Tests detect potentially illegal wood in paper. Here are some tips to manage risk.

The amended U.S. Lacey Act has already impacted the wood industry, from the investigation of Gibson Guitars to a recently-reported seizure of Peruvian hardwood. Both of these cases involved solid wood products. But what about paper?

Paper poses the challenge of linking an illegally harvested tree in a faraway forest to a piece of paper purchased in the United States—after all the mixing and bleaching. Companies in the Forest Legality Alliance and others asked whether or not it is even possible to find Lacey violations in paper products.

Working with others, WRI decided to check it out.

We sent samples from 32 imported paper products to an independent fiber analysis laboratory. Samples we had tested came from stationery, paper bags, cardboard boxes, toilet paper, facial tissue paper, wrapping paper, and books—including pages, glossy cover sleeves, and cardboard from hardback covers. All products were purchased from stores and outlets in the United States.

With fiber analysis, scientists use high powered microscopes to look at plant fibers and vessels in a snippet of paper to identify what types of trees were used to make it. Vessels are structures that transport nutrients and water in plants, and they have distinct anatomical features that allow for identification of its genus and, in some cases, species.

What we found is telling.

The tests identified vessels with anatomical features consistent with those of ramin (Gonystylus spp) in a page of a coffee table book and in the cover paper of a children’s book. These books were purchased from a U.S. retailer and published by U.S. firms but were manufactured in and imported directly from Indonesia. Increasingly rare, ramin trees have been protected internationally since 2003 under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Likewise, the Indonesian government has imposed an export ban on all ramin products. In other words, ramin fibers should not be found in paper.
In the cover of another children’s book, the tests found vessels consistent with those of mangrove trees (*Rhizophora spp*). Import/export trade databases indicated that this book, too, was manufactured in Indonesia. Mangrove trees are protected from being harvested under Indonesian coastal protection, conservation, and forest management laws.

Consequently, all three of these books potentially violate the 2008 amendments to the U.S. Lacey Act, which prohibit trade within the United States of products made from plants that are harvested in contrary to international law or the law of their countries of origin. Since 2008, it has been illegal to import, export, transport, sell, receive, or purchase such plant products—including pulp and paper— in the United States. All actors in the supply chain, including importers, publishers, and retailers can be liable under Lacey. Penalties can include forfeiture of goods and fines of up to $500,000 and jail time.

These results demonstrate that it is possible to detect potential Lacey violations for paper, thanks to modern technology. In addition, they suggest that the prevalence of illegally harvested fiber in paper products may be more common than assumed—3 of just 32 products had suspicious fibers.

Furthermore, they portend the possible use of this technology by third parties to uncover Lacey violations. Some NGOs have already used fiber analysis to determine whether books were made from plantation wood or from natural tropical rainforests. Now we know they can find potentially illegal species in paper, too.

So what can companies in the paper supply chain do to avert the risk of purchasing paper with illegal fiber in it?

First and foremost, exercise due care. “Due care” lies at the core of the amended Lacey Act. It is the legal term for exercising the level of appropriate action that would be taken by a reasonably prudent person under the same circumstances to minimize the risk of purchasing plant products that were harvested or traded illegally.

Examples of due care in the context of purchasing paper products include:

1. **Ask questions.** Ask your paper supplier questions such as: What is your supply chain? Can you trace the paper all the way back to the forest? What is the degree of illegal activity in that forest or region? What processes do you have in place to prevent illegally harvested fiber from entering your supply?

2. **Assess risk and respond accordingly.** Determine the relative risks associated with the forest of origin. Is the region suspected by credible sources of having high levels of illegal logging? Are civil society campaigns currently underway that indicate that this is a forest of concern? If so, compare the risk of inadvertently sourcing illegal paper to your degree of risk aversion. If responses from your supplier to the questions you ask do not meet your risk tolerance levels, consider sourcing paper from a different supplier or region.

