

WHAT IS THIS SEED?

INCREASING THE EFFICACY OF INVASIVE SPECIES INTERCEPTIONS AT OUR NATION'S BORDERS

SE-EPPC & NC-IPC
May 2015
Chapel Hill, NC

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Japanese Knotweed



Japanese Climbing Fern



Cogongrass

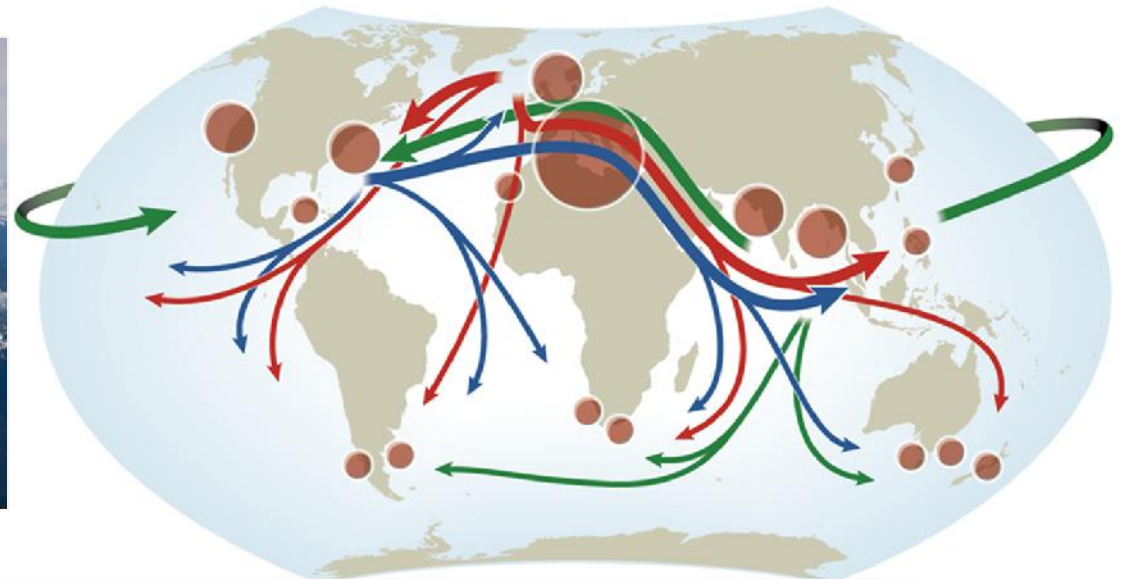


Golden Bamboo

