

# PROTECTING FORESTS:

## ISPM-15 Works

*By Brad Gething, PhD, Patrick Atagi, MBA*

The wooden pallet industry is an \$11.5 billion American success story, with close to two billion wood pallets in use every day in domestic shipping and warehousing operations; and about \$400 billion worth of American trade is exported annually using wood pallets and containers. Given our product is made from wood, it is critical that we protect our forests – a valuable renewable natural resource – from tree pests, both at home and abroad.

ISPM-15 works, and when it is implemented according to design, it significantly reduces the spread of forest pests.

As such, the wood packaging industry plays a critical role in ensuring ISPM-15 remains the successful and effective program it is today. Businesses that follow ISPM-15 protocols ensure seamless global trade by adhering to the rules of the program, certifying pest-free wood packaging for exporters shipping to international markets. Likewise, the program ensures that imported products also comply with ISPM-15 standards. The program safeguards North American forests, while imported products arrive on wooden pallets and containers, uninterrupted, for American consumption.

Since implementation of the ISPM-15 requirement in 2005-2006, the risk of plant pests arriving via wood packaging have significantly decreased. In a study conducted by the Nature Conservancy, infestation rates of live pests in consignments using wooden packing materials decreased by up to 52 percent from 2003 to 2009, following implementation of ISPM-15.<sup>1</sup>

### **Background on ISPM-15**

The International Plant Protection Convention (IPPC) developed standards to be used in international trade known as International Standards for Phytosanitary

Measures (ISPMs). The application of these standards is designed to protect forests and ecosystems by reducing the likelihood of non-native pest infestations, preventing both loss of species diversity as well as economic losses associated with the costs of pest eradication and control. Some of these controls include heat treating solid wood material over a set amount of time in a dry kiln to kill wood boring pests.

International trade using solid wood packaging material (SWPM), which includes wood pallets, containers and dunnage material, is managed through a set of phytosanitary measures referred to as ISPM-15. The purpose of the ISPM-15 program is to significantly reduce the spread of pests by mandating the use of wood that has been treated in a manner which destroys all regulated pests in the wood prior to shipment.

Currently, there are three options for certified treatment: conventional heat treatment (HT), dielectric heating (DH) and methyl bromide fumigation (MB), all of which are permitted in the United States. Only heat treatment and dielectric heating treatments are allowed in Canada.

**These treatments, when properly implemented, have been scientifically proven to be highly effective in killing quarantine pests.**

Before implementation of ISPM-15, several high-profile invasive pests garnered our national attention, and led to the international consensus for ISPM-15, for example:

- Asian Longhorned Beetle was first discovered in the USA in 1996.
- Emerald Ash Borer was found in the USA and Canada in the 1990s.

Since the wide-scale adoption of ISPM-15 in the United States, there have been no new large-scale establishments of invasive wood-boring insects.

### **Global Partnerships Working to Protect Forests**

There are more than 100 countries around the world that have adopted the ISPM-15 regulation for wood packaging, and the list continues to grow. Countries that adopt the ISPM-15 standard agree that all imports and exports must be treated according to the standard and certifiably marked in the proper manner.

Certification is conducted by accredited third-party inspection agencies. If a facility is approved, the agency then issues a stamp to be applied on the wood packaging material showing it is compliant with the ISPM-15 standard. One inspection agency, TPI, commented: "The IPPC program for ISPM-15 conformance is vital to protecting forests internationally. When properly implemented through facility training and application along with quality monitoring, ISPM-15 is an extremely effective tool for alleviating the risk of infestation by invasive foreign pests," stated Matt McGowan, WPM manager for Timber Products Inspection (TPI).

Thus, the stamp acts as a passport for the wood packaging to officially enter through customs. It is considered sufficient proof that it meets the ISPM-15 standard. Because of the effectiveness of the treatment, a certified stamp affixed to SWPM ensures a high level of confidence for wooden packaging to be pest free of wood boring insects.

The wood packaging industry across North America also works closely with the national governments' plant health organizations of the United States, Mexico, and Canada, including the North American Plant Protection Organization (NAPPO). Through these associations, the wood packaging industry is an active partner with the regulatory agencies and scientists involved in managing phytosanitary pest risk and the development of national standards related to the implementation of ISPM-15.

### **Wood Wins**

Wood continues to dominate pallet production with over 90% of the market share for pallets, as noted by Modern Materials Handling in a recent pallet user survey. Wood dominates for many reasons; it is renewable, recyclable, cost-efficient, durable, safe and environmentally sustainable.

With global trade estimated at over \$400 billion USD, a disruption or halt in trade due to the perceived threat of invasive pests needs to be clearly substantiated. In fact, in another research project supported by The Nature Conservancy and National Center for Ecological Analysis and Synthesis (NCEAS), it was shown how policy implementations like ISPM-15 can have a net positive economic effect, even after accounting for the costs of future potential pest establishment. Through modeling, it was estimated that the ISPM-15 program could have a cumulative benefit of more than \$11 billion USD by 2050.<sup>2</sup>

Because of the value that SWPM provides to the marketplace and the success of the ISPM-15 program in minimizing the threat of invasive insects, the NWPCA works with an array of partners to advocate for the program, and find ways to continuously improve it.

Authors: Dr. Brad Gething, Director of Science & Technology Integration, and Patrick Atagi, Vice President of Advocacy, National Wooden Pallet & Container Association, may be reached at 703-519-6104 or through PalletCentral.com <http://bit.ly/1ley16X>

---

<sup>1</sup> Robert A. Haack , Kerry O. Britton, Eckehard G. Bockerhoff, et al. "Effectiveness of the International Phytosanitary Standard ISPM No. 15 on Reducing Wood Borer Infestation Rates in Wood Packaging Material Entering the United States." May 14, 2014. <http://bit.ly/2u5rQQ3>

<sup>2</sup> Brian Leung, Michael Springborn, James Turner, Eckehard Bockerhoff. "Pathway-Level Risk Analysis: The Net Present Value of an Invasive Species Policy in the US." May 19, 2014. <http://bit.ly/2uw2E7A>