



**AMERICAN
HARDWOOD
EXPORT
COUNCIL**

Global Update for US Hardwoods



American Hardwood Assured



Tripp Pryor
tpryor@ahec.org



Agenda

Tariffs and Export Markets

—

European Union Deforestation
Regulation (EUDR)

—

American Hardwood Assured
now fully EUDR Compliant



PROMOTE OUR SUSTAINABLE
RESOURCE



INFLUENCE SPECIFIERS



PROMOTE NEW SPECIES &
APPLICATIONS

WHAT IS IAHEC?



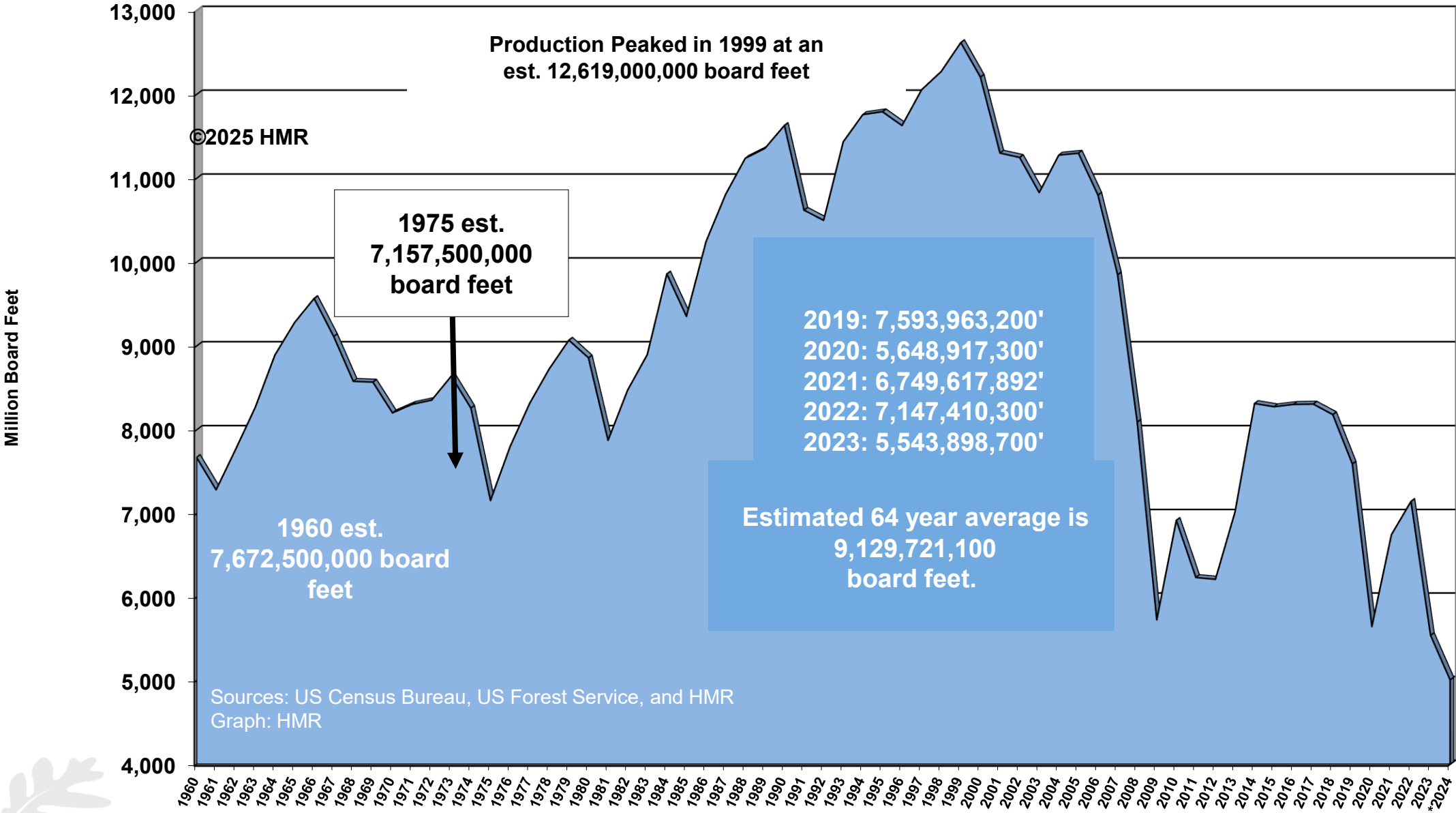
MAKE
CONNECTIONS



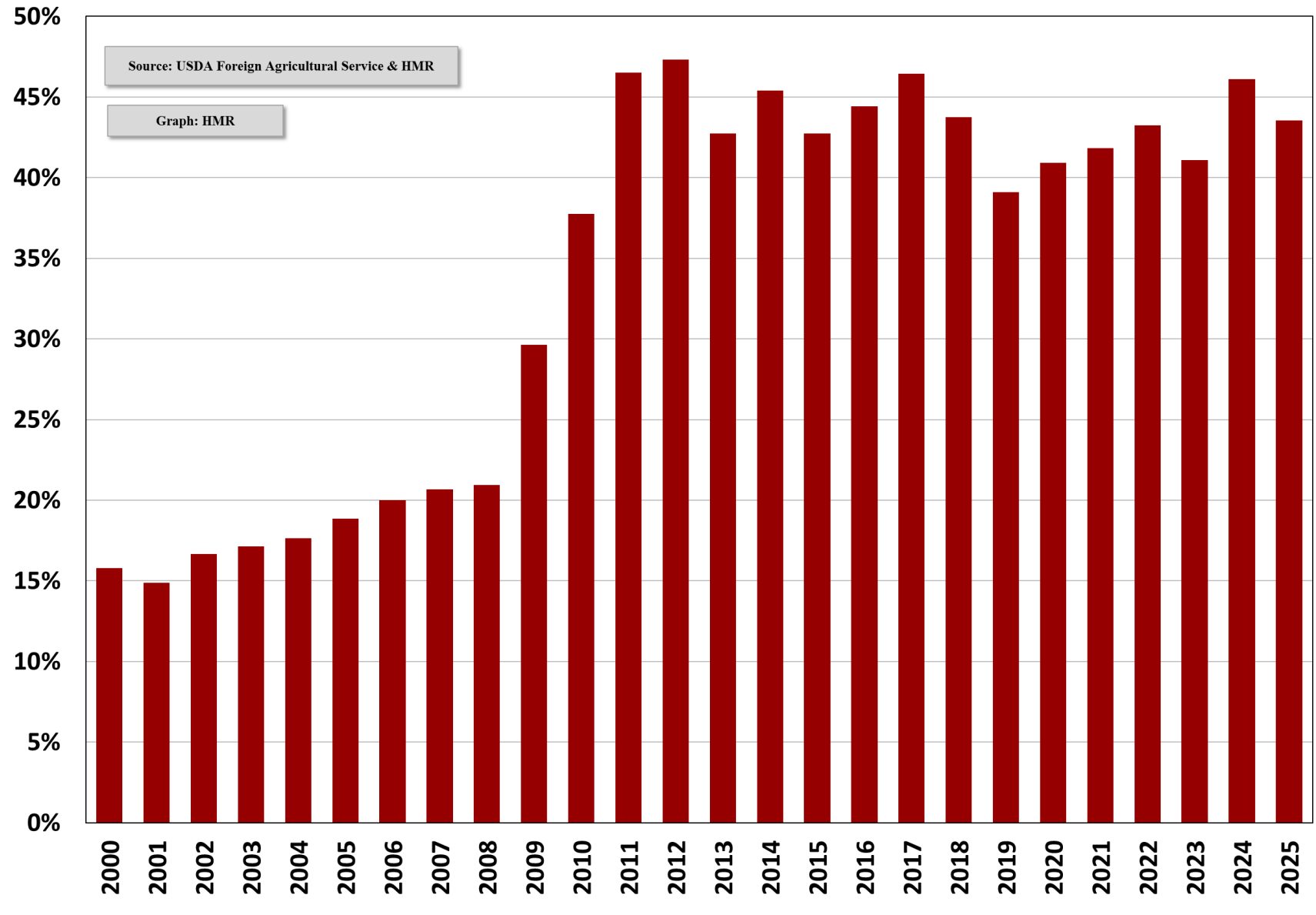