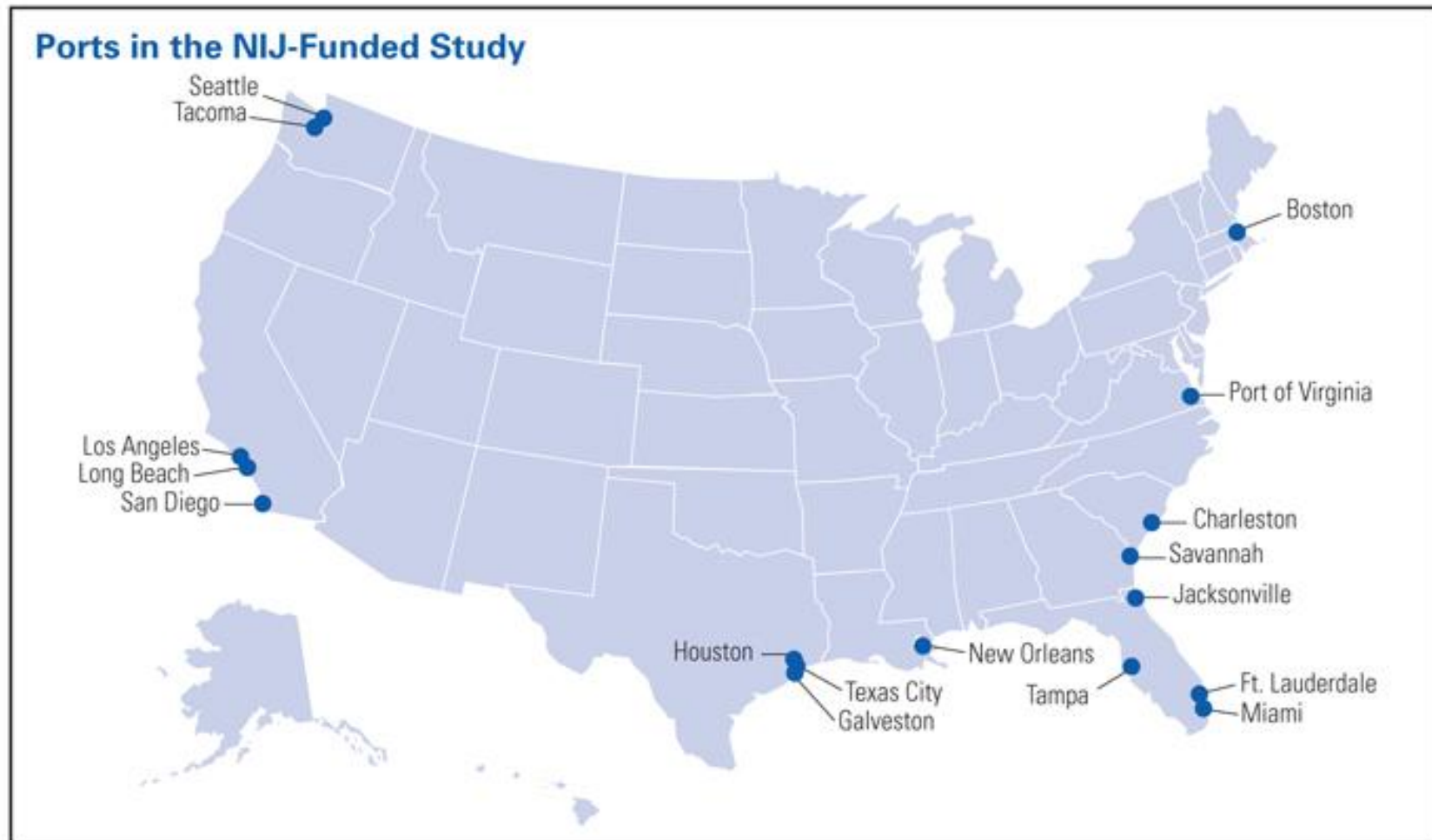


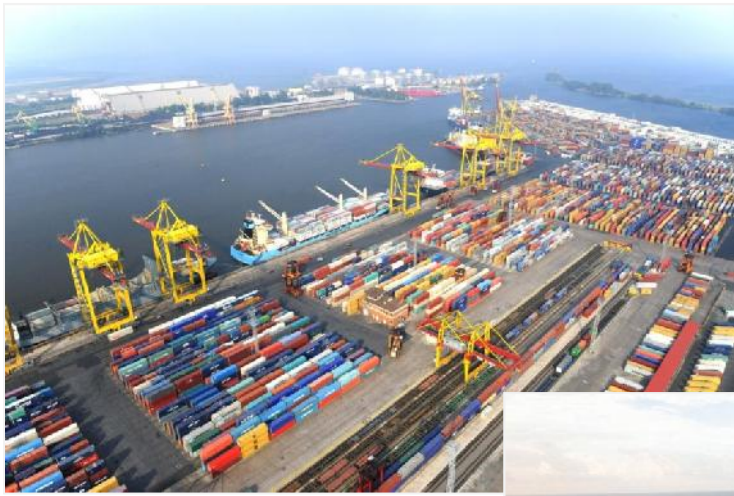
Amur Honeysuckle

How do invaders arrive?



Major US Ports







Shipping container purpose: *move commodities*



Refrigerated Cargo Containers

Refrigerated and Frozen

- Chicken
- Fish
- Fruit
- Vegetables







Why is it important?

