

# The Views from Washington and Ottawa: *A Keynote in Two Parts*



Samantha Simon

Senior Invasive Species Coordinator  
U.S. Department of Agriculture



Anthony Hopkin

Director, Entomology and Phytosanitary Service  
Natural Resources Canada, Canadian Forest Service



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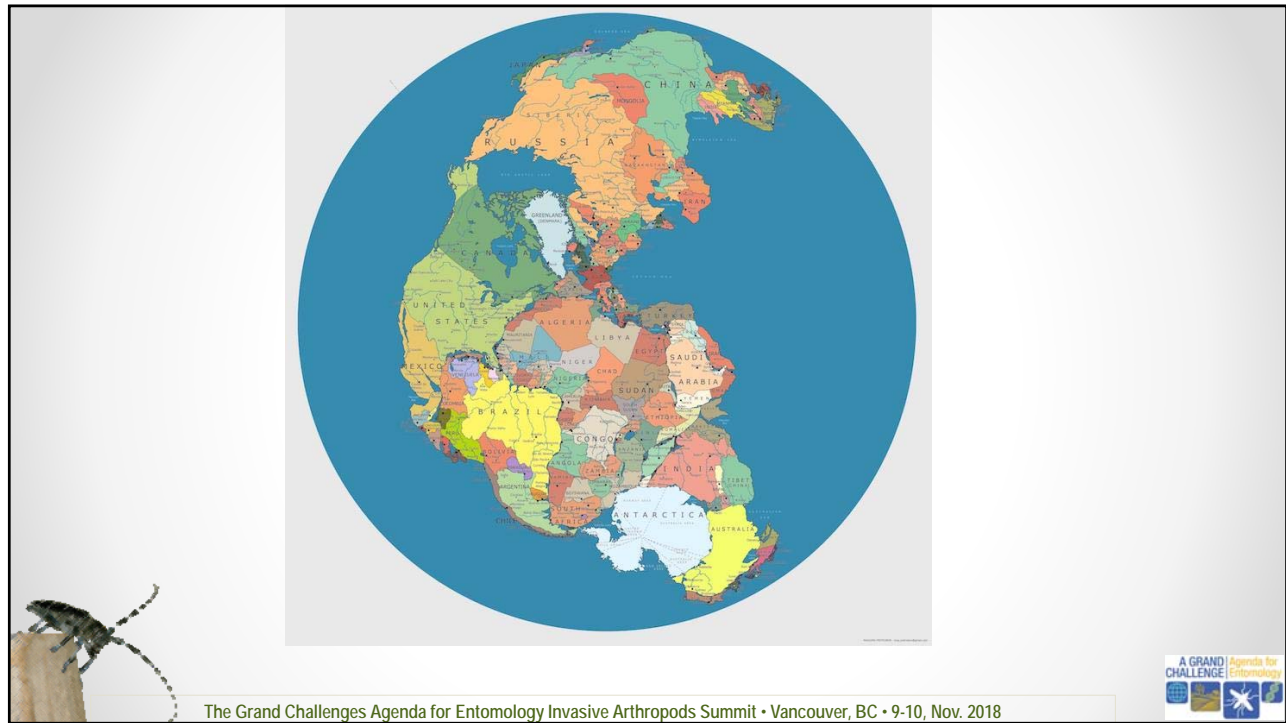
Alien Species are a reality of trade **and** a threat to ecosystems and the economy, **but** the threat can be minimized through appropriate actions, **therefore** policies to reduce introduction, and promote timely action when introduction occurs, are essential.

