

## Myanmar Amber

Amber is a resin material that is formed from fossilized conifer tree sap during years of constant pressure and heat. This yellow to reddish-brown translucent material has been used in a number of ways, including to make jewelry, in Egyptian burials, and in the healing arts. Amber also plays an invaluable role in research. In some cases, amber contains inclusions, such as insects, whole or parts of animals, and plants that are trapped and preserved. The ability to hold a piece of history untouched by time has resulted in a number of scientific discoveries and advances such as feathers on a non-avian dinosaur dated 99 million years ago and the biosynthesis of gene clusters for novel antibiotics.

One of the oldest amber deposits in the world, dating back 100 million years, is located in the Northern region of Myanmar. Myanmar amber is plentiful, high quality and contains inclusions within the resin. The mining of these amber specimens in Myanmar is the center of many legitimate and blackmarket sales to university researchers and private collectors alike. Over the last ten years, more than one billion dollars in legal revenue has been generated from the mining and sale of amber.

Myanmar is a small southeast Asian country that contains about 130 diverse ethnic groups recognized by the government. There is no official state religion but the Myanmar government favors the majority Theravada Buddhism population. This favoritism has created ethnic and religious conflicts resulting in government-enforced discrimination. For example, the government has made it difficult for Christian and Islamic groups to gain permission to repair or build new places of worship. The Kachin Independence Army, which includes ethnic minorities who live in the northern Kachin and surrounding regions of Myanmar, has been in armed conflict with the Myanmar government for the restoration of minority ethnic groups' rights.

For many years this mining area has been protected by the Kachin Independence Army. However, in 2017 the Myanmar government dropped leaflets from helicopters informing the population in northern Kachin that civilians and Kachin militants who remain in the region will be considered hostile opposition to the government military forces. The government then forced more than 5000 inhabitants from their homes and villages, as well as from the amber mines. This hostile takeover of the profitable Kachin amber mines ensures that amber purchases from researchers and private collectors will help fund the government side of the Myanmar ethnic civil war.

While some researchers and universities feel as though they should refrain from making such amber purchases, their failure to participate enables many private collectors to remove collections from the public or to charge researchers an exorbitant fee for access.

Furthermore, many of the miners in the Kachin region, on both sides of the conflict, are not fully aware of the value of the amber that they are selling and are therefore being exploited by the wholesalers who purchase from them. Myanmar classifies amber as a gemstone, not a fossil, so it can be legally removed from the country, unlike fossils that have restrictions on removal.





CASE STUDY

## **Discussion Questions:**

- 1. If you were a university scientist, how would you decide whether it is ethical for you to buy amber from Myanmar?
  - a. If you took a deontological approach, what would your reasoning look like? What moral principles would you take into account?
  - b. If you took a utilitarian approach to answering this question, what would your reasoning look like? What facts would you weigh in making the decision?
- 2. In deciding whether it is ethical for you to buy amber from Myanmar, do you need to guard against the self-serving bias unduly affecting your decision? If so, how would you go about guarding against it have a deleterious impact?
- 3. Are there other cognitive biases and heuristics that might adversely affect your moral reasoning if you are not careful? Which ones?
- 4. Are you aware of comparable situations around the world where individuals and corporations that wish to be moral buyers should be similarly wary, knowing that their purchase price might aid the seller's bad acts? Is this ever a consideration that buyers should take into account? Is it always a consideration that buyers should take in to account?
- 5. What can scientists considering the morality of trading in Myanmar amber learn from the debate over "conflict minerals" in Africa?

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