Why Exports Matter



Eastern US Hardwood Production

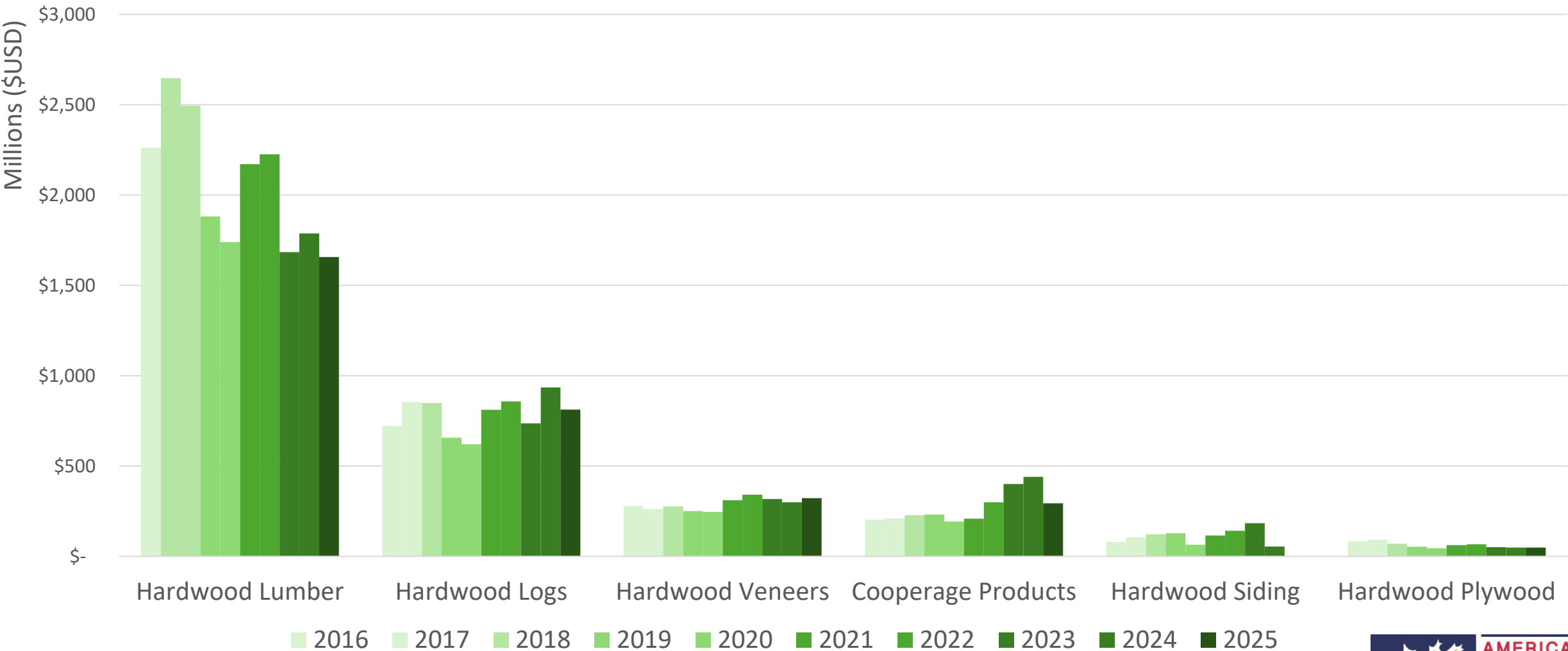


Exports' Share of Total Grade Lumber Consumption



Exports of US Hardwood Products

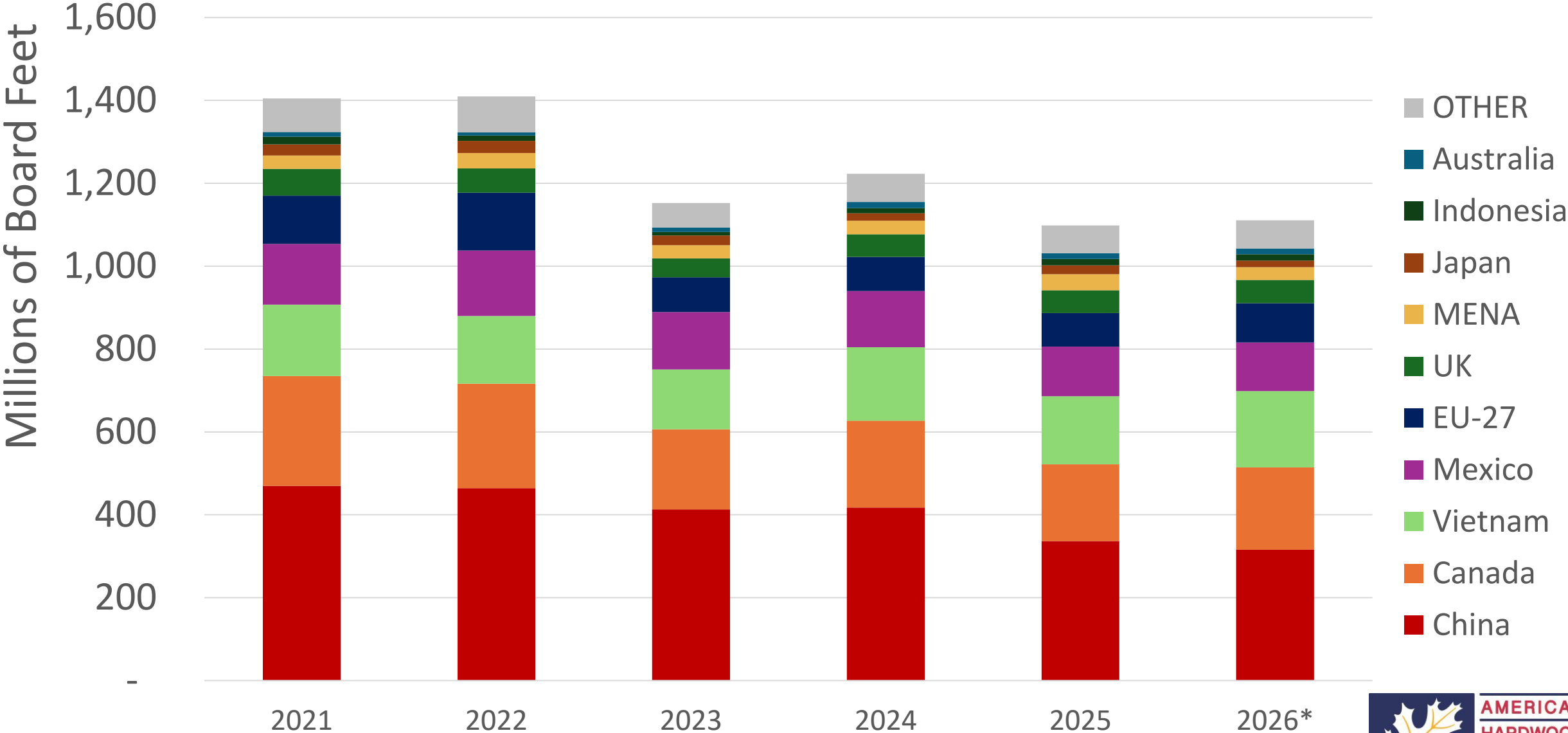
2016 - 2025



Source: U.S. Census Bureau Trade Data



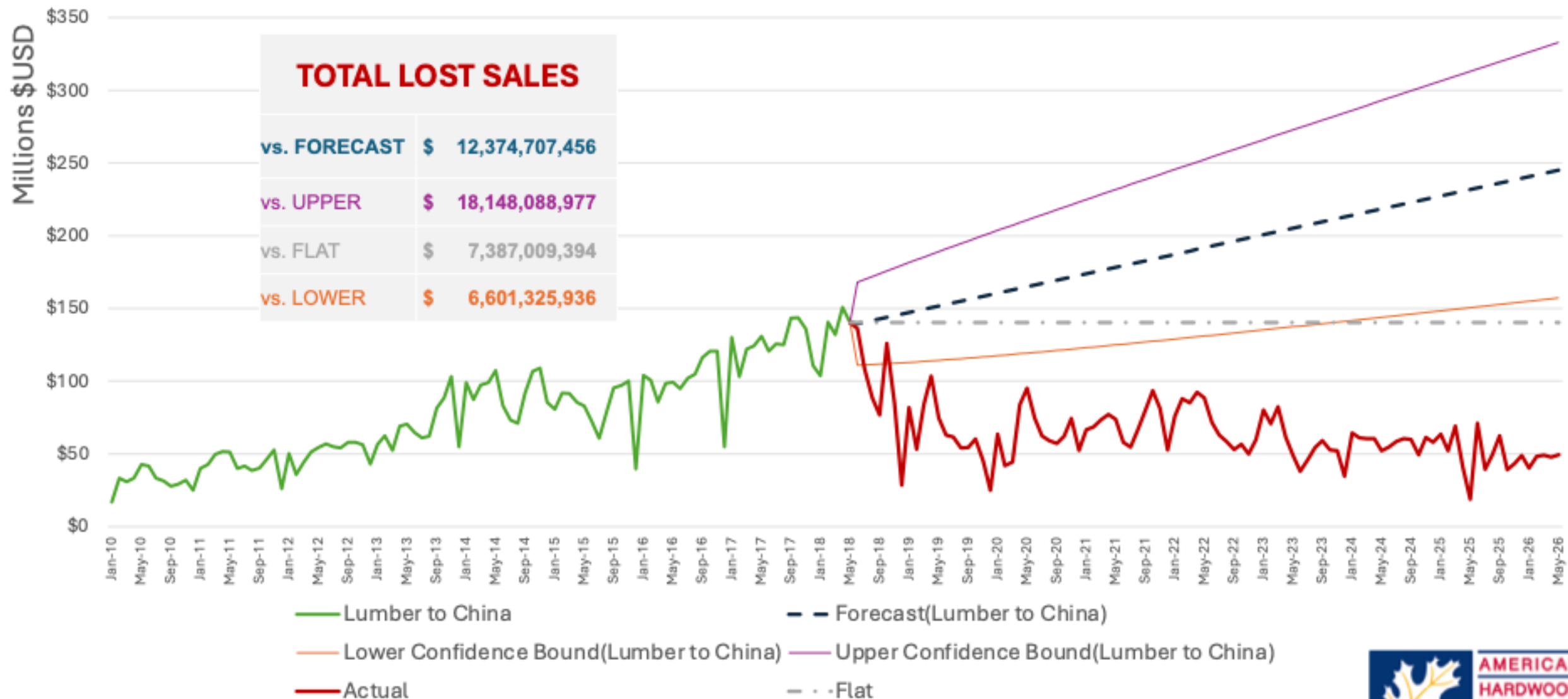
US Hardwood Lumber Exports



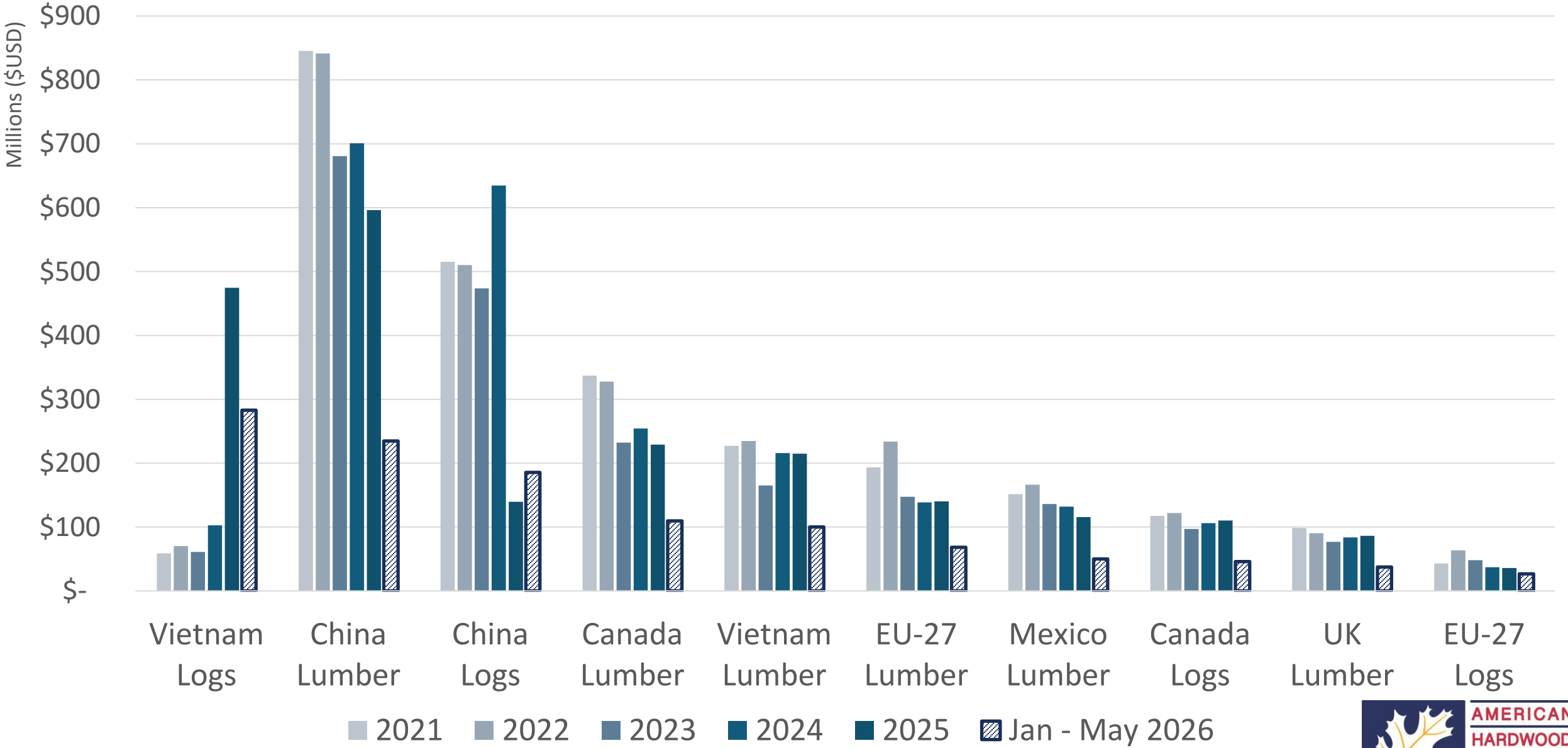
Source: U.S. Census Bureau Trade Data, 2026 Annualized from Jan-May Data



