What is a Claydog?

A claydog is a concretion of silt, clay, and calcium carbonate ($CaCO_3$) precipitate that forms around a nucleus of organic material. The exact formation process is not known. Occasionally found among the layered deposits of clays and silts left by a glacial lake. – claystones, – mudpuppies

The organic nucleus that is presumed to spark the formation process disintegrates with time, leaving only the calcareous structure. Because this is much harder than the surrounding materials, the dogs were originally called *claystones* by the early settlers.

Claystones were later named claydogs by workers at brickyards who found these hard formations to be a nuisance when molding bricks.

Sediments from glacial lakes are deposited in layers, or *varves*, due to climatic variations in the seasons. During the winter months, the water is cold and calm. This allows the smaller clay particles to settle and form a layer at the lake bottom. Summer warmth and turbulence, however, allow only the silt particles to settle, forming a different layer. After many years of this cycle, the lake dries up, leaving the alternating layers of sediment. Most of these areas have since been covered over by later deposition or modified by soil formation.

As severe erosion exposes the varves in a few rare areas, claydogs can be plucked from their *homes* in the silt layers. As water moves through the stratified landscape, soil slumps and slides, displacing claydogs into the streams below. Some claydogs are smoothed by the water as they are carried downstream and deposited among the stones and sediment.

Claydogs can sometimes have high iron content. When oxidation occurs, these dogs rust, turning a dark shade of brown. They have recently been named *dirty dogs*.