

Invasive Exotic Species Strategic Action Framework

Working Group/Science Coordination Group
November 19, 2013



2013 Task Force Direction

- July 9, 2013 Task Force Meeting
 - The Working Group recommended the development of a Comprehensive Invasive Species Strategic Action Framework (2013) that includes a cross cut budget (2010)
 - OERI to hold a high-level partnership workshop to discuss Strategic Action Framework
 - Provide coordination support for federal invasive species efforts (2010)



Framework Progress to Date

- Two meetings held
 - September 17, 2013
 - November 13, 2013
- Draft Developed:
 - Table of Contents
 - Vision/Goal Statements
 - Case Studies
- Web Portal enhancements
- Outreach to additional partners

Growing the Partnership

November Meeting – New Partner Presentations

- USFWS: David Pharo (Resident Agent in Charge) and Carlos Pages (Wildlife Inspector)
- U.S. Customs and Border Protection: Eunett James-Mack (Florida Agriculture Liaison)
- Zoo Miami: Frank Ridgley, DVM (Conservation and Research Manager)
- UF/IFAS: Edward “Gilly” Evans (Economist/Professor)



USFWS

- David Pharo (Resident Agent in Charge)
- Carlos Pages (Wildlife Inspector)

Special Agents

Plainclothes Criminal Investigators

Enforce wildlife laws nationwide

Investigations focus on:

Illegal trade

Unlawful take of native species

Habitat destruction

Wildlife Inspectors

Uniformed unarmed Import/Export control officers

Stationed at major airports, ocean ports, & border crossings

Enforce U.S. Wildlife Regulations and Foreign

Laws:

Compliance monitoring

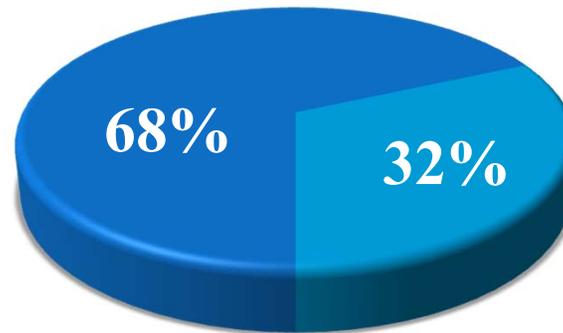
Smuggling interdiction

Wildlife Inspector K-9



Port of Miami Statistics

Inspections Resulting in Law Enforcement Actions

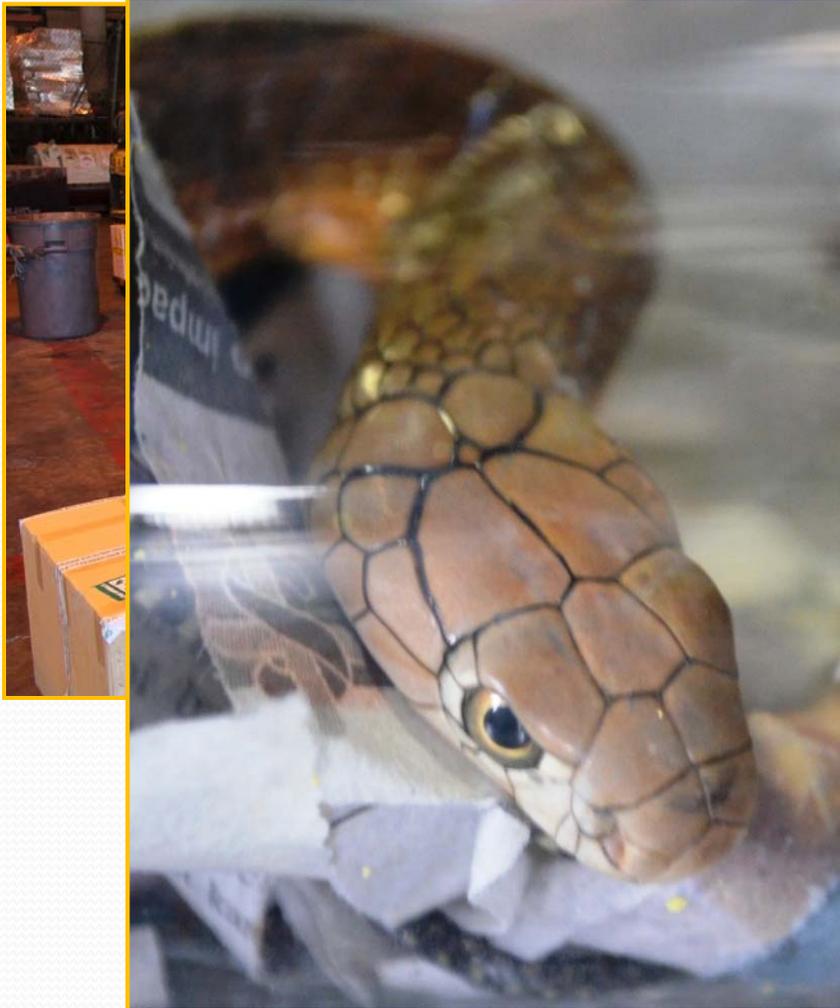


■ Cleared ■ Refused Clearance

- Statically, this equates to enforcement action being taken 1 out of 3 physical inspections that are being conducted.