**The view from Ottawa**  
**A. A. Hopkin**

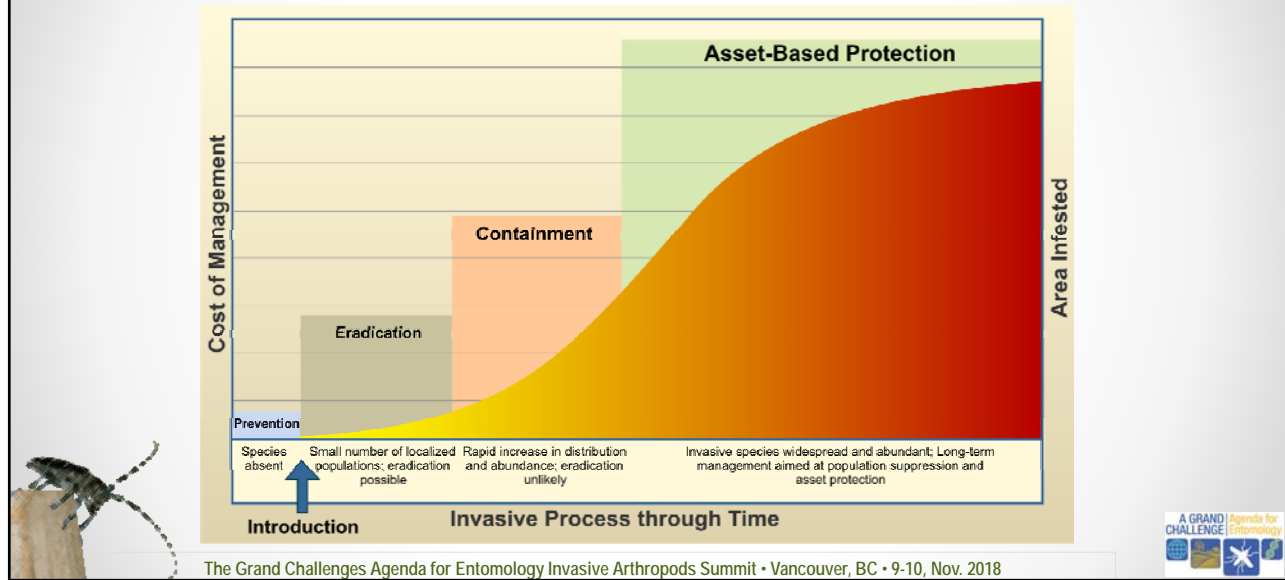


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## An ounce of Prevention



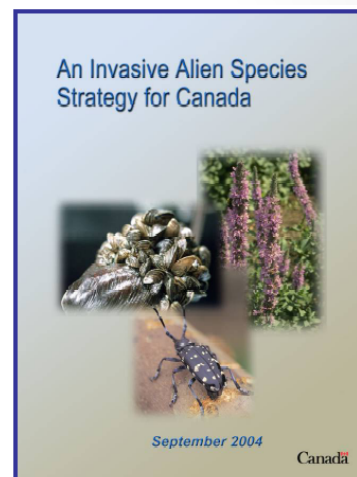
## IAS Strategy for Canada

### Purpose

- To minimize the risk of invasive alien species to the economy, environment, and society
- Cooperative program among Federal/Provincial/municipal agencies

### Strategic Goals

- Prevention
- Early Detection
- Rapid Response
- Effective Management of Existing IAS



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## PATHWAYS



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### Phytosanitary regulations



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- International Standards
- (ISPMs 15, 39, 41)
- Developed to ensure import and export wood commodities and equipment are free of pests and pathogens of phytosanitary concern
- Functional relationships with international organizations like NAPPO and IPPC which for decades have developed scientifically sound regulatory guidelines. Do not work 100%.
- We solicit the input of the scientific community to help us make them more robust, help out! We saw the challenges in the 1990s and since have been cooperating well internationally. (Noseworthy, *Pers comm*)



- Access to practical risk models that assess the likelihood of pest establishment
- Better data and tools to prevent the entry of pests, or to monitor, manage or eradicate forest pests of concern.
- Improved risk management decision making, policy development and implementation for the commodities that pose a phytosanitary risk
- Improved collaboration within a North American strategy



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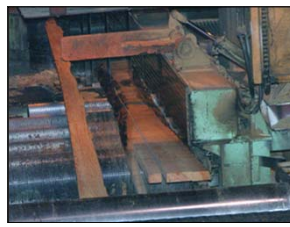
## Wood Products System Approach

### Example – Ash sawn wood

- Emerald Ash Borer *Agrilus planipennis*
- Processes used in production of ash lumber reduce risk of moving EAB
- Effectiveness of pest risk reduction process is based on understanding the biology and life history traits



Debarking



Milling



Heat treatment - kiln drying



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## ALHB: A success Story?


 Canadian Food Inspection Agency    Agence canadienne d'inspection des aliments  
 **Toronto**  
 **Conservation**  
for The Living City  
 Natural Resources Canada    Ressources naturelles Canada  
 Canadian Forest Service    Service canadien des forêts  
 **City of Vaughan**  
The City Above Toronto  
 **York Region**  
 **Ontario**

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## Dynamic Risk Model for managing Asian Gypsy Moth

- Development of a Dynamic Risk Maps for operational management of gypsy moth (Asian & European)
  - In collaboration with the Province of BC

Open source R project that synthesizes all available risk information to produce operational scale risk maps (30m resolution) to facilitate rapid decision making