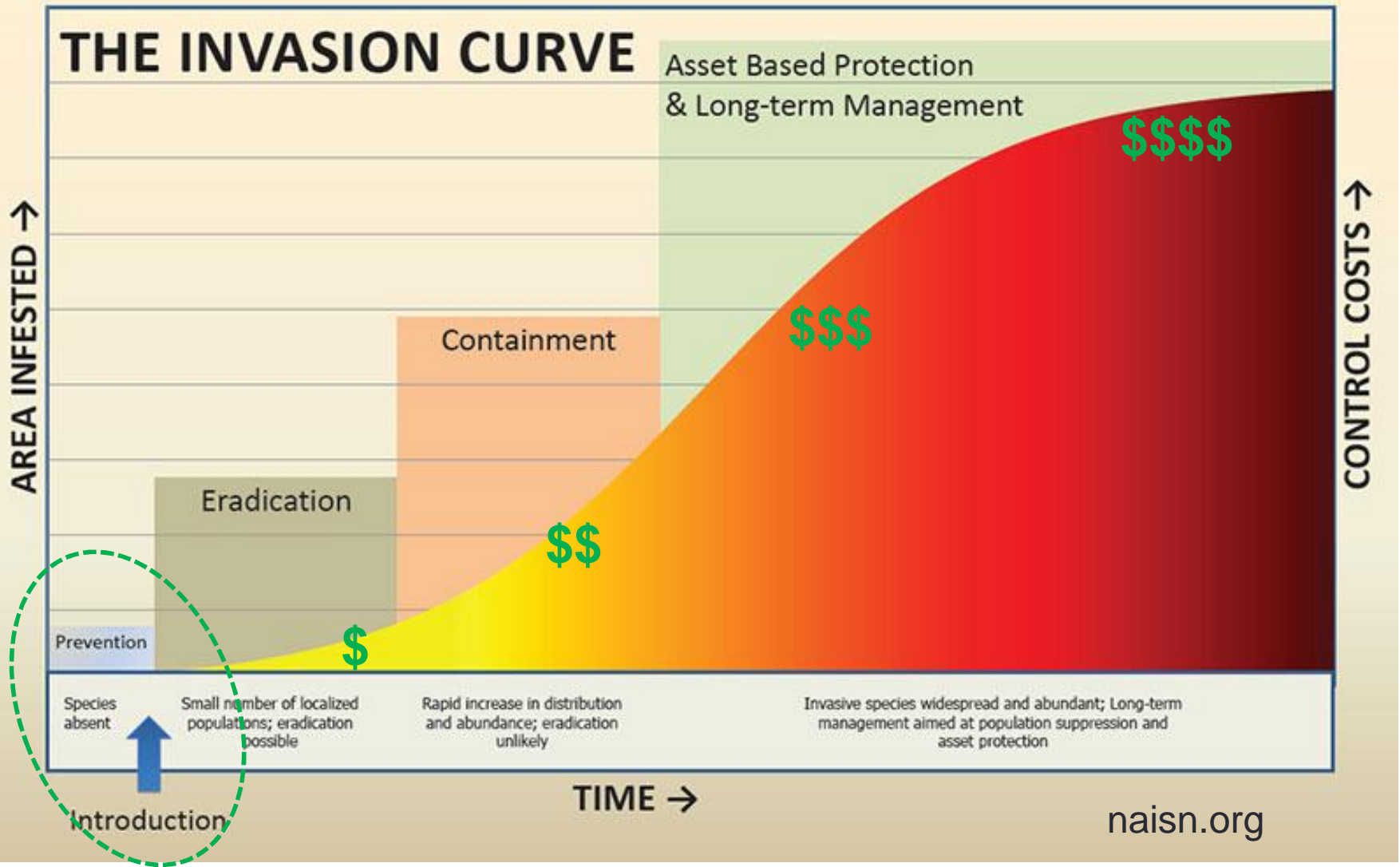
- “Invasive species pose dire consequences on our nation's economy, potentially more so than even a single terrorist act could have.”

(from www.cbp.gov; March 6, 2009)



Cogongrass seeds intercepted US Customs and Border Protection in Baltimore, MD

Our Focus



Our Approach

- Location: Port of Savannah
- Term: 2 years
- Method:
 - Viability
 - Morphological
 - Genetic



Why Savannah?