Interagency Collaboration

FWCC Support



Also collaborate on seizure of Florida prohibited species

Pictured: King cobra and tiger fish

Interagency Collaboration

USCBP/USFWS

Passenger Baggage Inspections



USPS Foreign Mail Inspections

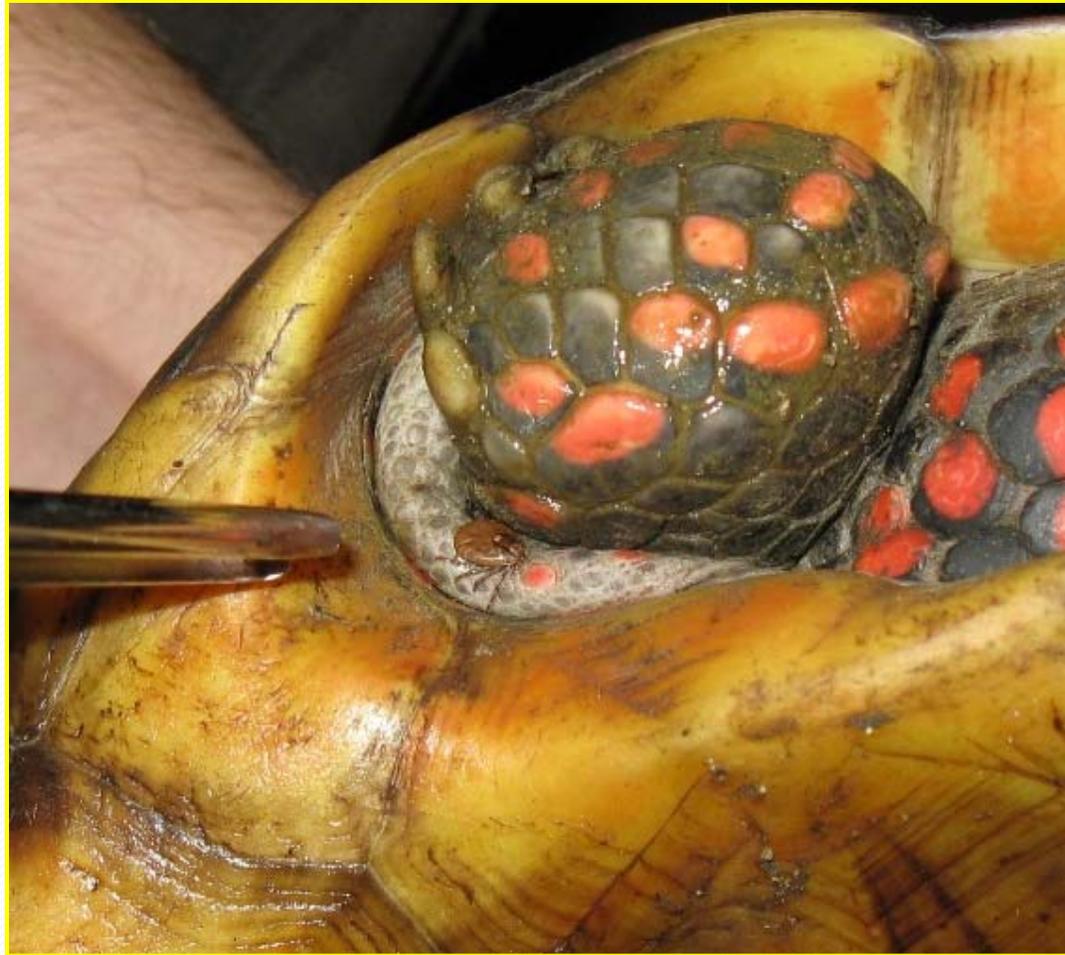


Pictured: Mexican salamander and common boa

Interagency Collaboration

USDA/USFWS

Heart Water Disease Program



Pictured: Red-footed tortoise and African tortoise tick

U.S. Customs and Border Protection

- Eunett James-Mack (Florida Agriculture Liaison)



Securing
America's
Borders



Securing and
expediting the
movement of
goods

Securing and
expediting the
movement of
people





During 2012...

- CBP Agriculture Specialists conducted more than **1.6 million interceptions** of prohibited plant materials, meat, and animal byproducts while also stopping entry of approximately **174,000 potentially dangerous pests**.
- CBP processed more than **\$2.3 trillion in trade**. The revenue which CBP collects remains the **second largest source of revenue** for the U.S. Government. (1-Individual Income tax).

CBP Collaborates

with other Government Agencies

- USDA's Plant Protection and Quarantine, Agriculture Quarantine Inspection, Veterinary Medical Officers
- USDA's Veterinary Services/Area Veterinarian in Charge
- Food Safety and Inspection Service
- State Veterinary Services
- Center for Disease Control and Prevention
- State and Federal Fish and Wildlife Services Inspectors



How Risk Approaches

- Air
 - Passenger/Baggage
 - Conveyance
 - Cargo
- Land/Border
 - Passenger/Baggage
 - Commercial Bus
 - Commercial Truck
 - Railcar
- Maritime
 - Conveyance
 - Cargo
 - Crew
 - Passenger
- International Mail
 - USPS
 - UPS
 - FedEx

How Risk Approaches



CBP's Screening Process

- Manifest Reviews / Entry Documents
- EAN Database – Emergency Action Notification
- Agriculture Enforcement Alerts
- Agriculture Program and Trade Liaison Memos and Muster Topics
- *PRCs – Pest Risk Committee meetings/ Communication with other agencies / Holds
- Computer Systems
 - TS – Targeting Framework
 - ACE – Automated Commercial Environment

***PRCs are an existing, effective collaborative effort between CBP, USDA and FDACS**

Zoo Miami

- Frank Ridgley, DVM
(Conservation and
Research Manager)



Successful Efforts

- Sacred Ibis

- Partnered with USDA Wildlife Services to capture and track 2 sacred ibis with GPS transmitters
- Discovered rookery site and captured a total of 33 that have since been surgically pinioned and placed in accredited institutions



