NAME OF SPECIES: Snakehead species (family Channidae, genus Channa)

A. CURRENT STATUS AND DISTRIBUTION	
1. In Wisconsin?	a. YES ☐ NO ☒
	b. Abundance:
	c. Geographic Range:
	d. Type of Waters Invaded (rivers, ponds, lakes, etc): (elsewhere) in ponds, rivers, lakes, wetlands
	e. Historical Status and Rate of Spread in Wisconsin: single giant snakehead caught in Rock River in 2003, no others found. Thought to be an aquarium pet release. Individual giant snakeheads have been caught in several northern states with no reported established populations. Northern snakehead is the only species with confirmed established populations in any northen US states.
2. Invasive in Similar Climate Zones	YES ☒ NO ☐ Where: Maryland (Northern Snakehead)
3. Similar Habitat Invaded Elsewhere	YES ☒ NO ☐ Where: Maryland rivers and ponds
4. In Surrounding States	YES ☐ NO ☒ Where:
5. Competitive Ability	High: Northern snakehead has wider range and temperature tolerance than other species and seems adaptable to a wide range of aquatic environments, ability to survive out of water for periods of time and predatory nature lead to concern. Low: some of the more tropical species may not be able to establish reproducing populations in Wisconsin due to temperature/environmental requirements (require warmer water)
B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS	
1. Temperature:	Range: (northern snakehead) 0 to >30 deg. C
2. Spawning Temperature:	Range:
3. Number of Eggs:	Range: (northen snakehead) females release 1,300 - 1,500 eggs per spawn, spawn up to 5 times per year
4. Preferred Spawning Substrate:	
5. Hybridization Potential:	
6. Salinity Tolerance	Fresh: ☒ Marine: ☐ Brackish: ☐

7. Oxygen Regime	Range: obligate air breather - can live in oxygen-depleted water and survive several days out of water if kept moist
8. Water Hardness Tolerance	Range:
9. Easily confused for Native Species?	List: may be confused with native bowfin or burbot
C. DAMAGE POTENTIAL	
1. Likelihood of Damage	a. Presence of Natural Enemies:
	b. How well introductory and expansion pathways can be described and quantified: Established populations and individuals caught likely released food fish (from Asian markets) or released aquarium pets
2. Environmental Impacts	a. Alteration of ecosystem composition, structure and function: These are aggressive, predatory fish that compete with native species for food and habitat. Adults feed primarily on fish, juveniles eat zooplankton, insects, crustaceans, fry
	c. Damage to ecosystem resilience/sustainability: Potential to drastically disrupt ecosystems through aggressive feeding
	d. Loss of biological diversity:
	e. Abiotic modifications (affects on turbidity, H2O chemistry, etc.):
	f. Biotic effects on other species (loss of cover, nesting sites, forage, changing competitive relationships:
D. NET SOCIO/ECONOMIC IMPACT	
1. Positive aspects of the species to the economy/society:	Effect: Food fish in Asia/Asian markets in North America, common in the pet-trade industry
2. Direct and indirect effects of the invasive species:	Effect:
3. Type of damage caused by organism:	Effect: potential to impact fish populations if established
Industries affected by invasive:	Effect: potential to impact fishing industries
4. Loss of aesthetic value affecting recreation and tourism:	Effect:
5. Increased cost to a sector (monitoring, inspection, control, public education, modifying practices, damage repair, lower yield, loss of export markets due to	Effect:

quarantine:	
6. Cost of prevention or control relative to cost of allowing invasion to occur (cost of prevention is borne by different groups than cost of control):	Effect:
7. Cost at different levels of invasion:	Effect:
E. CONTROL AND PREVENTION POTENTIAL	
1. Costs of Prevention (including Education):	
2. Responsiveness to Prevention Efforts:	Can survive out of water but not well adapted to land travel. Humans needed to introduce to most new waters. Education targeting pet-trade industry/aquarium owners and food markets/customers could be effective in preventing introductions.
3. Detection Capability:	
4. Control Tactics Effective:	Mechanical: ☐ Biological: ☐ Chemical: ☒
5. Efficacy/Feasibility of Control (effort, # of staff):	Chemical control not currently feasible in large waters because it's not selective for this species
6. Cost of Control:	High: ☐ Medium: ☐ Low: ☐
7. Non-Target Effects of Control:	Rotenone used to eradicate population in Maryland pond - kills all other non-target species as well.
8. Threshold at which control would be attempted:	
9 Efficacy of Monitoring:	