3. **Adopt a comprehensive forest products purchasing policy.** Establish a forest products purchasing policy that reflects company values and incorporates environmental and social safeguards. Such
policies can be a good foundation for practicing due care. Training employees on the policy and putting in place systems and performance incentives for policy implementation can effectively reduce risk.

4. **Purchase certified paper.** Harvesting trees legally is a common feature of third-party forest certification programs. Therefore, purchasing certified paper can be a means of demonstrating due care. But note that certification *per se* does not necessarily mean that the paper is legal, especially if the verification systems of the certification program are not robust and in countries with weak governance. In such circumstances, illegally harvested fibers can still find their way into certified paper.

5. **Conduct periodic fiber analysis tests.** Periodically test samples of paper products you purchase. Periodic testing can reveal what’s in your paper and might uncover suspicious fibers and sources. Fiber analysis testing is not expensive, and there are a number of independent fiber testing labs, including:

   - Integrated Paper Services, Inc. *(United States)*
   - Institute for Paper Science and Technology, Darmstadt Technical University *(Germany)*
   - INNVENTIA *(Sweden)*
   - Econotech *(Canada)*

As we discovered, paper is not risk free when it comes to the amended U.S. Lacey Act. But there are steps one can take to reduce these risks and demonstrate due care . . . and not just on paper.

---

**The Amended Lacey Act**

The 2008 amendments to the U.S. Lacey Act:

- Prohibit trade into and within U.S. borders of any product made from trees or other plants that were logged or traded in violation of a law in the country of harvest. Products include paper, lumber, and furniture;

- Require importers of plant products to declare the country of harvest, the genus and species of the plant, as well as the product’s volume and value (this is the “declaration requirement”); and

- Establish penalties for violations, including forfeiture of goods and vessels, fines of up to $500,000, and prison terms of up to five years.

Even though the declaration requirement does not yet apply to paper, the prohibition of trade in illegally harvested forest products has applied to paper since May 2008.

---

For more information about how you can conduct due care when purchasing forest products, visit [www.forestlegality.org](http://www.forestlegality.org).
The Lacey Act requires an import declaration upon importation. Customs and Border Protection (CBP) has automated the process for collecting the PPQ Form 505 data elements. Data will be transmitted to CBP's Automated Commercial System (ACS) through the Automated Broker Interface (ABI) in the cargo release and entry summary modules. An importer has the option to complete and present a paper Plant and Plant Product Declaration Form PPQ 505 for each line. If a paper form is used, the importer must mail the form to USDA at the address on the form. Importers may also file electronically in USDA, APHIS’s web-based system, Lacey Act Web Governance System (LAWGS). Contact APHIS for information about this option. For All Importers. The Lacey Act also now makes it unlawful to make or submit any false record, account, or label for, or any false identification of, any plant. In addition, Section 3 of the Lacey Act, as amended, makes it unlawful, beginning December 15, 2008, to import certain plants, including plant products, without an import declaration. For paper and paperboard products containing recycled content, the declaration also must include the average percent of recycled content without regard for species or country of harvest. The plant import declaration requirement does not apply to plants used exclusively as packaging material to support, protect, or carry another item, unless the packaging material itself is the item being imported. In 2008, the Lacey Act was amended to include a wider variety of prohibited plants and plant products, including products made from illegally logged woods, for import. When the Lacey Act was passed in 1900, it became the first federal law protecting wildlife. It enforces civil and criminal penalties for the illegal trade of animals and plants. Today it regulates the import of any species protected by international or domestic law and prevents the spread of invasive, or non-native, species. For more information on the Lacey Act and how it relates to injurious wildlife, visit the Office of Law Enforcement. The Lacey Act of 1900, or simply the Lacey Act (16 U.S.C. §§ 3371–3378) is a conservation law in the United States that prohibits trade in wildlife, fish, and plants that have been illegally taken, possessed, transported, or sold. Introduced into Congress by Representative John F. Lacey, an Iowa Republican, the Act was signed into law by President William McKinley on May 25, 1900. It protects both plants and wildlife by creating civil and criminal penalties for those who violate the rules and