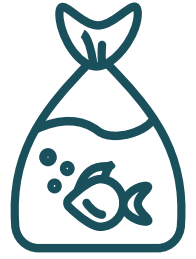


# Briefing: Aquatic Invasive Species in Commerce



## THE ISSUE

Non-native invasive species are a global problem causing harmful impacts to ecosystems and economies. The annual costs in the U.S. associated with invasive species are estimated to be \$219 billion. The movement and introduction of aquatic invasive species are often linked to recreational activities, like boating. However, the sale of live aquatic plants and animals also represents a significant pathway for new invasive species introduction. Complex global economies and online commerce have increased not

only the diversity of species that are available for purchase, but also the ways in which species can be purchased, sourced, and moved. While there are ways to prevent invasive species spread through regulatory actions, inspections, and monitoring of online transactions; management agency capacity to address all aspects of invasive species is limited.

There are multiple ways that invasive species can be introduced and spread as a result of the commerce of live aquatic plants and animals. Three specific ways are by contaminants, accidental violations, and intentional illegal violations.



Photo by StockSnap aquarium



Photo by SurprisingSnapShots batracian

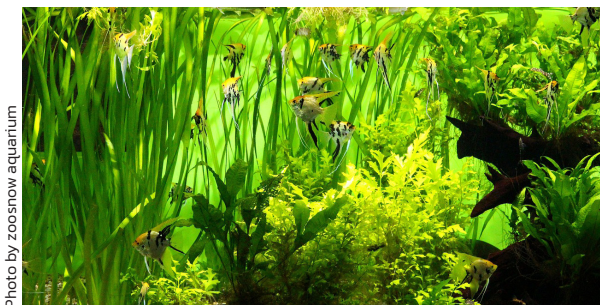


Photo by zoosnow aquarium

**Contaminants** are unintended live invasive species that are found in shipments of other legal live plants or animals that businesses order for sale.

**Accidental violations** are when businesses operate without adhering to requirements to prevent introductions or spread, by either offering species for sale that are regulated or by shipping live aquatic plants or animals to a state where they are not legal.

**Intentional illegal violations** are acts where a business operates knowingly to avoid complying with any laws or regulations. Unwanted aquatic animals and plants are sometimes released into natural waterbodies by consumers.

## A COMPLEX MANAGEMENT LANDSCAPE

Each state/province assigns different agencies to manage invasive species – departments of agriculture, departments of fish and wildlife, departments of

natural resources – often separating both the species that are managed and the associated responsibilities. The different agencies managing plants and animals create their respective lists of regulated invasive species through statutes. Keeping this information current and easy to find is a constant task. Furthermore, agencies often have limited funding and staff capacity for oversight and enforcement and may lack adequate statutory or regulatory authorities in specific areas concerning live aquatic plants and animals.

The number and types of businesses or entities (e.g. big box suppliers, small scale suppliers, online sales) offering aquatic plants and animals for sale adds further complexity to the landscape for both regulatory agencies and the buyers. Staying current on regulatory information as a business or buyer on the diverse variety of species available for sale or purchase requires constant research and considerable attention to detail. It is also common for businesses that deal in live aquatic plants and animals to operate with minimal licensing requirements. Without licensing, management agencies have limited options for identifying sellers, and contacting and checking for compliance to prevent illegal activities that may lead to invasive species introduction.

## BRIDGING THE GAP

There are multiple opportunities that could help lessen invasive species introduction and spread through the sale of live aquatic plants and animals.

1

Create mechanisms to provide oversight of businesses dealing in live aquatic plants and animals. At a minimum, this can be a statutory or regulatory authority to require a simple registration for any business dealing in live aquatic plants and animals. Required licensing will foster compliancy and allow better information exchange between businesses and agencies. Required labeling of live aquatic plants and animals for sale with scientific names is also a key need for prevention and oversight.

2

Support adequate funding and staffing for natural resource agency enforcement staff to respond to the issue of potential invasive species in commerce and be empowered with resources to react to invasive species detections to protect natural and economic resources.

3

Prioritize statutory authorities and or regulatory measures that encourage online sellers and online platforms to be visible, accountable, and compliant.



**Learn more about  
Aquatic Invasive  
Species in Commerce**

<https://www.aisincommerce.org>

Image by Alaska Region US Fish and Wildlife Service



**Marimo moss ball contaminated with invasive dreissenid mussels.**