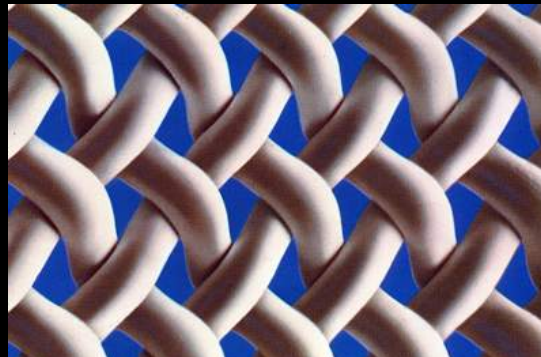


Report of Assignment from ANSTF to the
Nonnative Wildlife Screening Working Group:
Review of Rapid Screening Process
Developed by Mississippi Panel



Michael Hoff
Chair

Nonnative Wildlife Screening Working Group



Escape/Release of Nonnative Species Imported

- Is not, as a pathway for invasive species, an 800-lb gorilla

That Pathway is a 50-foot, 38-ton gorilla

- Rapid risk assessment important (to interdict the importation pathway)
 - This pilot did not conduct such an assessment
 - Risk = High, if flying within arm's length



Background Information

- National Management Plan for Invasive Species
- Great Lakes Regional Collaboration's Strategy to Restore and Protect the Great Lakes
 - Described the **need for rapid screening process** to assess risks of nonnative species

Presentation Overview

- Assignment from Autumn 2008 ANSTF meeting
- Summary of Working Group Member comments on MRBP's Rapid Screening Process

Summary of Review of the Screening Process and Toolset

- MRBP's rapid screening process was reviewed by
 - Miss. Panel members
 - National Association of Aquaculture Coordinators
 - No major changes were recommended by these groups

Assignment from Autumn 2008 ANSTF meeting

- Send MRBP's screening process to Aquatic Organism Screening Working Group members for review
 - I am reporting on these comments
 - No action was requested of the ANSTF

Screening Working Group Membership

- 17 members agreed to participate
 - FWS (Michael Hoff), Chair
 - NOAA (Ann Garrett, Robert Brock)
 - Treasury (David Brooks)
 - NPS (John Wullschleger)
 - USDA
 - Agricultural Research Service (Jeff Silverstein)
 - APHIS – Wildlife Services (Michael Avery)
 - Forest Service (Frank McCormick, Melvin Warren)
 - Veterinary Services (Randell Levings)
 - USGS (Cindy Kolar)
 - Private Sector (Marshall Meyers and Jamie Reaser--PIJAC; Diane Cooper--Taylor Shellfish)
 - NGO (Defenders of Wildlife--Peter Jenkins)
 - Mississippi River Basin Panel and State of MT (Eileen Ryce)
 - Florida Department of Agriculture and Consumer Services (John Teem)

Member Comments on Screening Process

- Overview
 - Sent out the 17 Working Group reviewers
 - No critical conceptual problems in the screening approach were recognized

Background information

- The **screening process** is based on science, but **has not been evaluated** during comparative testing with other risk assessment systems

Risk Assessment: Violet Goby in MT

History of
Invasiveness

N

(Not listed in GISD,
and as "harmless" in
Fishbase; no hits for
"invasive" in
googlescholar)

CLIMATE Match

L

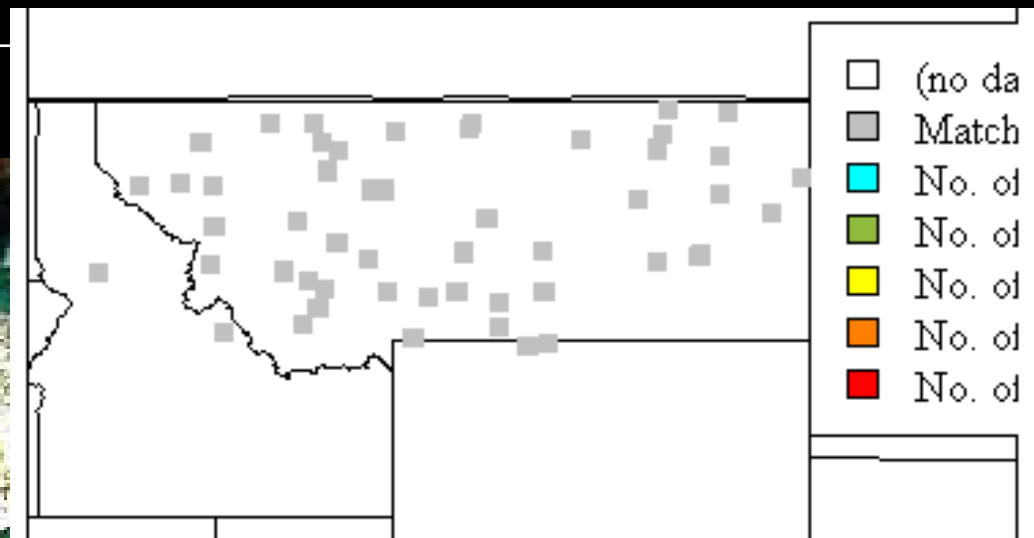
(0% of scores ≥ 6 ;
N=58)

Action

Allow

(Certainty –
High)

Gobioides broussonnetii



Risk Assessment: Round Goby in MT

History of
Invasiveness

Y

(Listed in GISD and as "potential pest" in Fishbase; 448 hits for 'invasive' in googlescholar)

