

# materials mines

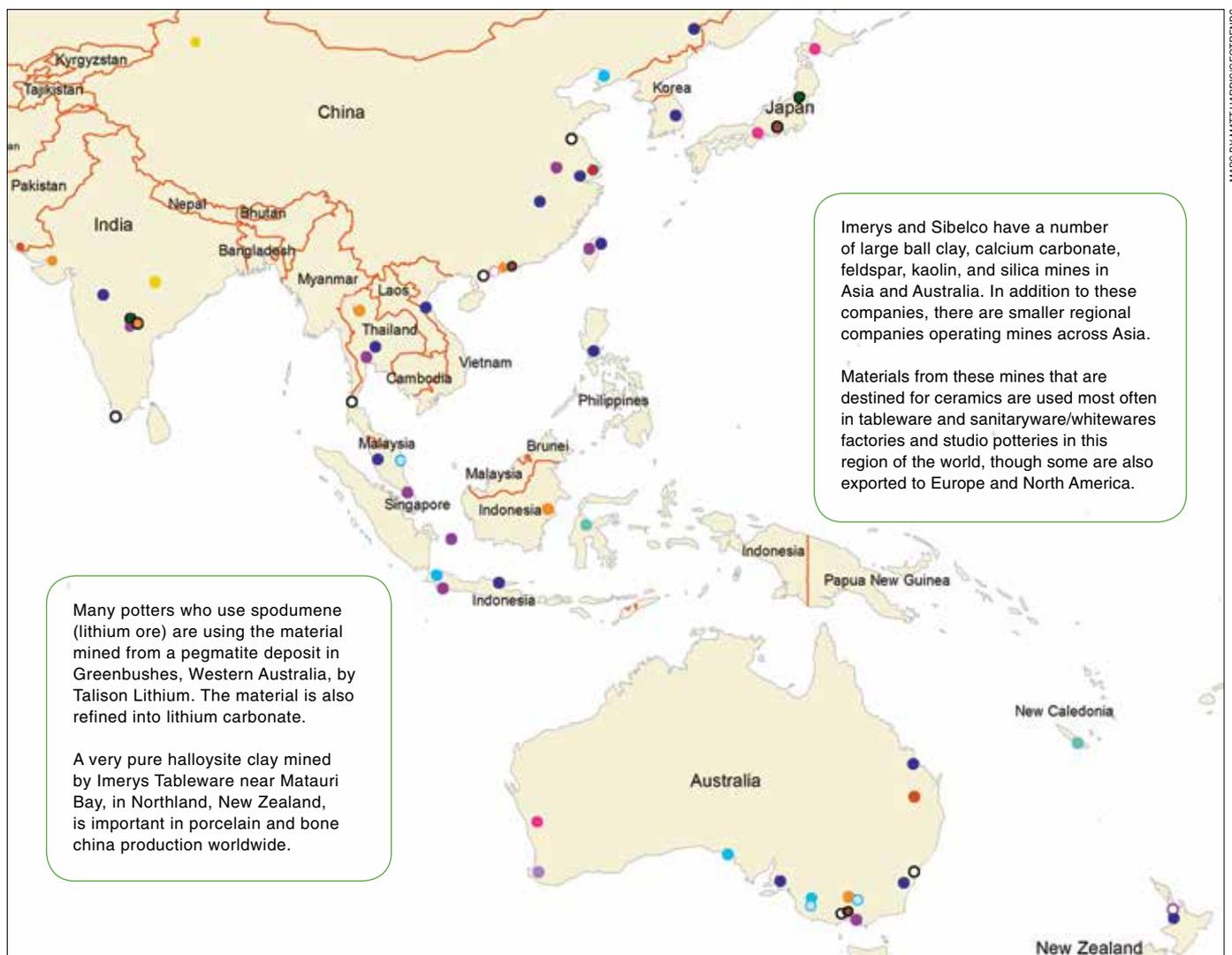
by Jessica Knapp

Unless you use local materials, the clay and glaze materials in your studio have probably traveled from far and wide. We probably all have materials that come from every continent except Antarctica. What's in your studio?

Most of our materials are primarily mined for industrial use, including the paper, manufacturing, and construction industries, which can be seen as a limiting factor as well as a benefit. Part of the reason we even have access to these materials is the fact that these larger industries need them in huge volumes, making the mining operations profitable. On the flip side, we sometimes lose access to a material when its no longer reliable or available in quantities that would be useful to larger industries.

Knowing where our materials come from is interesting from a geological perspective, and a practical use perspective, as the raw