- Key Location
- 4th Largest-2nd Busiest in US
- “Largest Single Container Terminal in North America”
- Over 3 million containers moved annually





US CBP, Port of Savannah

Viability

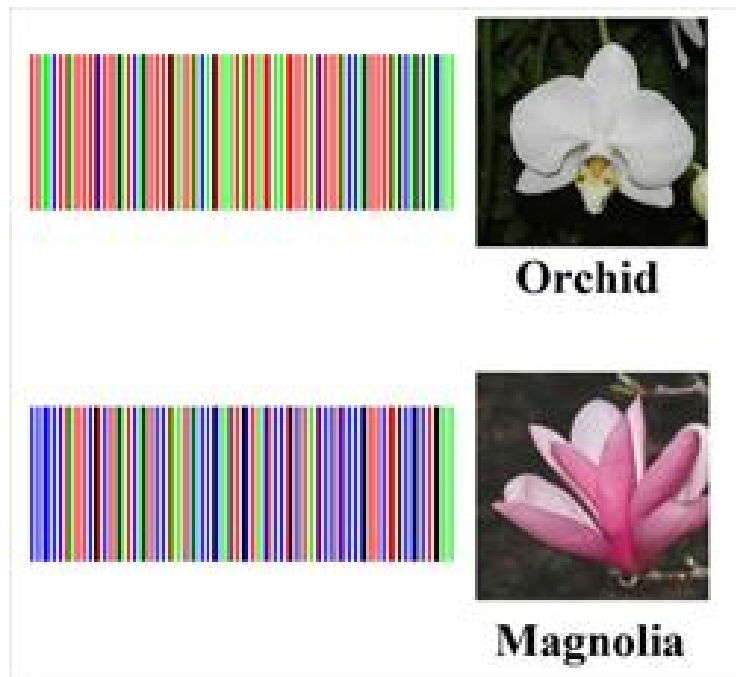


Morphological ID

- Vouchered and Accessioned by Herbarium
- Authoritative Determination
- Digitally Accessible