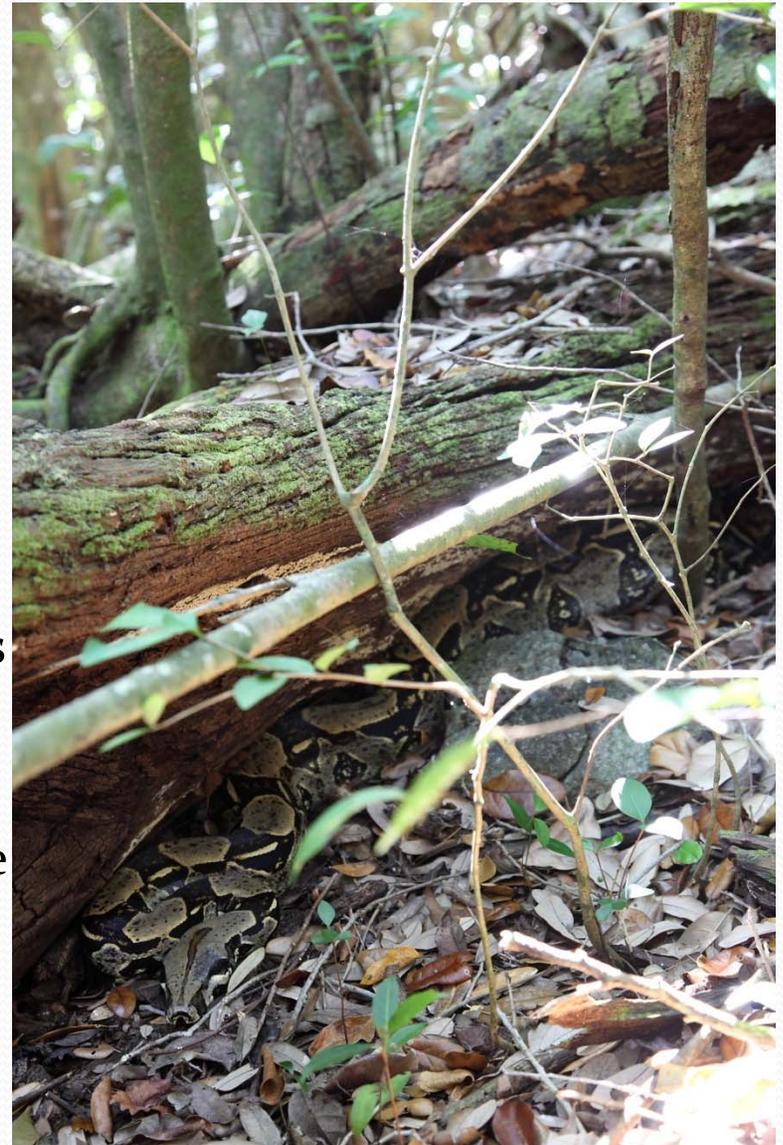
- Green Iguanas

- Management decision to reduce population due to concerns of animal collection and public safety, food competition and consumption
- Removed over 450; less than a dozen resident now
- Conducted necropsies and disease screening; carcasses provided to veterinary schools and researchers



Ongoing Efforts

- **Boa Constrictors**
 - 169 removed since 1989
 - Disease monitoring (gross pathology, histopathology, parasitology and virology)
- **Cuban Knight Anoles, Marine Toads, Cuban Treefrogs**
- **Invasive Plants**
 - Zoo Miami funds \$60,000/year towards invasive plant management of globally imperiled pine rockland
 - Removed thousands of invasive plants in 2013 and replaced with over 30,000 native plants through FWC collaboration and grant
 - Australian pine, Brazilian pepper, Cane and elephant grass, Earleaf acacia, exotic ground orchids, cow-itch vine



Collaborative Programs

- Burmese and African Rock python surveys
- Argentine Black and White Tegu monitoring and removal efforts
- Oustalet's Chameleon surveys and telemetry
- EIRAMP routes – UF
- ECISMA workdays and steering committee
- Host annual FWC Amnesty Day and provide veterinary and support staff volunteers



Future Plans

- Partnership with FIU to form a conservation and research center at Zoo Miami that will provide shared resources and collaborative initiatives for multiple agencies to address regional invasive species and conservation issues
- Desire to offer offices and shared space for government agencies, universities and NGOs to encourage cooperative programs



UF/IFAS

- Edward “Gilly” Evans (Economist/Professor)

