

Identifying Bronze Age Axes

Bronze casting technologies developed from simple to more complex through the Bronze Age (2300-800 BCE). This guide shows the main changes in axe styles and features.

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Flat Axe 2300-2150 BCE

The earliest metal axes in Wales were made of Irish and British copper. Bronze, made by alloying copper and tin from Cornwall, first appears in Britain around 2150 BCE. Similar shaped bronze flat axes soon replaced the copper ones.

Flat axes were cast by pouring molten metal into simple one-piece, flat stone moulds. They were then hammered, sharpened and fixed into wooden handles (hafts) for use.



Developed Flat Axe 1950-1750 BCE

Towards the end of the Early Bronze Age, flat axes had slender profiles and more expanded blades.

New features included tapering forms in profile and raised edges (flanges), which helped to better fit the axe to the wooden haft. Earlier flanges were hammered, later ones were cast into the mould.

These axes sometimes accompanied burials as grave goods.



Palstave 1500-1400 BCE

The typical axe form of the Middle Bronze Age was the palstave. These were made by casting molten bronze into two-part moulds of stone or bronze.

The more complex design of the non-blade ends, with a projecting stop on each side, meant that now a divided and forked wooden haft could be slotted onto the non-blade (butt) end and fixed securely for improved use.



Palstave 1400-1275 BCE

Slightly later, palstaves were cast with side-loops. These were attachment points for twine or rawhide, which was used to strap the wooden haft onto the bronze blade.

Palstaves may have a range of shield, trident and midrib designs on their faces, or they can be plain.

Late palstave types tend to have narrow blades.



Socketed Axe 1000-800 BCE

The typical Late Bronze Age axe form is the socketed axe, with a hollow central socket, into which the wooden haft was inserted. They were cast in elaborate three-part moulds of stone, bronze or clay. Lead was added to the molten metal, improving metal flow into the mould.

This axe with decorative face ribs is very common in South Wales, where they are often found buried in hoard groups.