Avoiding Lauan in Theatre and Movie Set Construction

The Problem

The demand for lauan (tropical plywood) causes tropical forest destruction and illegal intrusions on indigenous peoples' lands, mostly in Southeast Asia. Indigenous cultures are gravely threatened when their forest homelands are ruined by logging.

ENDEANGERED RAINFORESTS & PEOPLE

Lauan is a generic term that is typically used for tropical plywood sold in the U.S. The name was originally from the Philippines, the first country of origin for US tropical plywood imports in the 1940s and 50s. A new production process allowed for the use of 80% of the trees in the Philippines. Driving massive logging, the Philippines has lost 85% of its original forests, 80% of that destruction due to demand for plywood exports. Philippines is now a net wood importer. Illegal logging there still drives loggers into violent conflict with native people and landowners. Death threats are common.

In the 1970s demand shifted to Thailand (now 85% deforested) and then in the '80s to Malaysia. By 1985, Japanese and Malaysian logging companies were eliminating the forest homelands of dozens of native cultures and wiping out hundreds of endangered species. Native people, notably the Penan, began blockading logging roads into their customary lands, which were theirs to use according to Malaysia's constitution. The government brought in the police and army, using beating and incarceration to break up the blockades and keep the wood flowing. Mitsubishi was the major company doing the logging and exporting the plywood. Malaysian Borneo is now 65% deforested.

With the leveling off of Malaysian exports, demand shifted once again, this time to Indonesia. Indonesia now produces 90% of the world's tropical plywood exports. Indonesia's rainforests are expected to last only another 10 years at the current rate of logging.

Tragically unsustainable logging in Malaysia and Indonesia has led to catastrophic forest fires, first in 1983 and again in 1997. The latest fires devastated wildlife populations as well as blanketed Malaysia and Singapore in smoke for months.

ILLEGAL LOGGING

It has been estimated (and confirmed by the Indonesian government, UN and World Bank) that 75% of logging in Indonesia is being done illegally. Intrusions into parks and preserves are so common that there is now permanent infrastructure in the parks for moving logs. Threats, intimidation and bribes keep the logging going. A recent study showed 95% of concessions were operating illegally.

With the loss of these irreplaceable rainforests, Indonesia is losing native orangutans, hornbills and other critically endangered wildlife.

As Indonesia's forests wither, Brazil is heavily increasing tropical plywood production. Illegal logging in Brazil is estimated at 80% of exports.

THE CONSUMER'S ROLE

The United States is the second largest importer of tropical plywood (after Japan). Lauan is used for theatre, movie and television set construction, sub-flooring, cabinet and furniture backing and drawers, custom shelving and cabinetry, trailer paneling, interior doors and crafts. In the case of theatre sets, they are usually used for one show and then discarded.

The Alternatives

For set construction, there are numerous alternatives that can be used in combination to replace lauan.

Reused Set Materials

Perhaps the best way to limit the use of lauan is to reuse set components as much as possible. Sets can be built to facilitate reuse and then deconstructed and stored.

Sonoboard™

Made from post-consumer recycled newspaper cast into panels with a honeycomb core, Sonoboard is a structural panel with a smooth, paintable surface. However, this panel won't hold screws well.

Homosite™

A panel product made from 100% post-consumer recycled newspaper, Homosite works well for many uses. Homosite is not structural but can be used for smaller elements and props.

Strawboard and other Agricultural Residue Panels

Made from agricultural residue materials compressed with non-formaldehyde glues, these panels make an excellent replacement for plywood sheets 3/8" thick and can be used much the same way as medium density fiberboard.

Hardboard (Masonite™)

Made from sawdust combined with resin under pressure, Masonite is a stiff and durable panel material with an extremely smooth surface. Costing a bit more than plywood, Masonite can be painted and will hold screws.

High-density Fiberboard (HDF) or Medium Density Fiberboard (MDF)

Made from compressed wood chips and glue, HDF and MDF are better but not the best alternative, since they usually contain formaldehyde and are often made from virgin forests.

Temperate Hardwood Plywood

This product is nearly identical to lauan and can be used to replace lauan in all its uses. Made from beech, birch or maple, the forests from which temperate plywood are made in Canada, the U.S. and Scandinavia are much less endangered than tropical forests, and this product is more likely to be from old plantations. Independently certified sources are available. The cost of temperate hardwood plywood is a bit higher than the tropical plywood being 'dumped' on the world market as tropical forests are liquidated and often illegally logged with underpaid and even forced labor.

How To Do It

Rainforest Relief can work directly with small and large companies who build or specify sets.

Producers can make all the difference by calling for Rainforest Safe™ lauan-free sets.

Producers can use bid language calling for alternate bids. By using the alternate bid structure for set bids, bids for both conventional and lauan-free sets can be obtained and the most competitive costs for each can be compared.

In a non-bid environment, Set Builders can avoid lauan by stocking and utilizing alternative materials in combination. Some alternatives are less expensive than the same dimensions of plywood and others are more expensive. By combining alternatives, Rainforest Safe™ sets can be built for about the same costs as conventional.

Directors can demand Rainforest Safe™ sets, built free of lauan and other tropical woods. For example, Dennis Dugan called for the sets of Big Daddy to be built lauan-free.

Studios and Theatres can pass policies calling for Rainforest Safe™ sets for all productions.