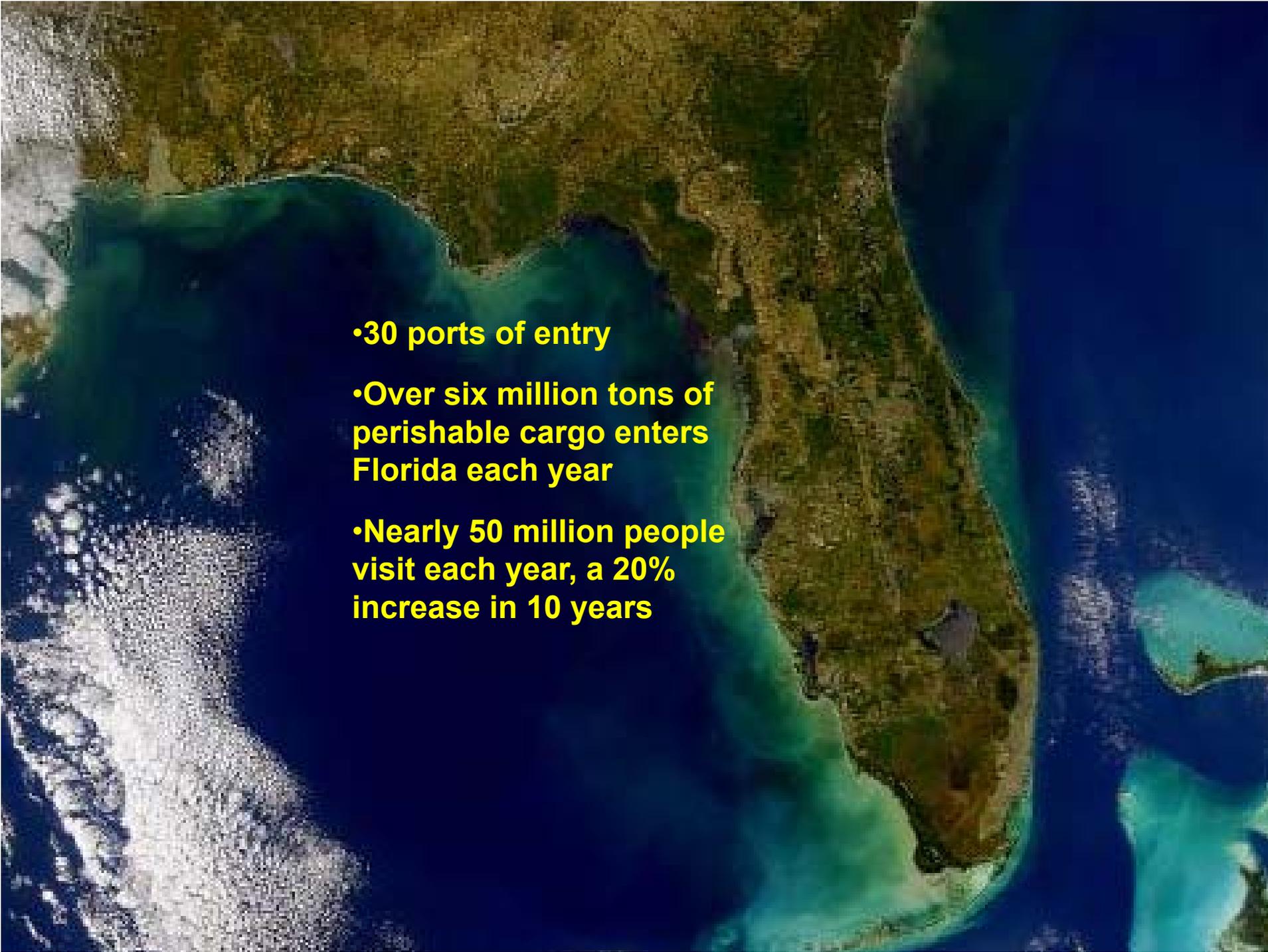
Assessment of Impacts

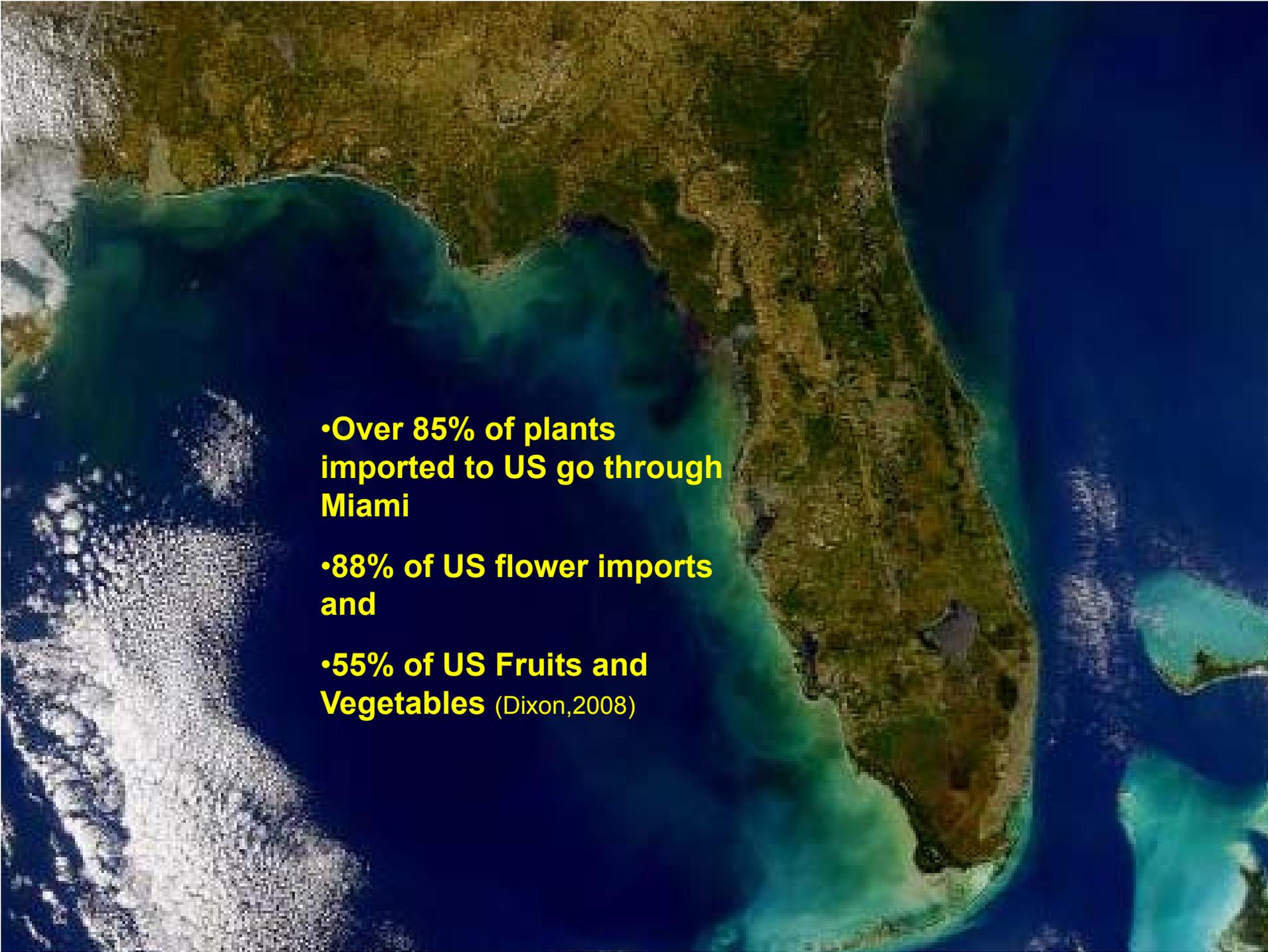
Example of Economic Profile

	Market Impacts	Non-Market Impacts
Direct Pest Effect	<ul style="list-style-type: none">● Yield reduction● Poor quality● Control costs	<ul style="list-style-type: none">● Urban mango trees affected
Indirect Pest Effect	<ul style="list-style-type: none">● Trade effects● Unemployment	<ul style="list-style-type: none">● Political effects● Legal battles with homeowners