US Hardwood Lumber to China Pre-Tariff Forecast vs. Actual



Top 10 Markets for Hardwood Logs and Lumber



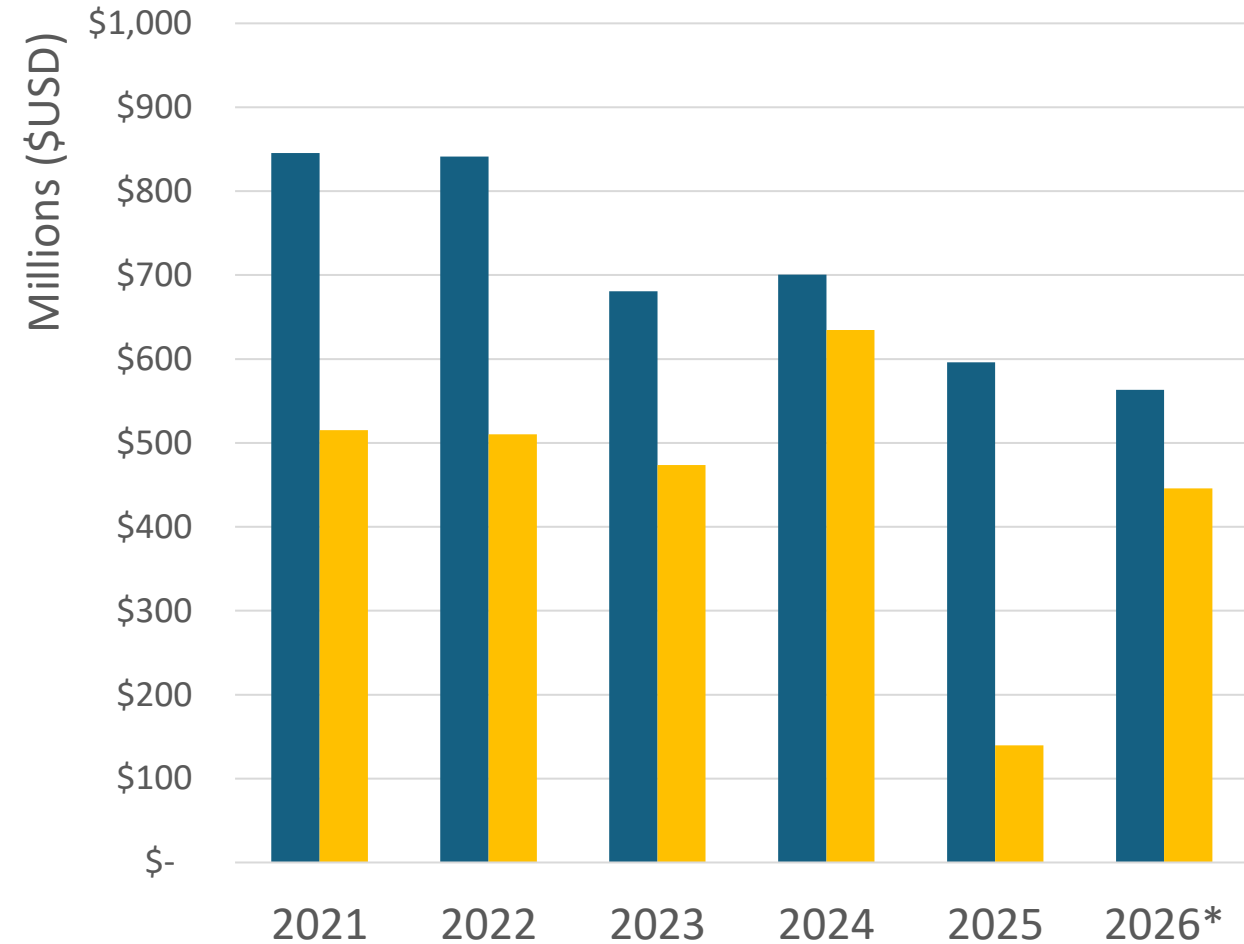
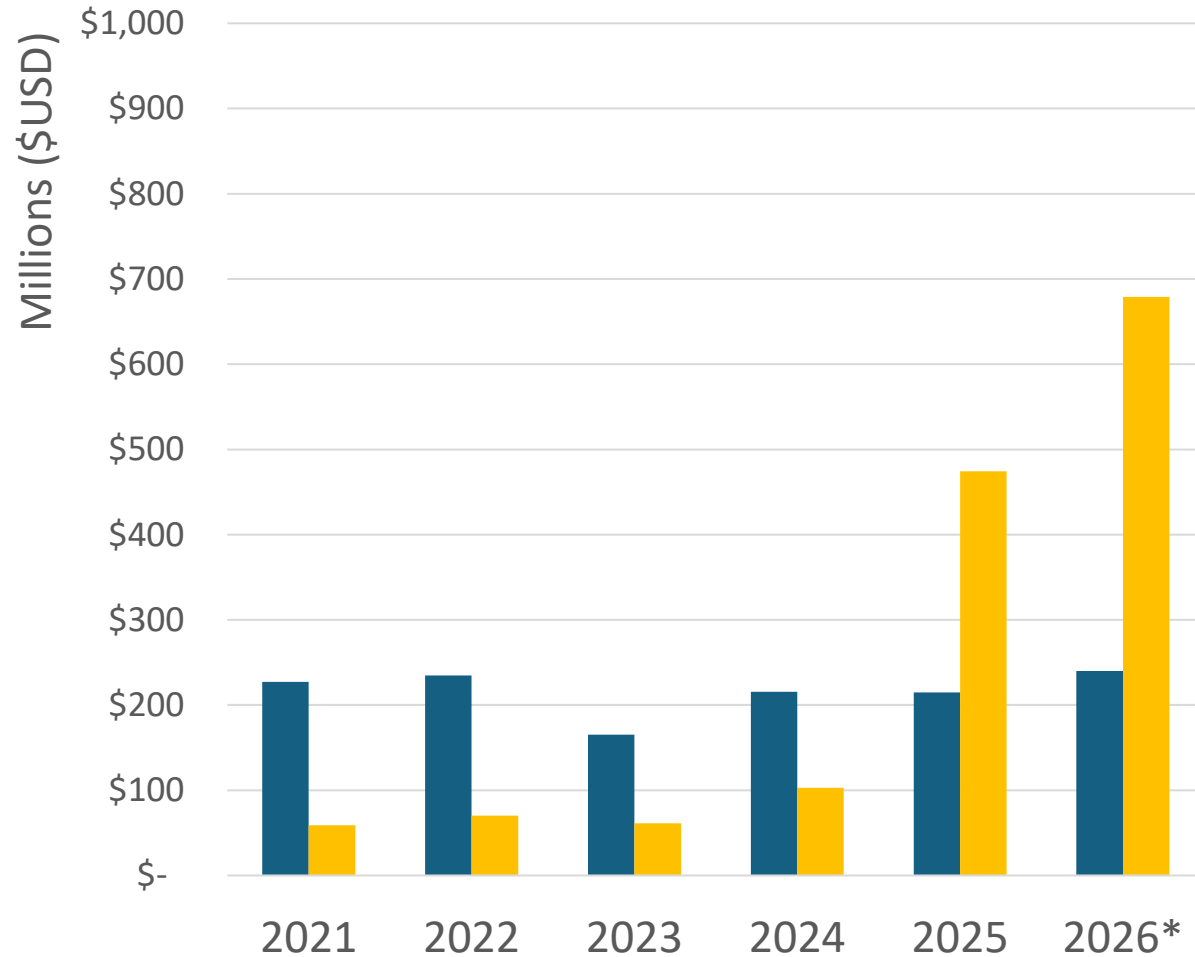
Source: U.S. Census Bureau Trade Data



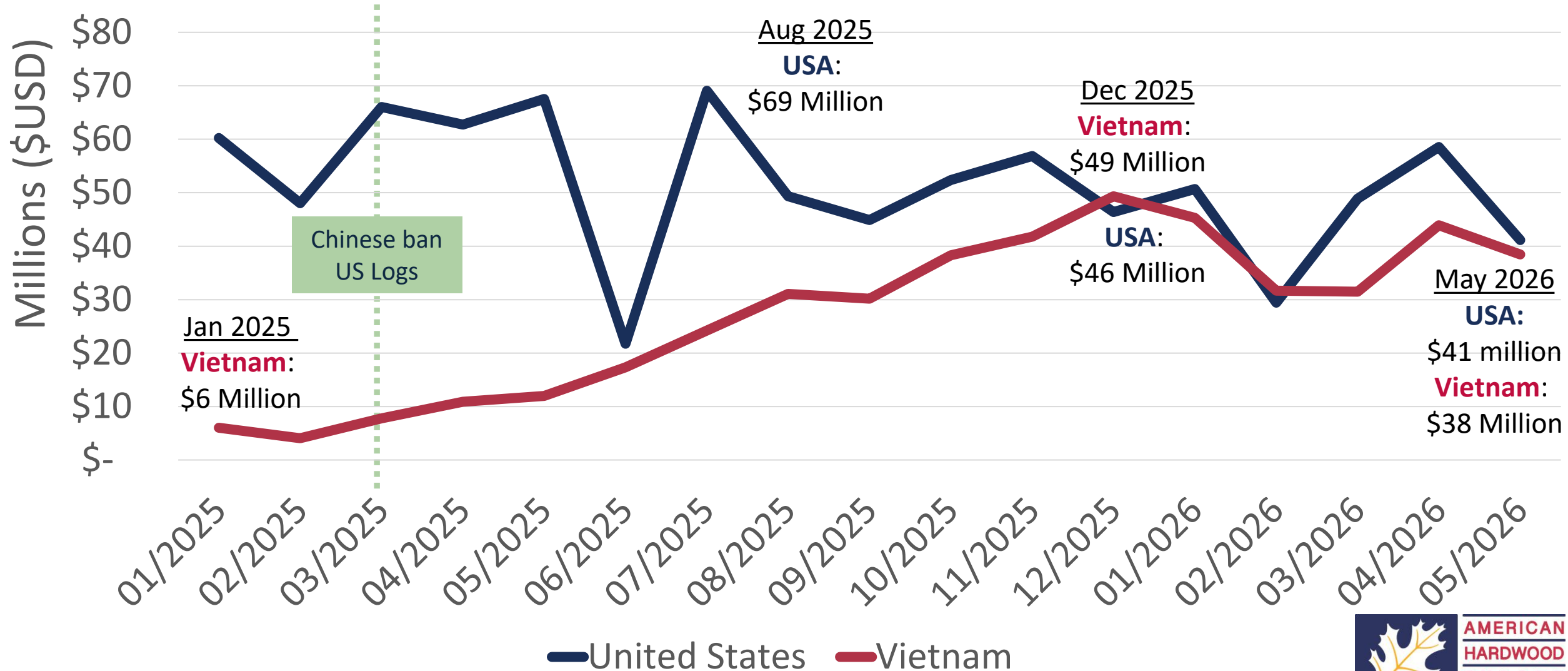
US Hardwood Lumber & Logs Exported to:

Vietnam

China

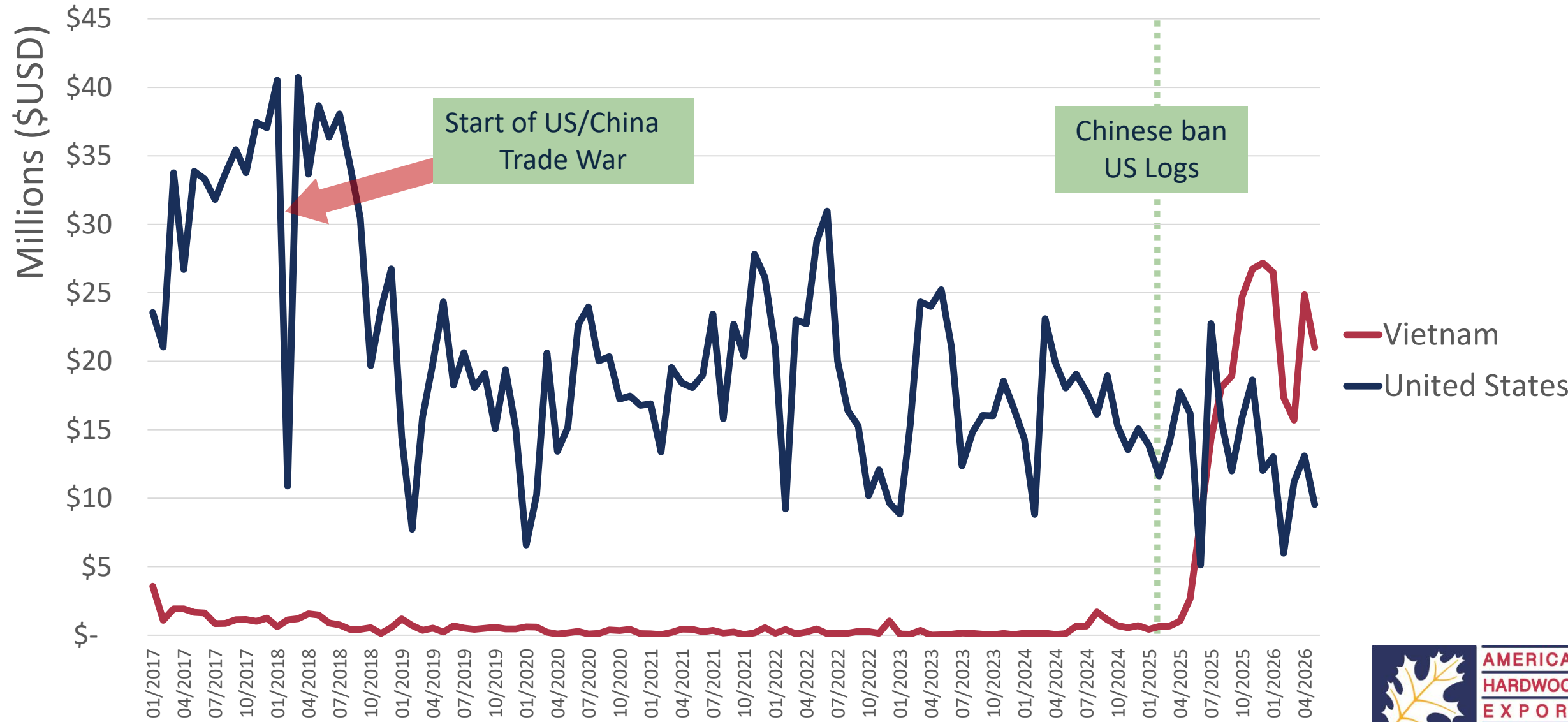


China Lumber Imports from **USA** and **Vietnam** Since 2025



China Imports of **440799 (inc. Walnut)** Lumber

Monthly, Jan 2017 to May 2026



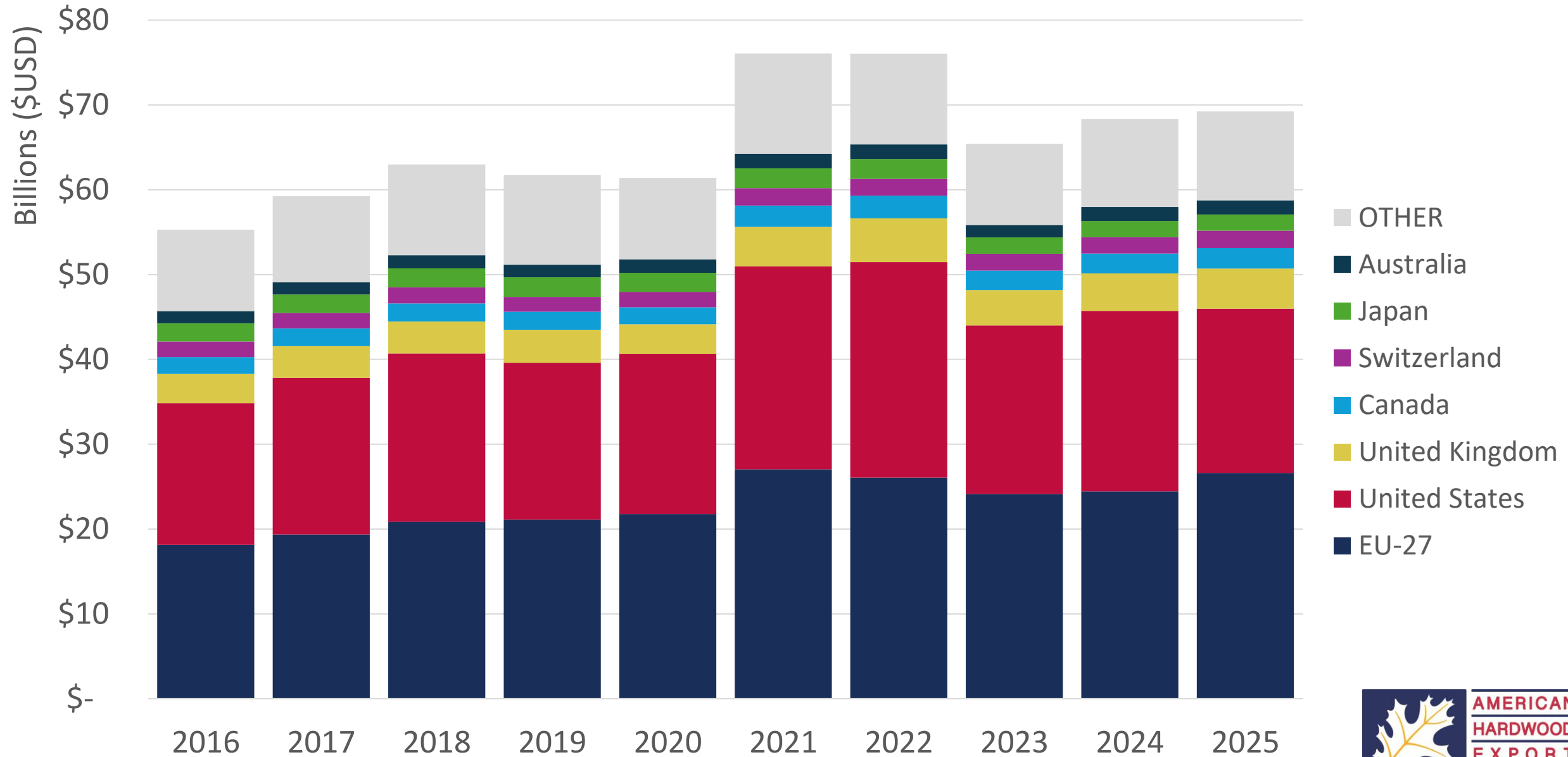
Source: U.S. Census Bureau Trade Data





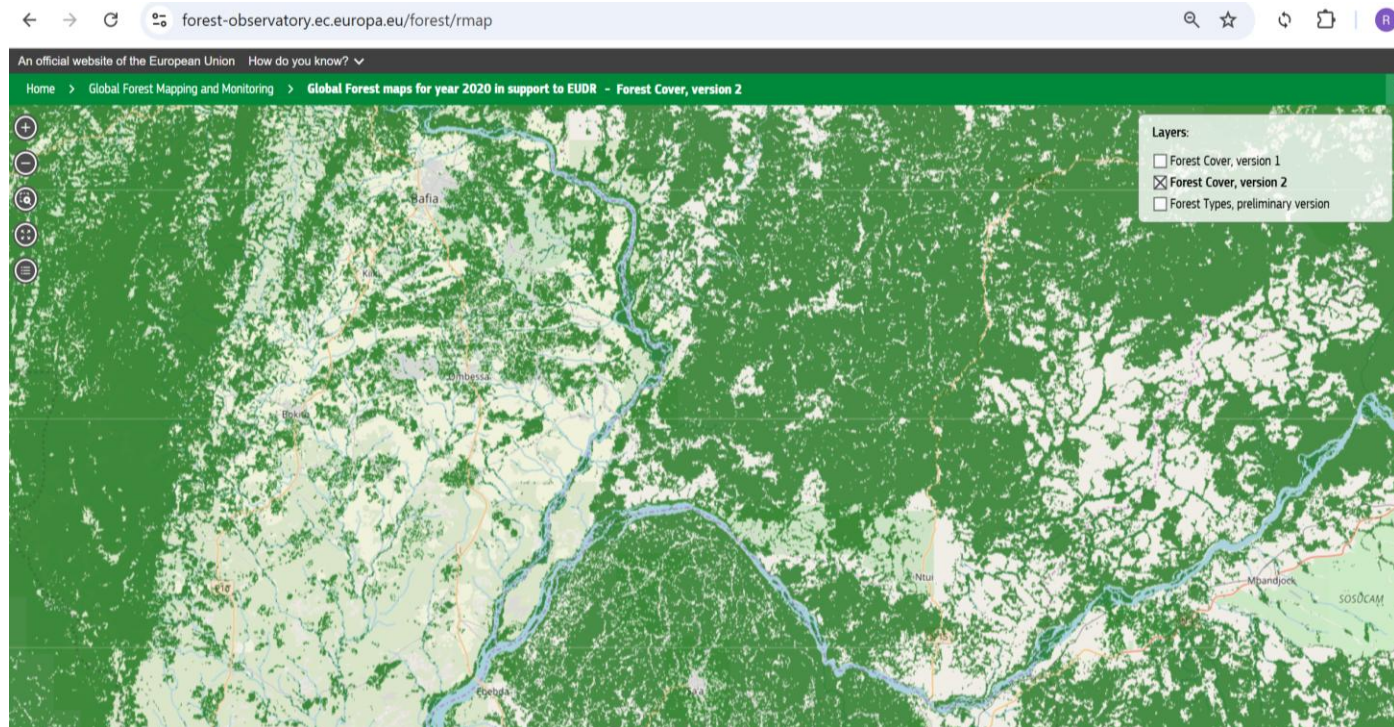
European Union Deforestation Regulation (EUDR)

Wooden Furniture Imports

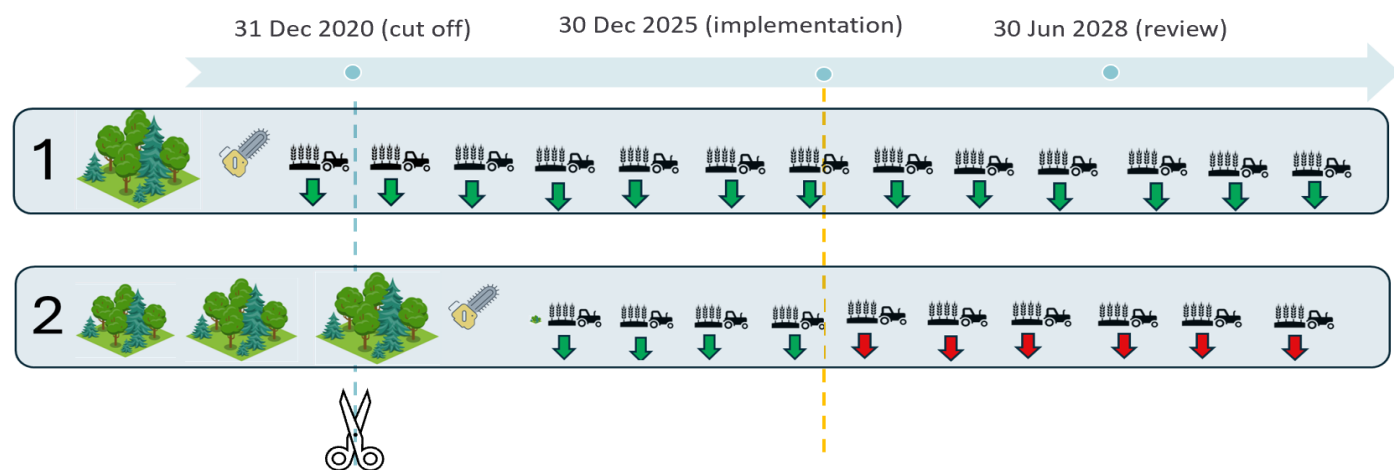


Source: Trade Data Monitor,

The BIG IDEA behind EUDR



- Trace all Ag products back to a “plot of land”
- Products coming from land that was a forest on Dec 31 2020 and now is an agricultural field cannot be placed on or exported from EU market after 30 Dec 2026
- Will use scientific testing like World Forest ID to audit
- Importer fined **4% of annual turnover**