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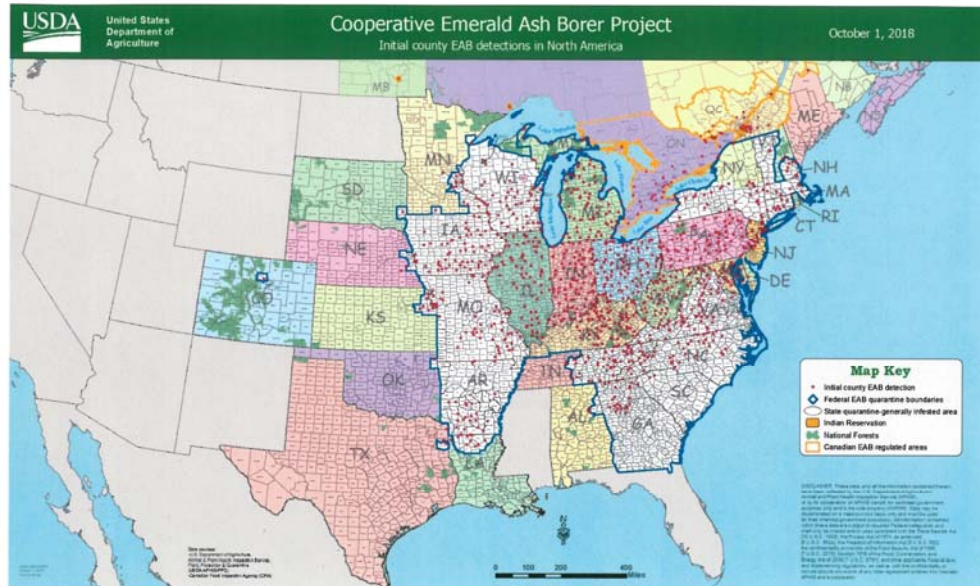
## Emerald Ash Borer



Detroit, Windsor 2002  
London 2006  
Toronto 2007  
Ottawa 2008  
Montreal 2011



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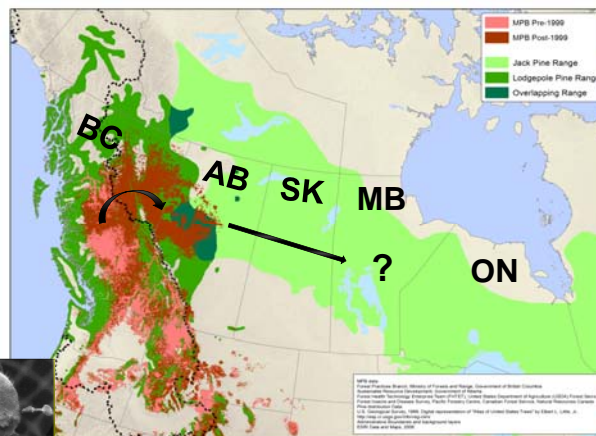
Movement  
via firewood  
the most  
common  
vector



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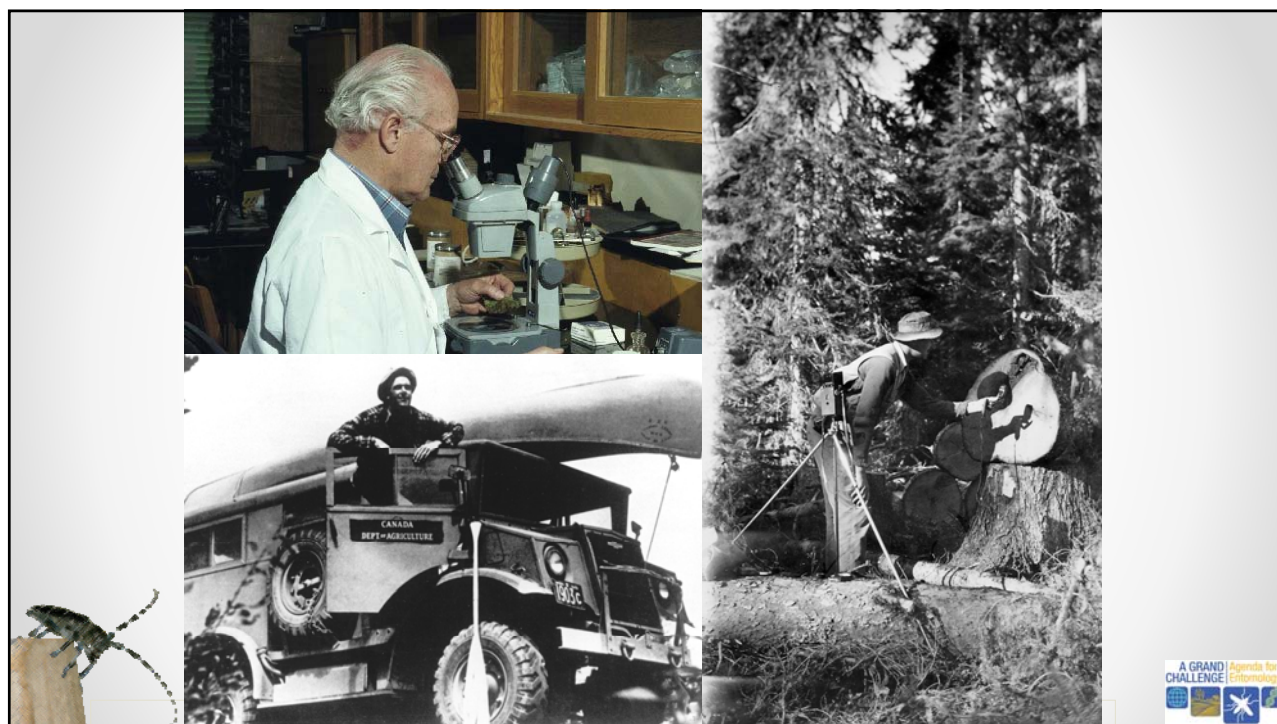
BC Outbreak Facilitated MPB Range Expansion east of Rockies:  
...into a new ecosystem – MPB a native invasive?