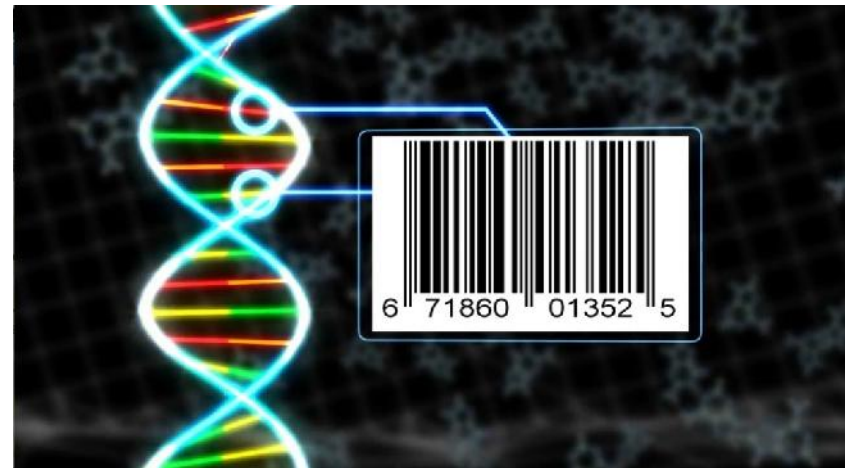


DNA Barcode Development



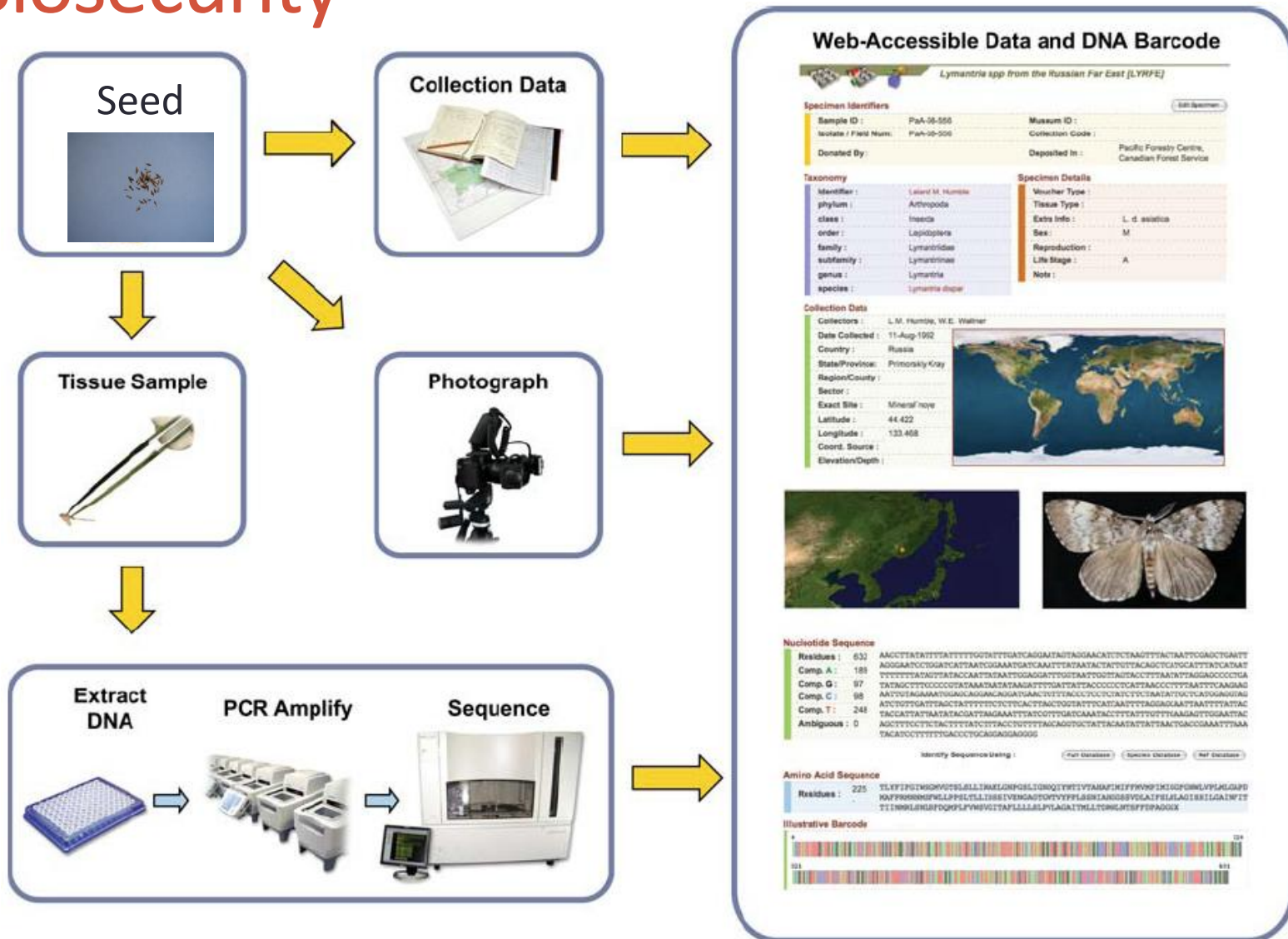
nybg.org

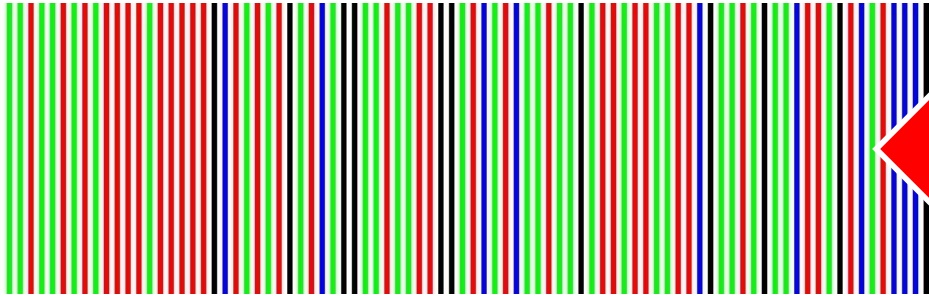
- Reference DNA from varied tissues or life stages