EUDR strengths and challenges

Strengths

- Targets driver of 90% of global deforestation: Conversion to Agriculture
- Uses new technology to address deforestation and illegal logging
- Not tied to Certification

Technical challenges

- Over-estimates access to technology & data, particularly by SMEs
- Under-estimates supply chain complexity
- Poorly adapted to forest products
- Failure to understand time factor – conversion only becomes apparent several years after wood harvest
- Strict definition requires more data than the TRACES system can accept

Major Issues for US Hardwoods

- “Plot of Land” definition discriminates against smallholders
- EU operators not held to same standard in global supply chain
- EU Tracking cannot determine exact plot of land

U.S. forest ownership





Small scale hardwood harvesting

- 90% Private Landowners
- Typically harvesting once in a generation
- 11 million forest owners
- Less than 4% of family forest owners are certified
- US hardwood mills purchase from hundreds of landowners each year



US hardwood supply chain

U.S. hardwood sawmill

- Logs from ~100-mile radius
- 200-300 harvest sites per year distributed across several 100k properties
- Logs sorted by species, size, grade
- Further sorts after sawing & drying



U.S. hardwood exporter

- Purchases from ~80-100 mills
- Several million forest properties
- Distributed across several states
- Further mixing & sorting to match customer specs



**16k to 30k
potential
harvest sites
for each
consignment**

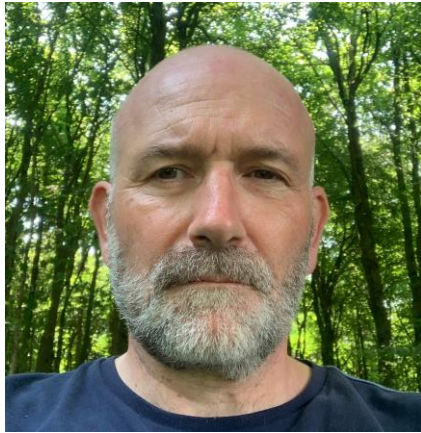


American Hardwood Assured



Legal & deforestation-free proof of provenance

The Team Behind AHA



Rupert Oliver

Environmental Policy Director, AHEC.
Over 30 years experience consulting
for Government policy and private
businesses



George White

Former Director of Global Timber
Forum, Consultant for FLEGT and
WWF's Forest & Trade Network



Ben Gunneberg

Former CEO of PEFC for over 20
years, Chair of the UK Woodland
Assurance Standard



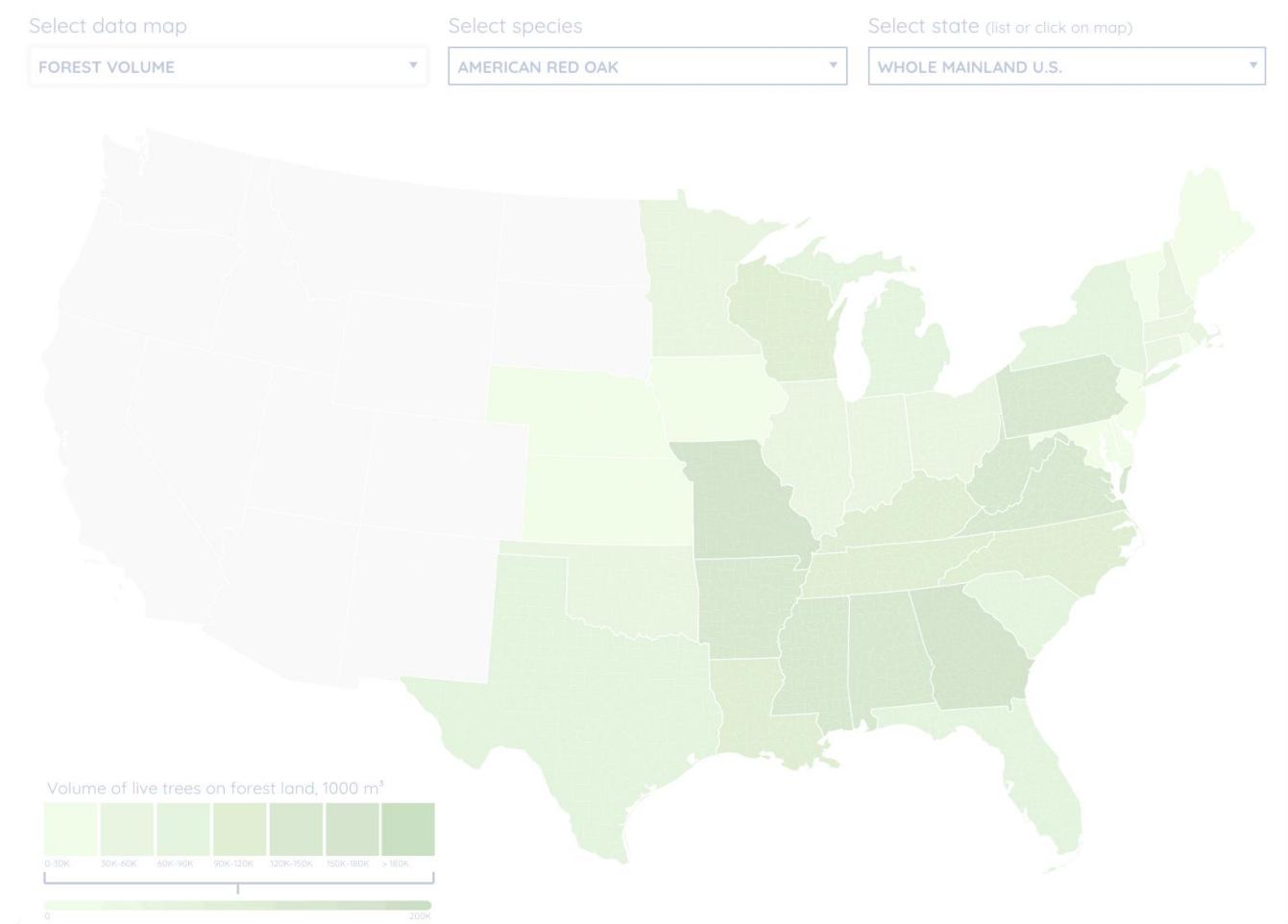
- Uses satellite mapping and AI to track forest change and detect deforestation under EUDR and FAO (UN) definitions
- For **hardwood** products (logs, lumber, veneer, etc.) from USA
- Exporters can select the **counties** they source from, and harvest site GPS data is automatically created
 - Data is in **GeoJSON format required by EU's TRACES system**
- Includes due diligence risk statements for illegal harvest/deforestation
- **FREE TO USE FOR US COMPANIES**



The four components of AHA

1. Deforestation Risk
Assessment of U.S.
hardwood forest
(county level)

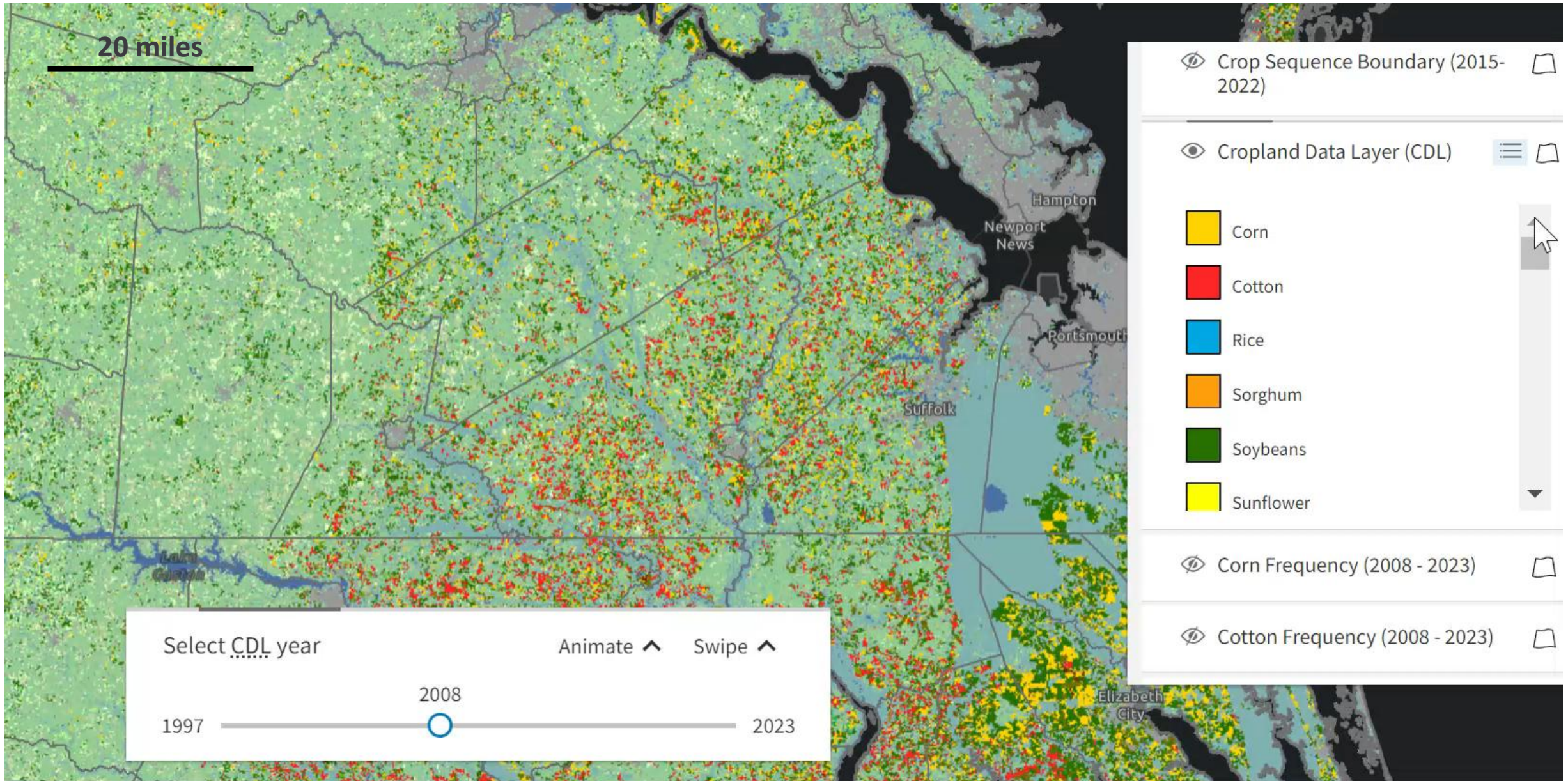
VOLUME, GROWTH
AND REMOVALS OF
ALL SPECIES AT A
STATE AND COUNTY
LEVEL



Access the map online



USDA Cropland Data Layer:





HOW THE AHA PLATFORM IDENTIFIES THE GEOLOCATION OF HARDWOOD HARVESTING SITES

The AHA Platform uses multiple sources of earth observation data and advanced analytics to detect and confirm hardwood harvesting activity.

1

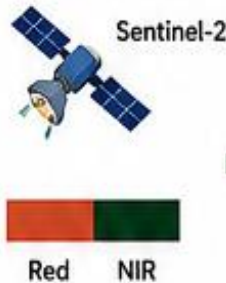
DEFINE FOREST BASE LAYER



Start with the revised 2020 JRC forest base layer to identify existing forest areas.

