



Hennepin County Minnesota

# **Aquatic invasive species and the psychology of color:**

**Motivating behavior change at the North Arm Public Access**

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# Background

- Third most used access on Lake Minnetonka with 6,000 launches in a season.
- DNR inspectors are at the access for over 40 hours per week. However, there are significant hours when no inspectors are on-site.

# Problem: awareness ≠ action

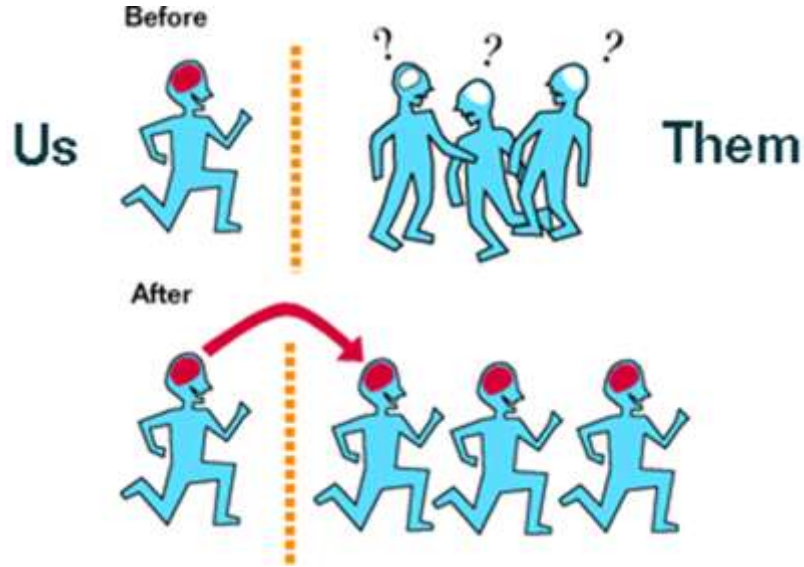
## Awareness

MN DNR studies show that 95% of Minnesotans are aware of invasive species and the laws regarding transportation.

## Action

On-site observations showed 1 in 5 boaters were not following the requirements.

# Typical Response



Put up a sign!



Bigger and in color!



Add more signs and make it orange!



Tips and tricks to motive behavior change!

Pick one message

# Communication Goal

- Increase boater behavior to properly remove and dispose of invasive species when visiting Lake Minnetonka public boat accesses.





# Analyze your Audience

Tips and tricks  
to motive  
behavior  
change!

Don't skimp on research!

- Explore the attitudes and behavior of your intended audience prior to developing your message.
- Hire a U of M research student to help!

# Barriers Identified

- Laziness and being in a hurry.
- Poor weather.
- Inadequate facilities – no space at boat access to pull over and follow procedures.
- Uncertain how to effectively clean their boats - unlikely to follow through unless they knew the effort was effective.
- Recommended behaviors are difficult to perform.
- The fight against invasive species is a losing battle.

# Installed prompts and changed the environment

- Identified where actions occurred
- Created space to set the social norm



# Prompts

Tips and tricks to  
motive behavior  
change!

Prompts reminds us to  
carry out an activity  
that we might  
otherwise forget. Not  
intended to change  
attitudes.



# Prompts and changed environment



# Addressed barriers through communication messages

- Fighting the inevitable. Communicate their actions are worth the effort.

## Can you make a difference?

**Yes!** Every action you take can prevent the spread of aquatic invasive species from this lake and stop new species from coming in.

Spread of invasive species is not inevitable – only a small number of waters are infested.

Every water protected keeps our lakes healthy, protects recreation and saves jobs.

# Addressed barriers through communication messages

- Previous efforts focused too much on weeds. People believe they can see invasives.

## Invasive species can be too small to see

Young zebra mussels that are too small to see can easily spread when they go unnoticed in bilge water, livewells and bait buckets. Other invasive species, such as spiny waterfleas, and fish diseases are difficult to see or invisible to the naked eye.



Zebra mussels

Photo: Kansas Department of Wildlife, Parks, and Tourism



Spiny waterfleas

Photo: Jeff Miller, UMK-Madison University-Germania Kottler



A diseased fish

Photo: Dr. P. Bowen, Cornell University

# Provide feedback

Tips and tricks to  
motive behavior  
change!

Communicate the social norm and  
let people know how they are doing  
(but only when the norm is good!)





# Addressed barriers through communication messages

- Empowering messages and recognition of doing the right thing.



**Your efforts help preserve Minnesota's outdoor tradition**



**Thank you**



# Success!



Behavior	2011	2012
Weeds attached (failed to take actions to remove weeds)	24%	1.3%
Drain plug installed (failed to remove drain plug)	18%	9%
Used designated area to prepare boats for leaving	n/a	91%

# Questions?

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