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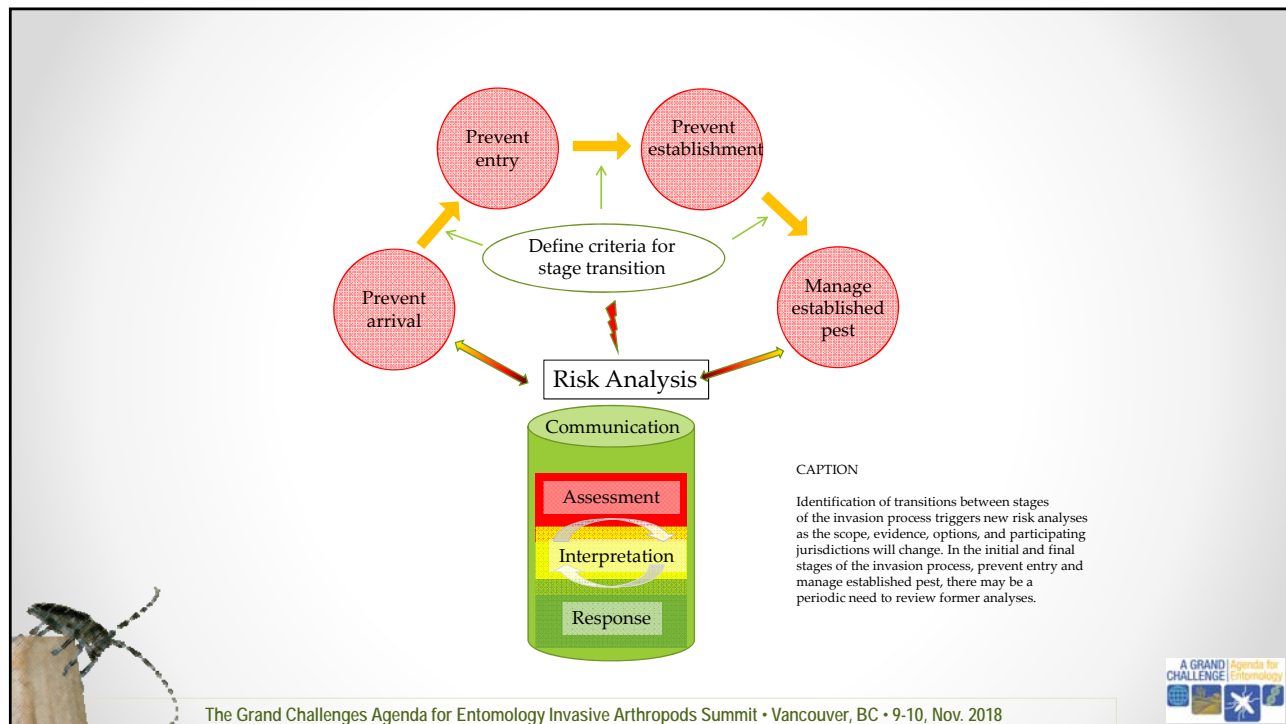




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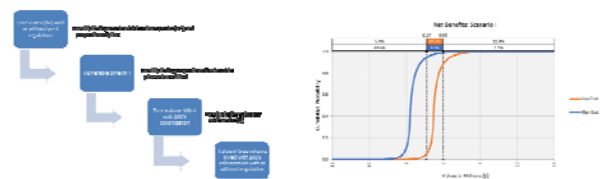






## It isn't always worth it

Cost-benefit analysis of managing an invasive species: *Tomicus pineperda*



Assessing timber and other damages involves: 1. defining the geographical scope; 2. defining the vulnerable resource; 3. defining the time period(s) under which damages will occur; and 4. estimation of damages with and without management effort. The difference between damages estimates is avoided damages or in other words estimated benefits from management.

Compare estimated benefits of management (avoided damages) to the costs of management to arrive at the net benefits of management. Require net benefits to be greater than zero. In the case of *Tomicus pineperda*, only an 11% chance that management returns a positive result, even under very optimistic scenarios of efficacy of management. That is, expected net benefits are negative. Better to not manage and re-allocate resources to other management activities that offer a better chance of providing society a net benefit.

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