2

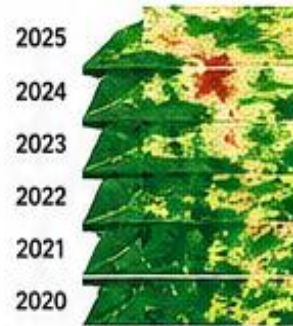
MONITOR FOREST HEALTH & CHANGE



Calculate NDVI (Normalized Difference Vegetation Index) from red and near infra-red channels to measure healthy canopy.

3

DETECT CHANGE OVER TIME



Year-on-year NDVI changes identify forest thinning, low intensity harvesting, and clear fell areas.

4

CORROBORATE WITH MULTIPLE DATA SOURCES



Cross-validate detections using independent earth observation datasets.

5

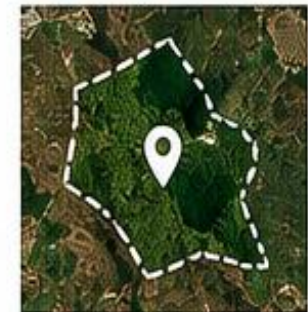
EXPERT VALIDATION (AHA EXPERT EYE)



AHA foresters review high-resolution imagery and data to confirm harvest activity and exclude other causes.

6

HARVEST SITE GEOLOCATION



Confirmed harvest areas are geolocated and made available to AHA Platform users for due diligence and EUDR compliance.



MULTIPLE EARTH OBSERVATION DATA SOURCES

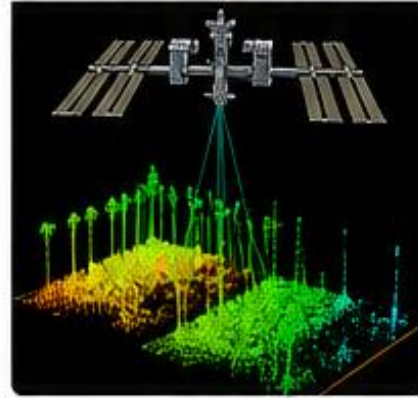
SENTINEL-2 NDVI (10 m resolution)



Low NDVI  High NDVI

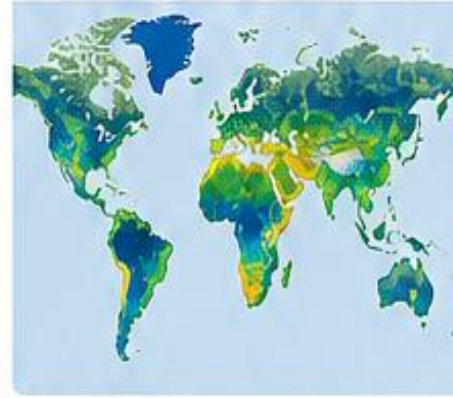
NDVI measures vegetation health and density. Changes over time reveal harvesting intensity from thinning to clear fell.

NASA GEDI LIDAR (25 m footprint)



Measures 3D forest structure and canopy height to detect biomass loss and structural changes not visible in imagery.

ESA CCI BIOMASS (100 m resolution)



Provides above-ground biomass estimates to quantify biomass loss and distinguish harvesting from non-forest conversion.

FOREST PERSISTENCE LAYER (Forest Data Partnership)

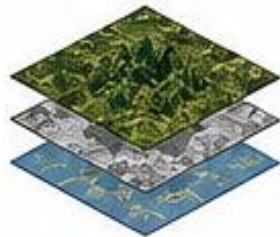


 Persisted Forest (remained forest)
 Non-persistent (forest loss)

Identifies areas that have remained continuously forested over time to help confirm harvesting vs. permanent forest conversion.

INTEGRATED ANALYSIS WORKFLOW

1. DATA INTEGRATION



All datasets are spatially aligned within the 2020 forest base layer.

2. CHANGE DETECTION



Algorithms detect significant drops in NDVI and biomass indicators year-on-year.

3. CROSS-VALIDATION



Signals are corroborated across NDVI, LIDAR, biomass, and persistence data.

4. EXPERT REVIEW



AHA foresters apply the Expert Eye to confirm harvests and refine classifications.

5. GEOLOCATION OUTPUT



Harvest polygons with precise geolocation are generated for due diligence and compliance.

Harvest Sites by the Numbers:

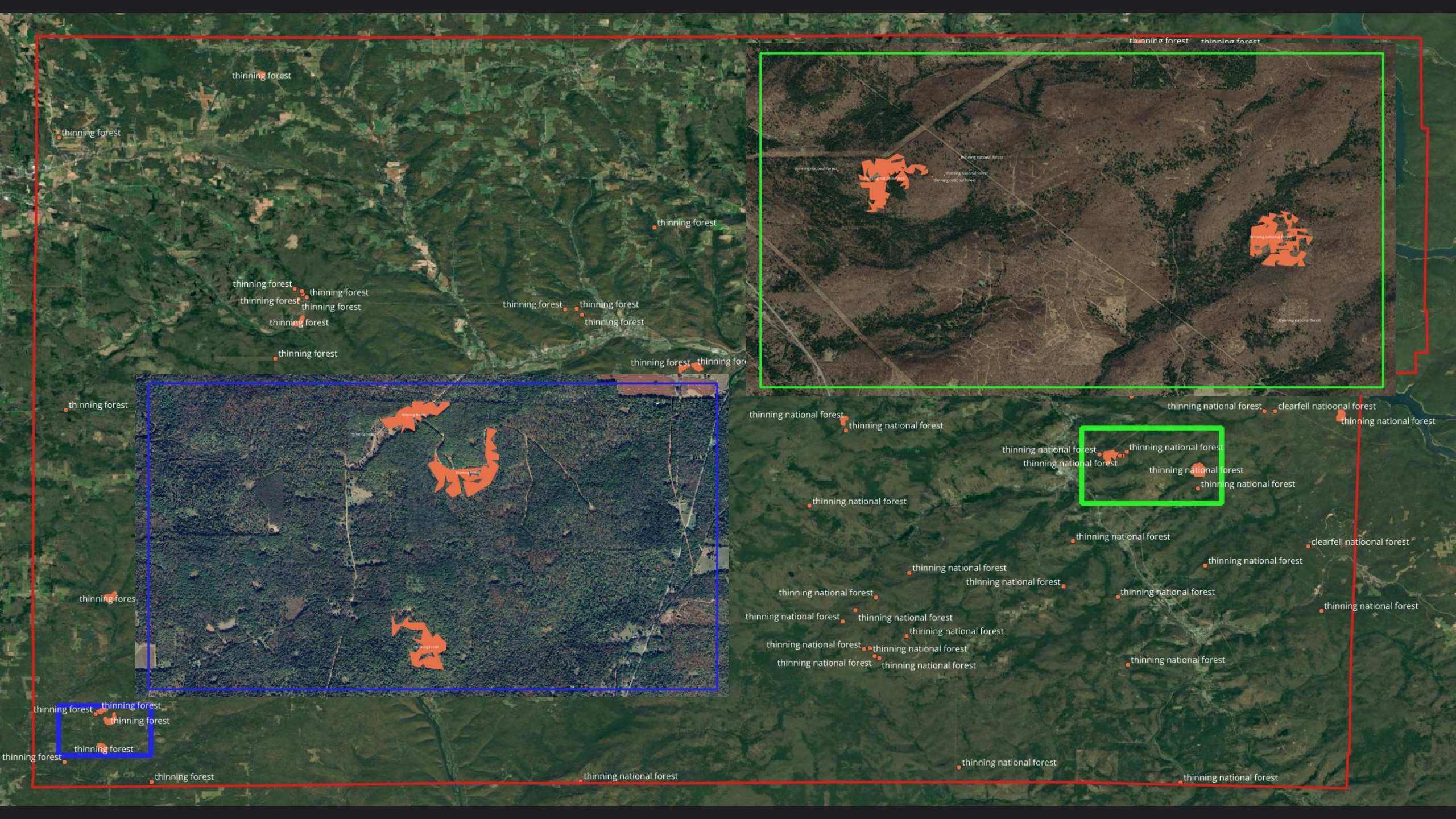
- Total harvest sites identified nationally: **121,176**
- Harvest sites identified in 2,311 of the 2,615 counties processed across the 37 states (88% of counties)
- Range per county: from 0 (many counties returned no sites) up to 2,316 in St. Louis County, MN



Figures for the September 2024 to August 2025 season. Softwood exclusive forests excluded.



thinning forest



thinning forest

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clearfell national forest
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clearfell national forest

thinning national forest

Expert Eye Truthing Tool

← Compare different satellite images to determine deforestation

Esri 2020

Esri 2024

+

-



Lawrence, IL

Left

Right

Esri 2020

Esri 2024

Was this forest in 2020?

☐ No

☐ Probably not

☐ Don't know

☐ Probably

☐ Yes

Which satellite image led you to this decision?

Select one

Was this forest in 2024?

☐ No

☐ Probably not

☐ Don't know

☐ Probably

☐ Yes

Which satellite image led you to this decision?

Select one





U.S. HARDWOOD: DEFORESTATION RISK IS NEGLIGIBLE

2025 AHA ASSESSMENT OF 2,615 COUNTIES ACROSS 37 STATES

HEADLINE FINDINGS



154.5 MILLION

HECTARES OF FOREST
ASSESSED



18,983

HECTARES OF FOREST
CONVERTED TO AGRICULTURE
PER YEAR (AVERAGE)

94,914 hectares total
(2020–2025)



0.012%

ANNUAL FOREST CONVERSION

One-sixteenth of the 0.2%
EUDR low-risk threshold



99.99%

OF FOREST AREA REMAINED
FOREST (NOT CONVERTED
TO AGRICULTURE)

