

Sparkling Clean?



Photo courtesy of StockAction

So-called 'conflict diamonds' leave the environment as dirty as they leave trade bloody.

Leonardo DiCaprio made another big splash at the box office with the December release of "Blood Diamond." The movie grossed nearly \$100 million internationally, while publicizing the dirty world of conflict diamonds. But while it brought the humanitarian aspect of diamond mining to the public eye, it ignores the environmental concerns presented by these sparkling rocks — a compressed coal that has come to represent love in Western society.

Diamonds, which are the hardest known naturally occurring material, are composed of carbon-bearing materials at regions of high pressure and low temperatures within the earth. Historians estimate they were discovered as early as the 17th century, with use in both the industrial and jewelry markets.

BY ASHLEY CORINN WALDORF

In the 1940s, De Beers cleverly conceived the diamond engagement ring concept as a marketing scheme that convinced Americans to associate everlasting love with the eternal hardness of a diamond. As alluded to in "Blood Diamond" and exposed in Blaine Harden's *New York Times* article "Africa's Diamond Wars," De Beers has created an illusion of rarity and romance surrounding diamonds. The diamond has evolved into a product of high demand and high profits, translating directly into increased motivation and pressure to retrieve them from the Earth — despite the environmental, social and human costs.

Two methods are predominant in dia-

mond mining. Usually, diamonds are found in a volcanic pathway called a "pipe." In these pipes, magma forces diamonds upward from deep inside the Earth, bringing them close to the surface. Open-pit mining is then used to uncover these primary deposits by removing whatever lies in the way, be it dirt, trees or wildlife habitat.

The second type of diamond deposit — known as "alluvial" deposits — are found in water. Diamond materials are washed downhill from the erosion and weathering that affect the volcanic pipes, leaving it in waterways such as in riverbeds or on ocean shores.

In the case of open-pit mining, the immense removal of natural materials is cause for concern. The land is removed and piled elsewhere while the diamonds are

sought and retrieved. Ideally, environmental reclamation — in which the mining companies restore the landscape back to its “natural” state — will occur afterwards, but even then the land will need to rebuild itself.

Robert Hitchcock, chair of the anthropology department at Michigan State University, studies and works directly with indigenous African populations. He noted a number of other environmental concerns with open-pit mining:

“There are three environmental effects I have noticed,” Hitchcock said in an e-mail. “First, the diamond pipes that are excavated leave a large gaping hole in the landscape. The concerns with open-pit mining are the vast area of ecosystems disturbed by the extraction of ... materials and the improper disposal of [those materials] that could cause further harm to other ecosystems. Second, considerable water is used in the mining and diamond location process — this causes environmental impacts in terms of loss of ground and surface water. Third, roads are built to the diamond area, and these have their own impact, as does the footprint of the diamond mine, processing facilities and housing and other services for workers — all of which are sealed off from the rest of the countryside.”

Alluvial mining — the kind that takes place in waterways — can lead to more ecosystem disturbance. On an ocean shoreline, marine soil is generally disturbed via bulldozing or pumping sand from behind a built wall, which blocks the surf from the mining area.

Environmental concerns are exacerbated by un-enforced reclamation laws. Reclamation essentially means filling in the hole created by the mining with the original materials. But in developing countries, laws tend to focus on the social, rather than environmental aspects of diamond mining. The Kimberley Process Certification Scheme was created in 2002 to monitor and track the source of diamonds in an effort to stop conflict-diamond trade among participating countries (currently, 71 countries participate), but it is easily circumvented in African countries through smuggling. Hitchcock explained that developing countries tend to not have the “tough teeth in the law that developed countries do.”

Diamonds are mined in Africa, North America, Oceania and Asia. The concern of Siberian natives demonstrates the widespread worry over environmental effects. Their concerns are being silenced by their government. Susan Crate, anthropologist and professor in the environmental science and policy department at George Mason University, has worked since



Although they move slowly, the mining trucks working in this open-pit diamond mine take two hours to travel from the entrance at the top to the end of the corkscrew road at the bottom.

1991 with Viliui Sakha communities that inhabit areas adjacent to Russia’s diamond mining operations in northeastern Siberia. She said that in some countries it is possible to achieve some regulation because the mining is done by multinational corporations (MNCs). In Russia, diamond mining is done by Russian companies that have direct links to the government. This precludes independent monitoring or regulation because precedence is on the government’s best economic interest.

“[They] perform Environmental Impact Assessments (EIAs) and are, on paper, responsible for abiding by environmental safeguards, but they are also the ones mining, and so these environmental protection measures are disregarded and reduced to what you might call ‘symbolic greenwashing,’” Crate said. It is more profitable from a miner’s perspective to open-pit mine without reclamation, and the government is the miner. Crate said it would be different for a multinational mining company coming from outside Russia because the Russian government could then impose stipulations demanding that the company fund reclamation.

DiCaprio’s “Blood Diamond,” though it missed these environmental issues, may have pressed Western consumers to find alternatives to traditional diamond engagement rings. While some choose to abandon the custom altogether, other options do exist. Lab-created diamonds are the man-made alternative. Their substance is the same, but their origins differ. This is a surefire way to ensure no bloodshed or environmental degradation occurred in the creation of a purchased jewel.

Another option is seeking a diamond that was mined in a country like Canada, where strict environmental protection laws oversee the process. Brilliant Earth is a company that has tapped this market and offers conflict-free diamonds to suit those whose desires match their motto: “Luxury with Conscience.”

Brilliant Earth co-founder Eric Grossberg explained that the Canadian diamonds sold at his company are both socially and environmentally suitable. The mining methods and associated land treatments used were agreed upon with the voice of local indigenous peoples and are monitored heavily by the Canadians.

“[It’s] a service that was needed,” said Grossberg, whose company was founded in 2005 with a social mission as an ethical alternative to conflict diamonds. To further help in the global crisis of conflict diamonds, Brilliant Earth has pledged 5 per cent of its profits to Diamonds for Africa, an organization that gives back to African communities torn by the diamond trade.

“Blood Diamond” may be credited with unveiling the social implications of diamond mining, but the path is just now being paved for the environmental community to publicize its own concerns. Alternative diamond methods can save bloodshed, alleviate environmental concerns and leave the bejeweled sparkling with a clean conscience. 🌍

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