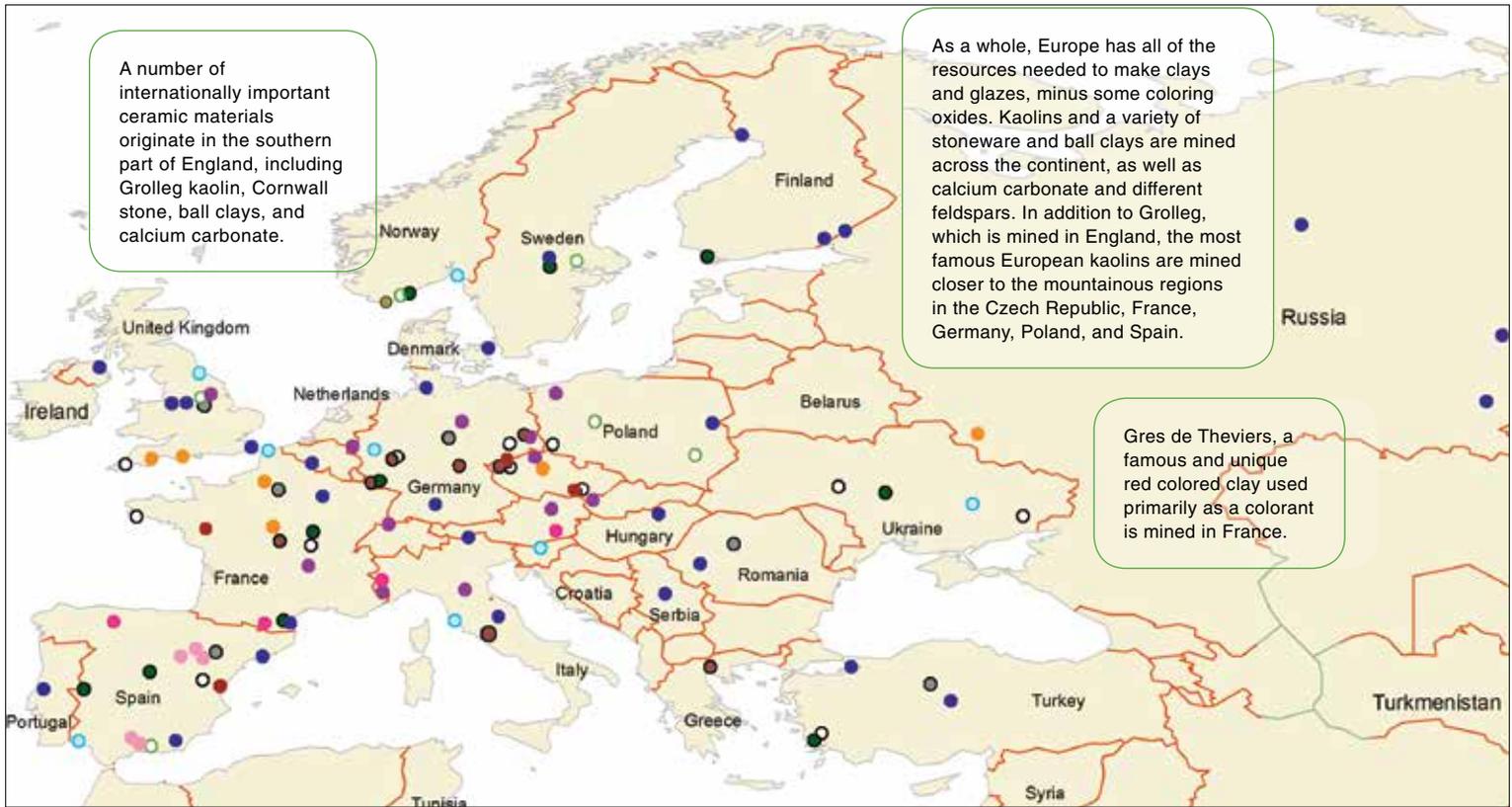
materials at different mines have varying compositions and characteristics that can greatly affect the work we make. It can also be useful for determining your studio carbon footprint. The maps below and on the next two pages, while not comprehensive, show many of the larger mine sites relevant to our field that we have been able to verify despite being really small players in the mining world. Visit the table of contents for this issue at <http://bit.ly/CMfeb2012> and click on the title of this article to download a PDF with a full list of materials mines, matched by number to each location.



## Key

● Ball Clay	● Copper	● Iron-bearing minerals (like geothite, hematite, and magnetite)	● Lithium Carbonate	● Silica and Quartz	● Zirconium Silicate
● Bentonite	● Dolomite	○ Kaolin	● Manganese	● Talc	● Zinc Oxide
● Calcium Carbonate	● Feldspar	● Kyanite	● Nepheline Syenite	● Tin Oxide	
● Fire Clay and Stoneware Clay	● Gypsum Rock		● Nickel	● Titanium Dioxide, Rutile, Ilmenite	
● Cobalt	● Halloysite		● Pyrophyllite	● Wollastonite	
			● Red Clay		

MAPS BY MATT HARRIS@GETRENDS



A number of internationally important ceramic materials originate in the southern part of England, including Grolleg kaolin, Cornwall stone, ball clays, and calcium carbonate.

As a whole, Europe has all of the resources needed to make clays and glazes, minus some coloring oxides. Kaolins and a variety of stoneware and ball clays are mined across the continent, as well as calcium carbonate and different feldspars. In addition to Grolleg, which is mined in England, the most famous European kaolins are mined closer to the mountainous regions in the Czech Republic, France, Germany, Poland, and Spain.

Gres de Theviers, a famous and unique red colored clay used primarily as a colorant is mined in France.



Although there are clay deposits used by potters across Africa, most of the globally important mining in Africa related to ceramics is of metallic oxides used in colorants. These include cobalt, copper, chrome, iron bearing minerals, manganese, nickel, tin, and zinc. Most of the extracted metals are destined for other industrial uses with ceramics as a whole, and studio pottery in particular, using a very small percentage. This map shows some of the larger metallic oxide mines.

# CLAY CULTURE materials mines