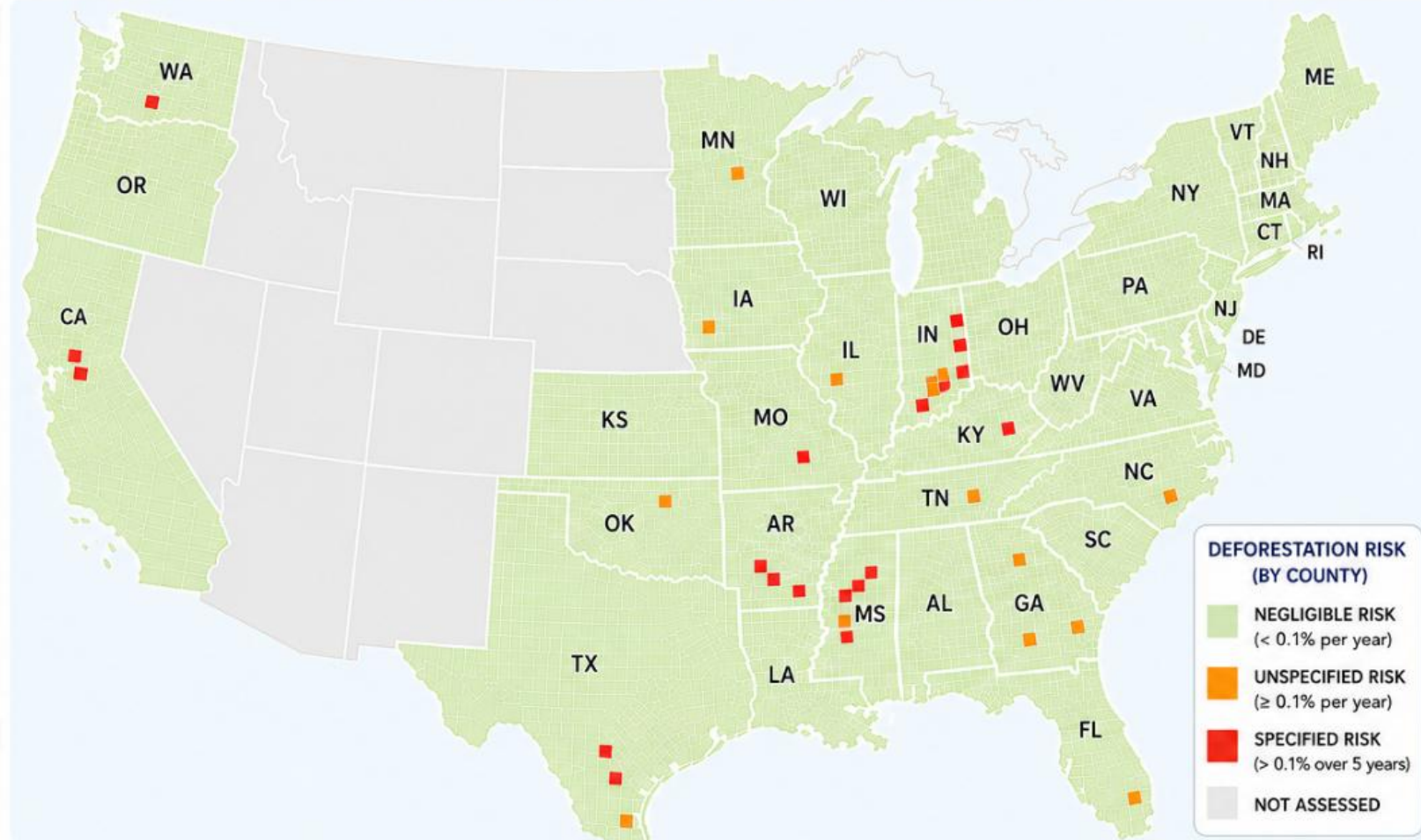
HARDWOOD PRODUCTION EXPOSURE



~11,600 m³

OF HARDWOOD PRODUCTION
POTENTIALLY FROM AREAS
CONVERTED TO AGRICULTURE
EACH YEAR

Equivalent to 1.3 m³ per 10,000 m³
of annual production (0.013%)



2,578 (98.6%)

COUNTIES
NEGLIGIBLE RISK
(< 0.1% per year)



24 (0.9%)

COUNTIES
UNSPECIFIED RISK
(≥ 0.1% per year)



13 (0.5%)

COUNTIES
SPECIFIED RISK
(> 0.1% over 5 years)



HARDWOOD HARVESTING

IS NOT A DRIVER OF DEFORESTATION

Hardwood production explains
less than 1% of the variation
in forest loss across counties.



U.S. hardwood production occurs overwhelmingly within stable, managed forest landscapes where harvested forests remain forests after harvest.

Source: 2025 American Hardwood Assured (AHA)
Deforestation Risk Assessment



The four components of AHA

1. Deforestation Risk
Assessment of U.S.
hardwood forest
(county level)

2. U.S. Hardwood Legality
Risk Assessments
(state level)



AHA Legality Jurisdictional Risk Assessment

Alabama Download endorsement summary Download full assessment	Arkansas Download endorsement summary Download full assessment	California Download endorsement summary Download full assessment	Mississippi Download endorsement summary Download full assessment	Missouri Download endorsement summary Download full assessment	New Hampshire Download endorsement summary Download full assessment
Connecticut Download endorsement summary Download full assessment	Delaware Download endorsement summary Download full assessment	Florida Download endorsement summary Download full assessment	New Jersey Download endorsement summary Download full assessment	New York Download endorsement summary Download full assessment	North Carolina Download endorsement summary Download full assessment
Georgia Download endorsement summary Download full assessment	Illinois Download endorsement summary Download full assessment	Indiana Download endorsement summary Download full assessment	Ohio Download endorsement summary Download full assessment	Oklahoma Download endorsement summary Download full assessment	Oregon Download endorsement summary Download full assessment
Iowa Download endorsement summary Download full assessment	Kansas Download endorsement summary Download full assessment	Kentucky Download endorsement summary Download full assessment	Pennsylvania Download endorsement summary Download full assessment	Rhode Island Download endorsement summary Download full assessment	South Carolina Download endorsement summary Download full assessment
Louisiana Download endorsement summary Download full assessment	Maine Download endorsement summary Download full assessment	Maryland Download endorsement summary Download full assessment	Tennessee Download endorsement summary Download full assessment	Texas Download endorsement summary Download full assessment	Vermont Download endorsement summary Download full assessment
Massachusetts Download endorsement summary Download full assessment	Michigan Download endorsement summary Download full assessment	Minnesota Download endorsement summary Download full assessment	Virginia Download endorsement summary Download full assessment	Washington Download endorsement summary Download full assessment	West Virginia Download endorsement summary Download full assessment
Mississippi Download endorsement summary Download full assessment	Missouri Download endorsement summary Download full assessment	New Hampshire Download endorsement summary Download full assessment	Wisconsin Download endorsement summary Download full assessment		



2024-2025 AHA State Risk Assessments by Dovetail
All 37 hardwood states www.hardwood.us/aha-jra-results



The four components of AHA

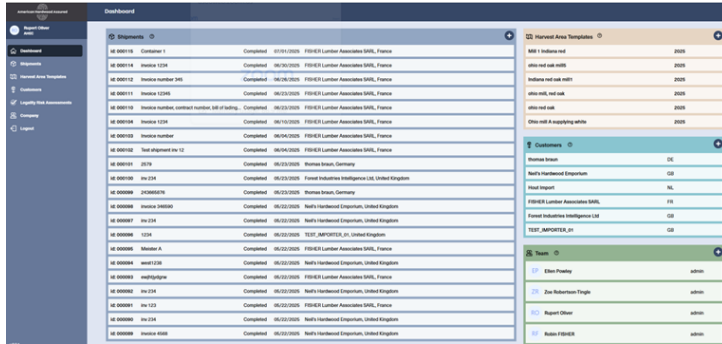
1. Deforestation Risk
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hardwood forest
(county level)

2. U.S. Hardwood Legality
Risk Assessments
(state level)

3. Web Portal for U.S.
hardwood exporters



AHA intuitive online platform

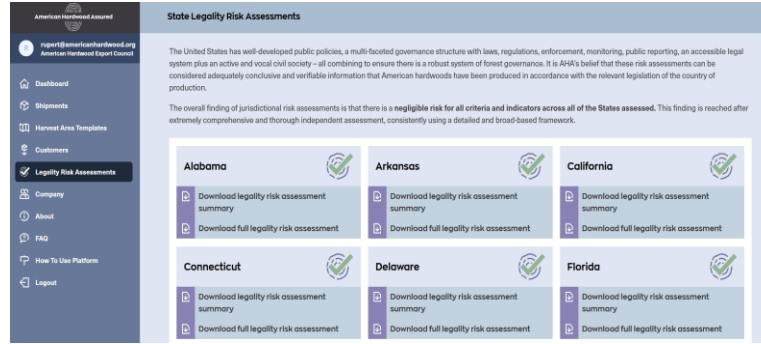


Shipments			
42 000116	Container 1	Completed	01/01/2025 FIDEER Lumber Associates SRL, France
42 000114	Invoice 1234	Completed	04/30/2025 FIDEER Lumber Associates SRL, France
42 000112	Invoice number 245	Completed	04/26/2025 FIDEER Lumber Associates SRL, France
42 000111	Invoice 12345	Completed	04/23/2025 FIDEER Lumber Associates SRL, France
42 000110	Invoice number, contract number, bill of lading	Completed	04/23/2025 FIDEER Lumber Associates SRL, France
42 000108	Invoice 1234	Completed	04/19/2025 FIDEER Lumber Associates SRL, France
42 000107	Invoice number	Completed	04/14/2025 FIDEER Lumber Associates SRL, France
42 000106	Test shipment no. 12	Completed	04/04/2025 FIDEER Lumber Associates SRL, France
42 000104	2019	Completed	04/03/2025 Thomas Bruns, Germany
42 000102	Inv 234	Completed	04/23/2025 Forest Industries Intelligence Ltd, United Kingdom
42 000099	210605576	Completed	04/23/2025 Thomas Bruns, Germany
42 000098	Invoice 200350	Completed	04/22/2025 Nath's Hardwood Exports, United Kingdom
42 000097	Inv 234	Completed	04/22/2025 Nath's Hardwood Exports, United Kingdom
42 000096	1234	Completed	04/22/2025 TEST_AMPORTER_01, United Kingdom
42 000095	Invoice 1	Completed	04/22/2025 FIDEER Lumber Associates SRL, France
42 000094	Invoice 123	Completed	04/22/2025 Nath's Hardwood Exports, United Kingdom
42 000093	Invoice 1234	Completed	04/22/2025 FIDEER Lumber Associates SRL, France
42 000092	Inv 234	Completed	04/22/2025 Nath's Hardwood Exports, United Kingdom
42 000091	Inv 123	Completed	04/22/2025 FIDEER Lumber Associates SRL, France
42 000090	Inv 234	Completed	04/22/2025 Nath's Hardwood Exports, United Kingdom
42 000089	Invoice 6568	Completed	04/22/2025 Nath's Hardwood Exports, United Kingdom

Harvest Area Templates			
M01	Indiana oak	2025	
white oak red oak	2025		
Indiana red oak red oak	2025		
white oak, red oak	2025		
white oak oak	2025		
One white & supplying white	2025		

Customers			
Thomas Bruns	DE		
Nath's Hardwood Exports	GB		
Forest Impact	NL		
FIDEER Lumber Associates SRL	FR		
Forest Industries Intelligence Ltd	GB		
TEST_AMPORTER_01	GB		

Team			
Elio Padley	admin		
Joe Robertson Taylor	admin		
Agent Oliver	admin		
Ruben FIDEER	admin		



State Legality Risk Assessments

The United States has well-developed public policies, a multi-faceted governance structure with law, regulations, enforcement, monitoring, public reporting, an accessible legal system plus an active and vocal civil society – all combining to ensure there is a robust system of forest governance. It is AHA's belief that these risk assessments can be considered adequately conclusive and verifiable information that American hardwoods have been produced in accordance with the relevant legislation of the country of production.

The overall finding of jurisdictional risk assessments is that there is a **negligible risk** for all criteria and indicators across all of the States assessed. This finding is reached after extremely comprehensive and thorough independent assessment, consistently using a detailed and broad-based framework.

Alabama
Download legality risk assessment summary
Download full legality risk assessment

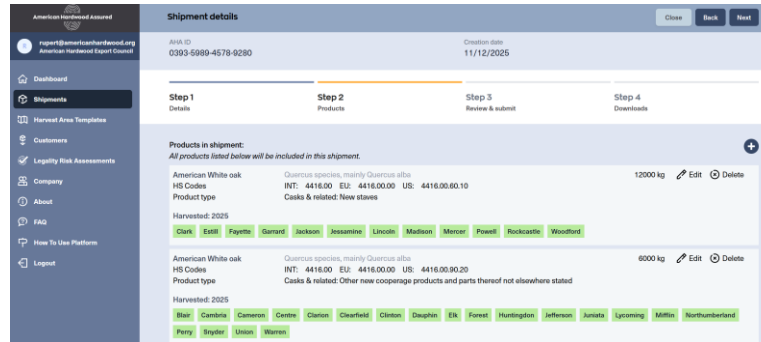
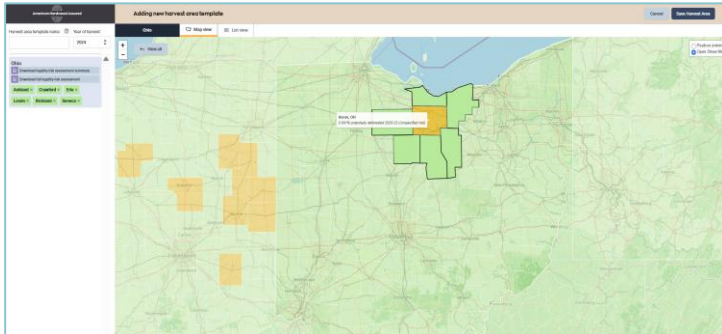
Arkansas
Download legality risk assessment summary
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California
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Connecticut
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Download full legality risk assessment

Delaware
Download legality risk assessment summary
Download full legality risk assessment

Florida
Download legality risk assessment summary
Download full legality risk assessment



Shipment details

AHA ID: 0303-5989-4578-9280
Creation date: 11/12/2025

Step 1: Details | Step 2: Products | Step 3: Review & submit | Step 4: Downloads

Products in shipment:
All products listed below will be included in this shipment.

