation Equipment

- Diamond saw cutters

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Air abrasives
- Variable air flow
- Variable powder rate
- Various powders
- Various nozzles

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Air pens or Air scribes
- Coarse and fine nibs
- Variable percussive effect

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Flexible drives with rotary or percussion attachments



# Palaeontological Preparation Equipment







# Palaeontological Preparation Equipment

- Electric engravers

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Jet wash
- Fully adjustable spray and water pressure

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Ultrasonic tank

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Ultrasonic Scaler 'Cavi - jet'



# Palaeontological Preparation Equipment







# Palaeontological Preparation Equipment

- Split - V

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Rotary Grinder
- Two handset unit
- Various and variable speeds
- Various abraasive attachments
- High Torque
- Little vibration

# Palaeontological Preparation Equipment





# Palaeontological Preparation Equipment

- Research

- The surface effect of various tools can be examined by:
  - SEM analysis
  - Silicone rubber moulds
  - Stress and strain gauges



# Palaeontological Preparation Equipment

- Future work
- Recommendation for specific tools for specific work
- More detailed understanding of the long term stability of prepared specimens



# Palaeontological Preparation Equipment

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