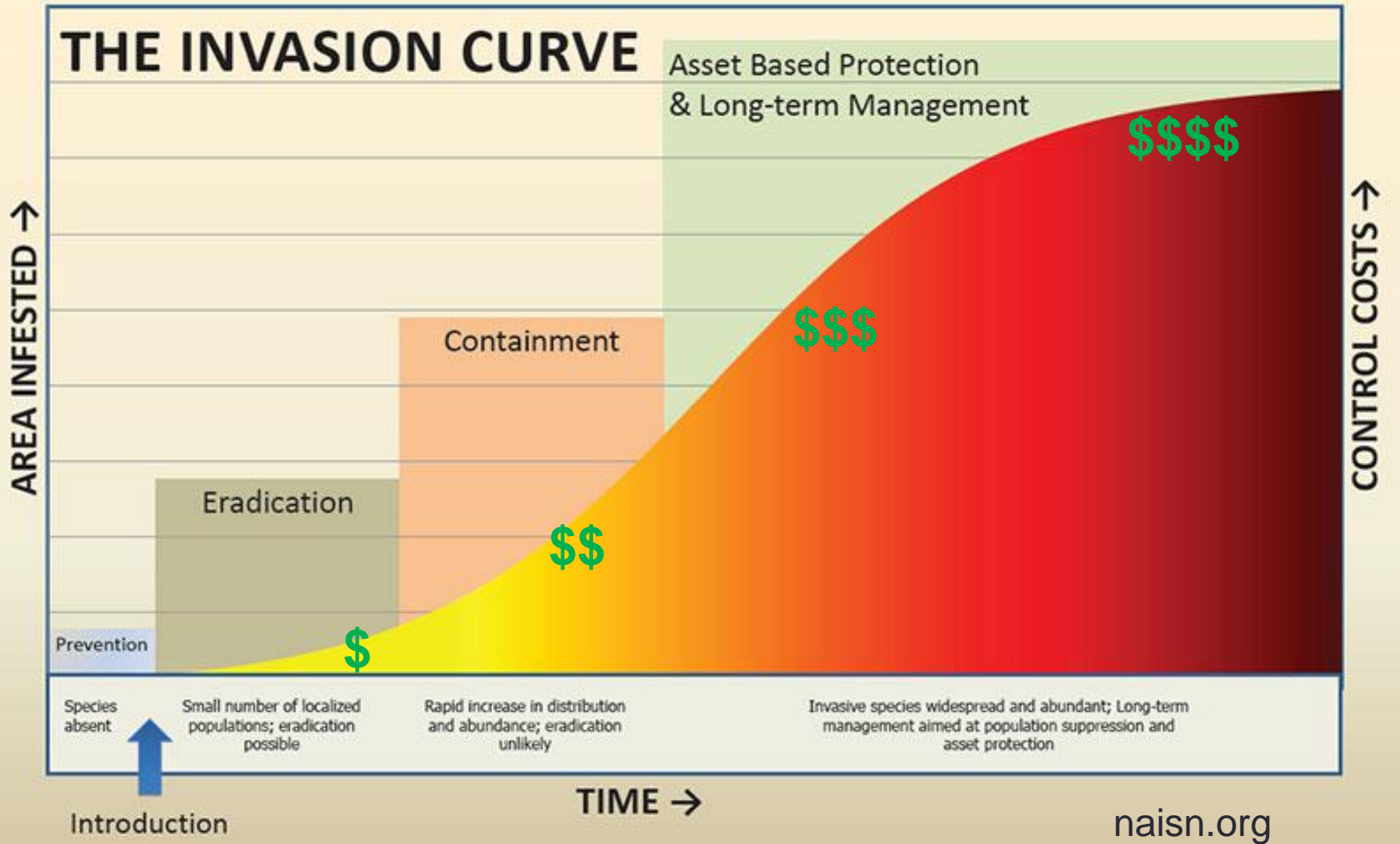
earthsky.org

Biosecurity





How much is saved?



Acknowledgements

- US Customs and Border Protection, Dept. of Homeland Security
 - Ofc. MA King, SCBPAS
- USDA APHIS PPQ
 - Dr. WC Kauffmann



U.S. Customs and Border Protection



GEORGIA FORESTRY COMMISSION

protecting and conserving Georgia's forests



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