Highlight Species

The Asian or “Invasive” Carp
Hypothesis

Fish are able to invade new ecosystems in various ways, but the vast majority of pathways are directly involved with intentional human intervention.

Walking Catfish

Figure 6.9. Methods of introduction for fishes nationwide.
As transportation channels have opened and expanded to benefit commerce and travel, the rate of fish introduced into the United States has skyrocketed.

**Figure 6.4.** Number of fish taxa introduced over time (1850–2000).
Methods

1. Information came from CABI, Fishbase, and Invasives.org
2. Earliest documented introductions in 1600’s
3. Invasions in late 1900’s
4. Majority of introductions were intentional
   a. sport, aquaculture, ornamental/aquarium
Results

Pathways of Introduction

- Intentional
- Accidental
- Unknown
Invasive Species

The Eastern Mosquito Fish in Maryland

Mosquito fish
Gambusia Affinis

Male

Female
Invasive Species

The Sea Lamprey
The majority of invasive fish introductions are intentional (stocking, bait release, aquarium release, biocontrol).
Once established, fish have the ability to spread through drainages and canal systems.
To best prevent introductions, specific regions should be analyzed for origins and pathways.

1. Stocking of native species
2. Education on the negative effects of bait release
3. Implementing strict “banned” lists could reduce the amount of intentional invasions