

# Rock stuck in a hard place

**John Upton, San Francisco Examiner, 7-7-10**

Decades after California led the nation in celebrating its geological riches by designating a state rock, serpentine's heady official status could be stripped away by lawmakers.

California is on the verge of dumping serpentine as its official state rock because of health concerns that arise when asbestos, which occurs naturally in serpentine, is ground up and inhaled.

Serpentine is a very hard type of rock that forms deep beneath the Earth's surface, where the temperature and pressure are extremely high. The material is squeezed up to the surface along fault lines, meaning it's far more common in California and the San Francisco Peninsula than in most other parts of the world.

Wildflowers thrive on serpentine rocks and soils, which are too nutrient-poor for other plants. Car exhaust threatens the habitat, however, including on San Bruno Mountain, because it contains nitrogen that fertilizes invasive weeds.

The material is commercially valuable because it can contain asbestos, which is mined and used in flame retardants, insulation and other building products. However, in addition to commercial use, grinding up asbestos releases fibers that can lodge inside lungs and cause cancer and other deadly diseases years or decades after exposure.

In 2008, homebuilder Lennar Corp. was fined by air regulators and forced to change its procedures after it failed to properly manage and monitor dust from serpentine-based soil in southeastern San Francisco.

But those risks were not understood while asbestos was being widely used in the 1960s, when lawmakers declared serpentine to be the state's official rock.

Since that 1965 declaration, Colorado, Massachusetts, Nevada, Oregon and more than 20 other states have adopted their own state rocks.

Serpentine's status as California's state rock would be stripped away by a state bill that was approved unanimously by the state Senate and is being mulled by the Assembly.

Senate Bill 624 was authored by Sen. Gloria Romero, D-East Los Angeles, and sponsored by Redondo Beach-based nonprofit Asbestos Disease Awareness Organization.

"For us, this is a very important piece of legislation that will help educate the public about the dangers of asbestos," organization co-founder Doug Larkin said.

The nonprofit is lobbying lawmakers and federal officials in Washington, D.C., to ban asbestos imports.

The legislation, however, has baffled geologists and minerals aficionados.

“The rock itself is benign — unless you happen to be caught in an avalanche or get hit in the head by somebody throwing it,” California State Geologist John Parrish said.