

Ecological Impacts and Practices of the Coral Reef Wildlife Trade



Daniel J. Thornhill
Cara H. Cooper



An Imperiled Ecosystem

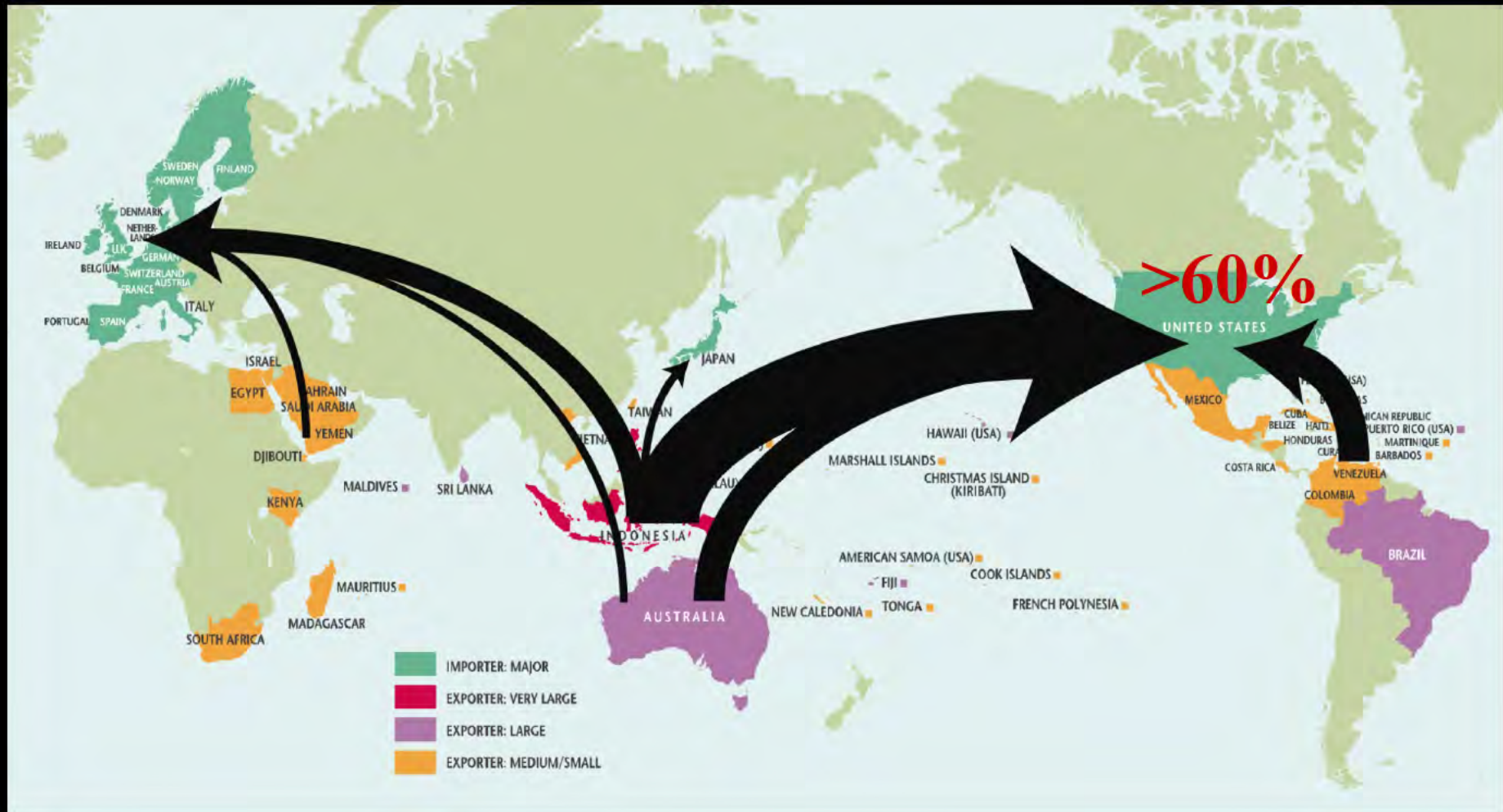


Ornamental Trade:

- Aquarium, Jewelry, & Décor
- ~ 30 million fish / yr
- ~ 1.5 million live corals & 4 million pounds of dead corals
- >65 thousand pounds of precious corals
- All underestimated



U.S. is the leading consumer



The Report

www.defenders.org/reeftrade



- Review of >650 scientific papers & reports
- Comprehensive review of
 - Wildlife injury & mortality
 - Population declines
 - Ecological impacts

Eight Case Studies



Supply Chain Injury & Mortality

- Mortality occurs at every stage
- Rates vary by location & practice

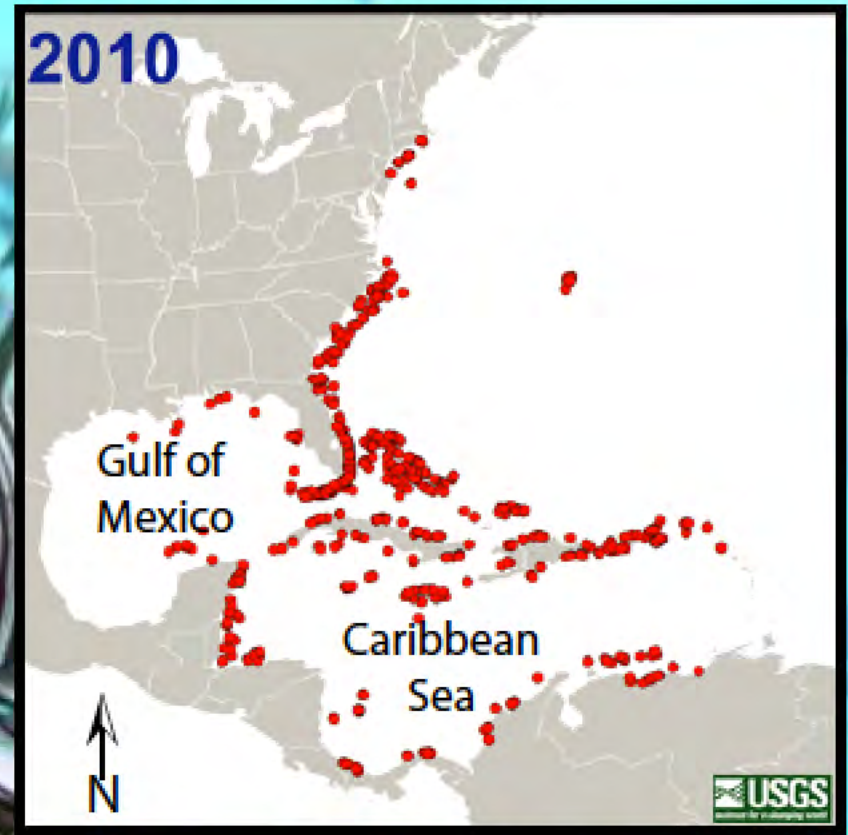


- Losses drive additional collection → exacerbate impacts

Cyanide Fishing



Invasive Lionfish



Losses at Every Trophic Level

- **Predators**

- *Reduced predation → trophic cascades*

- **Grazers**

- *Decreased herbivory → increased algal growth*

- **Other key functional groups**

- *Loss of cleaning stations & symbiotic relationships*

- **Corals & live rock**

- *Damage reef building & framework*



Insuring Resilience in an Era of Global Change



A Partnership for Responsible Trade in Coral Reef Wildlife