Florida Economy and the Issue of Invasive Species

- Florida is the most vulnerable mainland state in the USA for invasive pest introduction and establishment.
- **On average Florida receives one new pest every month.**
- Agricultural trade & pest interceptions at ports of entry have been doubling every 5-6 years.
- With increased trade liberalization and as east – west trade has increased many invasives now come from Asia.
- Level of resource expenditure committed to the prevention and control of invasive species will have a direct bearing on the rate of introduction, establishment, spread and the likely impact of the invasive exotic species

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- An aerial photograph of the state of Florida, showing the coastline and surrounding waters. The text is overlaid on the central part of the state.
- 30 ports of entry**
 - Over six million tons of perishable cargo enters Florida each year**
 - Nearly 50 million people visit each year, a 20% increase in 10 years**

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- An aerial photograph of the Florida peninsula, showing the state's coastline and surrounding waters. The water is a deep blue, with some lighter turquoise areas near the shore. The land is a mix of green and brown, indicating vegetation and urban areas. The text is overlaid on the left side of the image.
- Over 85% of plants imported to US go through Miami
 - 88% of US flower imports and
 - 55% of US Fruits and Vegetables (Dixon,2008)

Strategic Action Framework

Brief Review

What Might a Strategic Action Framework Provide?

- Recommends a governance structure
- Helps decision-makers understand the connections between goals, strategies, tactics
- Defines success and provides for accountability
- Maximizes the extent to which the current capacity for partnership is leveraged to meet common goals
- Helps decision-makers make wise and timely investment decisions in the battle against invasive exotics

Creating an Action Framework; Not Another Plan

From Wisconsin's "Statewide Strategic Plan for Invasive Species":

- *Not intended to replace existing projects or species specific plans.*
- *Provides an overarching strategy and draws recommendations from these plans for areas that require additional resources.*
- *Identifies common themes and areas of common interest where increased cooperation can help achieve strategic goals.*
- *Helps present the business case for invasive species prevention and control and can now be shared with leaders, decision makers, and natural resource user groups.*



Strategic Planning

- Long-term
- Future-oriented
- Includes:
 - Assessment (of current issues, capabilities, and needs)
 - Vision Development (of desired future)
 - Goal Setting
 - Strategy Building
- Can lead to priority-based resource allocation and other decisions