CLIMATE Match

H

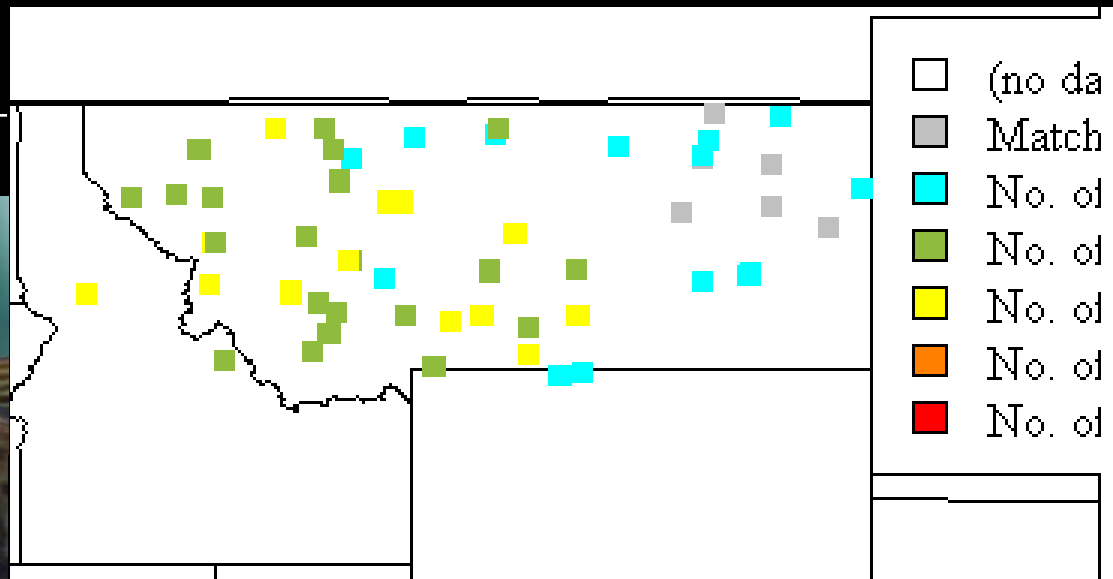
(88% of scores ≥ 6)

Action

Regulate

(Certainty – High)

Neogobius melanostomus



Summary of Assignment and Completion

- MRBPs screening process sent to Working Group for Review
 - No major problems or flaws found in screening process
- Evaluation of existing screening processes (only 1 exists) and other risk assessments is a reasonable next step
 - Will report on this next

Next Steps - MRBP

- I will:
 - Send the [slightly] revised RA Document to the Miss. Panel, Working Group, Prevention Committee, ANSTF, NISC Staff, and GLP
 - Continue to adapt the Risk Assessment-Risk Management approach (including rapid screening process)
 - By adding decision-support tools and other materials, when they are available
 - FRESHMap next tool??

The 38-ton Gorilla?

- Tamed this beast [of screening] as best we can, without funding for development and testing



What should be included in a scientific
evaluation of rapid screening
and other pre-import risk assessments?

Assignment Completion Report

Michael Hoff

U.S. Fish and Wildlife Service



Overview of Presentation

- Recommendation from MRP and GLP to ANSTF & Assignment from ANSTF
 - Autumn 2008 meeting
- Assignment Completion
 - Details of proposed study submitted to ANSTF
 - May 2009 meeting

Recommendation to ANSTF During Autumn 2008 Meeting

- From Mississippi and Great Lakes Panels:
 - “If any member of the ANSTF will issue a RFP for AIS research, then **we recommend consideration of a project to evaluate existing screening** [and other risk assessment] **processes...**”
 - This recommendation was described in some detail, but

Assignment from ANSTF

- I was assigned the task of:
 - Providing more detailed recommendations about the scientific evaluation proposed by the MRBP and GLP Panels
 - PIs in this proposed evaluation can enhance and expand upon my recommended approach, and provide additional deliverables

Project Objectives of Proposed Evaluation

- Assemble existing rapid screening processes and other risk assessments
- Scientifically evaluate those processes

Project Objectives of Proposed Evaluation

- Determine, for each screening/RA process:
 - **Accuracy** (assignments to species categories listed in a later slide)
 - **Precision** (among expert screeners)
 - **Efficiency** (speed) for each screening/risk assessment process

Project Objectives (continued)

- Evaluate strengths and weaknesses of each screening/risk assessment process
- Use results, to **propose how to develop a “gold standard” (if none exists)** screening process or processes
 - (Could be several of these--for large ecosystems, and the entire U.S)

Project Methods of Proposed Evaluation

- Develop a database with information for species in these categories for the U.S.:
 - Introduced, established, and invasive
 - Introduced, established, and NOT invasive
 - Introduced, but failed to establish populations

Project Methods (continued)

- Convene workshop of risk assessment experts who will:
 - Conduct assessments on species in database
 - Using each RA and screening process
 - For large ecosystems of U.S., and entire U.S.

Project Methods (continued)

- Convene workshop of risk assessment experts who will:
 - Tabulate screening results including
 - Accuracy for each screening process in assigning each species to its category
 - Precision among screeners for screening process species categorizations
 - Efficiency (speed) in assessments

Project Deliverables

- After workshop, develop a **report** that includes:
 - Additional statistical analyses, and a synthesis based on them
 - Includes **biases of each screening process**

Project Deliverables (continued)

- **Report** should include (continued):
 - Evaluation of strengths and weaknesses of each screening/RA process
 - For each ecosystem of the U.S. and for U.S.
 - For each category of species

Project Deliverables (continued)

- **Report** should include (continued):
 - Provide **guidance on how to develop and test a gold standard screening process** for either the entire U.S., and if needed for large ecosystems of the U.S.
 - **If no gold standard exists**