American White oak	Quercus species, mainly Quercus alba	12000 kg	Edit	Delete
HS Codes	INT: 4416.00 EU: 4416.00.00 US: 4416.00.00.10			
Product type	Casks & related: New staves			
Harvested: 2025				
Clark	Estel	Fayette	Garnard	Jackson
Jessamine	Lincoln	Madison	Mercer	Powell
Rockcastle	Woodford			
American White oak	Quercus species, mainly Quercus alba	6000 kg	Edit	Delete
HS Codes	INT: 4416.00 EU: 4416.00.00 US: 4416.00.00.20			
Product type	Casks & related: Other new cooperage products and parts thereof not elsewhere stated			
Harvested: 2025				
Blair	Cambria	Cameron	Cedric	Clanton
Clearfield	Clemon	Daughter	Eli	Forest
Huntingdon	Jefferson	Junata	Lycorning	Mifflin
Northumberland	Perry	Snyder	Union	Warren



Delivers AHA
Statement for issue
with other shipping
documents



Exporter
American Hardwood Export Council
42777 Trade West Drive
Sterling
VA
20166

Importer
John Chan Timber Company
2003 Bank of America Tower
Admiralty, Hong Kong
Hong Kong
Hong Kong



Container number
3556

Bill of lading number
125

Products in shipment

American Cherry	Prunus serotina	10000Kg
Harvested	2025	
HS Codes	INT: 4407.94 EU: 4407.94.99 US: 4407.94.00.00	
Product type	Sawnwood: Sawn (excl. planed, sanded or end-jointed)	

Harvest state
Pennsylvania



Download legality risk assessment summary



Download full legality risk assessment

Harvest counties: Click here for more information on Deforestation risk assessment

Cameron Centre Clearfield Elk

American White oak	Quercus spp. mainly Q. alba. May include Q. prinus, Q. stellata, Q. macrocarpa, Q. lyrata, Q. muehlenbergi, Q. michauxii, Q. bicolor	15000Kg
Harvested	2025	
HS Codes	INT: 4407.91 EU: 4407.91.90 US: 4407.91.00.63	
Product type	Sawnwood: Sawn (excl. planed, sanded or end-jointed)	

Harvest state
New York



Download legality risk assessment summary



Download full legality risk assessment

Harvest counties: Click here for more information on Deforestation risk assessment

Cayuga Monroe Onondaga Ontario Oswego Seneca Wayne

Please note.This shipment includes American Hardwood products which have been sourced from one or more counties where the AHA risk assessment has identified an unspecified risk of conversion to crops during the period of harvest. The exporter has confirmed that additional mitigation action has been undertaken to demonstrate negligible risk of conversion to crops at the harvest sites in this county (or counties).
This was confirmed by rupert@americanhardwood.org of American Hardwood Export Council.

Description of action taken to mitigate risk of conversion to crops and any additional comments:

We require our suppliers in Wayne County to provide written assurance that harvesting is not part of an operation to convert for agriculture.

Origin Geo Data



Download as GeoJSON file

Important notes on the geo data file

- Click [here for detailed information on EUDR conformance of AHA county geolocations](#)
- The data file is in GeoJSON format using the WGS 84 coordinate system (EPSG:4326) as required by EUDR. To view, use only those readers set up to correctly interpret these files (e.g. [www.geojson.io](#)). Other readers (such as google maps) expect a different file format and may give inaccurate results.

Exporter

American Hardwood Export Council
42777 Trade West Drive
Sterling
VA
20166

Importer

John Chan Timber Company
2803 Bank of America Tower
Admiralty, Hong Kong
Hong Kong
Hong Kong



Container number

3556

Bill of lading number

125

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American Cherry	Prunus serotina	10000Kg
Harvested	2025	
HS Codes	INT: 4407.94 EU: 4407.94.99 US: 4407.94.00.00	
Product type	Sawnwood: Sawn (excl. planed, sanded or end-jointed)	

Harvest state
Pennsylvania

-  Download legality risk assessment summary
-  Download full legality risk assessment

Harvest counties: [Click here for more information on Deforestation risk assessment](#)

[Cameron](#) [Centre](#) [Clearfield](#) [Elk](#)

American White oak	Quercus spp. mainly Q. alba. May include Q. prinus, Q. stellata, Q. macrocarpa, Q. lyrata, Q. muehlenbergi, Q. michauxii, Q. bicolor	15000Kg
Harvested	2025	
HS Codes	INT: 4407.91 EU: 4407.91.90 US: 4407.91.00.63	
Product type	Sawnwood: Sawn (excl. planed, sanded or end-jointed)	

Harvested	2025
HS Codes	INT: 4407.91 EU: 4407.91.90 US: 4407.91.00.63
Product type	Sawnwood: Sawn (excl. planed, sanded or end-jointed)

Harvest state
New York

-  Download legality risk assessment summary
-  Download full legality risk assessment

Harvest counties: Click here for more information on Deforestation risk assessment

[Cayuga](#) [Monroe](#) [Onondaga](#) [Ontario](#) [Oswego](#) [Seneca](#) [Wayne](#)

Please note. This shipment includes American Hardwood products which have been sourced from one or more counties where the AHA risk assessment has identified an unspecified risk of conversion to crops during the period of harvest. The exporter has confirmed that additional mitigation action has been undertaken to demonstrate negligible risk of conversion to crops at the harvest sites in this county (or counties).

This was confirmed by rupert@americanhardwood.org of American Hardwood Export Council.

Description of action taken to mitigate risk of conversion to crops and any additional comments:

We require our suppliers in Wayne County to provide written assurance that harvesting is not part of an operation to convert for agriculture.

Origin Geo Data  Download as GeoJSON file

Important notes on the geo data file

1. Click [here for detailed information on EUDR conformance of AHA county geolocations](#)
2. The data file is in GeoJSON format using the WGS 84 coordinate system (EPSG:4326) as required by EUDR. To view, use only those readers set up to correctly interpret these files (e.g. www.geojson.io). Other readers (such as google maps) expect a different file format and may give inaccurate results.



The four components of AHA

1. Deforestation Risk
Assessment of U.S.
hardwood forest
(county level)

2. U.S. Hardwood Legality
Risk Assessments
(state level)

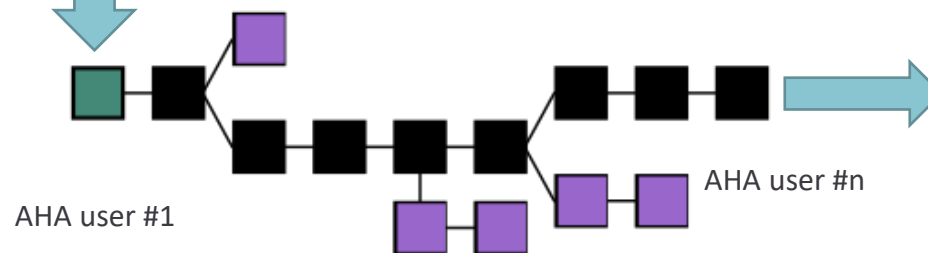
3. Web Portal for U.S.
hardwood exporters

4. Proof of Provenance testing
and Global Blockchain
2027





Legal & deforestation-free proof of provenance

[Origin Geo Data](#) [Download as GeoJSON file](#)[illegible]

End consumer



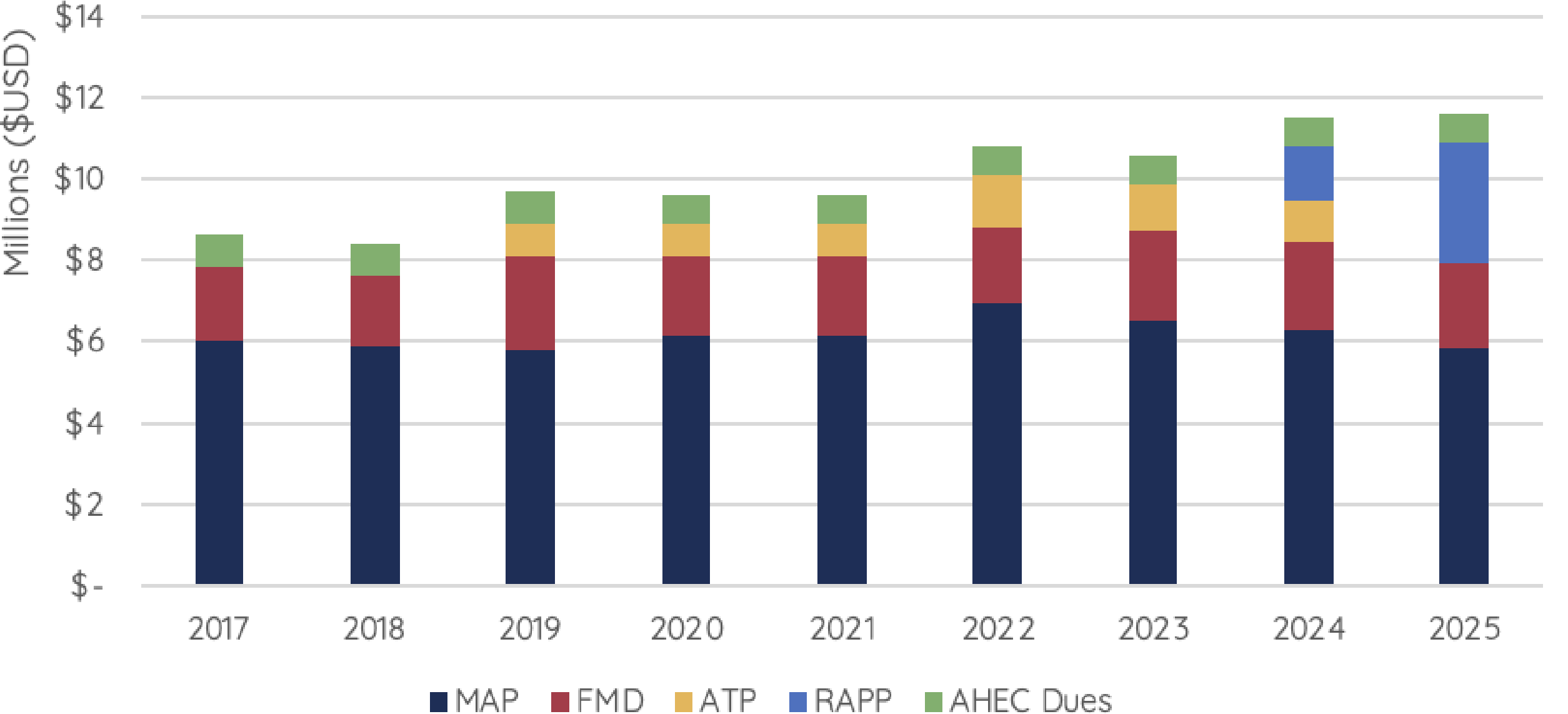
AHA
surveillance

Random inspections integrated with the latest plant chemistry-based provenance technologies to ensure the accuracy of county origin claims

- US Forest Service WISC
- Using plant chemistry to identify provenance
 - LIBS Handheld technology
 - Stable Isotope Ratio Analysis
 - Trace Element Analysis
- Resolution up to within 40 miles or origin



All AHEC Funding Sources



Thank You

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