Draft Framework

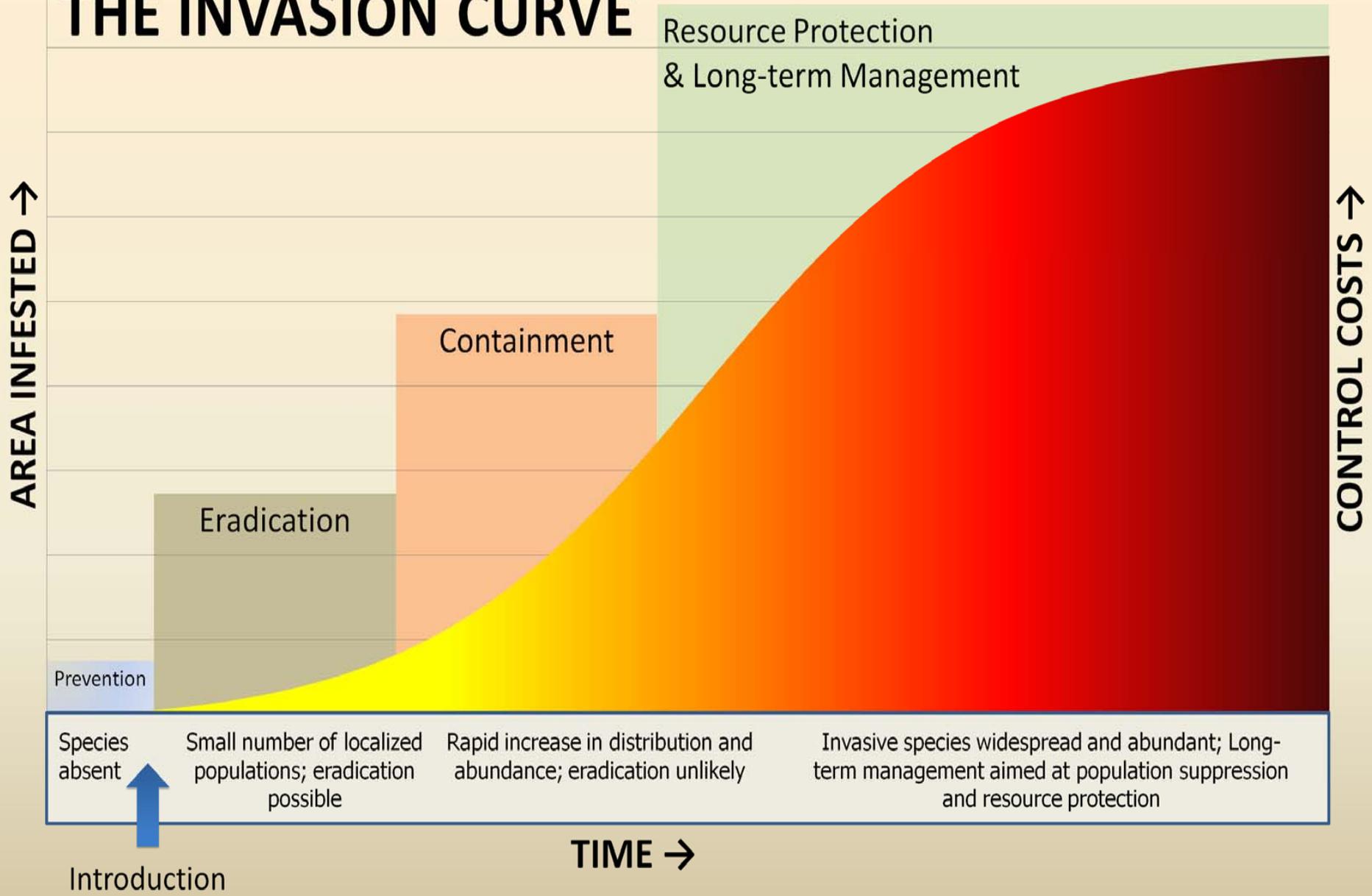
Vision, Goals, and Case Studies



Draft Framework Elements

- Agreement on Terminology
 - Consistent with EO 13112
 - Invasive-Nonnative-Exotic-Nonindigenous-Nuisance-Alien-Species-Oh-My
 - Invasive Exotic Species
- Agreement on Geography
 - South Florida Ecosystem including America's Everglades
 - SFWMD boundary plus marine systems
- Agreement on Invasion Curve as organizing principle

THE INVASION CURVE





Draft Vision Statement

- The South Florida Ecosystem, including America's Everglades, its environmental, economic, and cultural values and human health, is protected from the harmful effects of invasive exotic species.



Draft Goals

- Goal 1: Prevent the introduction of invasive exotic species into the South Florida Ecosystem
- Goal 2: Implement Early Detection and Rapid Response (EDRR)
- Goal 3: Prevent the spread of invasive exotic species to new areas
- Goal 4: Reduce the populations of widely established invasive exotic species to lowest feasible levels



Case Study Nominees

- Prevention
 - South African Python
 - Ticks
- Eradication
 - Sacred Ibis
 - Giant African Snail
- Containment
 - Tegus
 - Gambian Pouched Rat
- Management
 - Melaleuca (bio-control success story)
 - Burmese python
- Lessons Learned
 - Ambrosia Beetle/Laurel Wilt
 - Burmese Python