

Are billboards an effective communication medium to *Stop Aquatic Hitchhikers?*



STOP AQUATIC HITCHHIKERS!™

Early aquatic invasive species public outreach...

Since the early 1990s, many strategies and methods have been used attempting to reach boaters and anglers with aquatic invasive species (AIS) prevention messages. Overland movement by boaters and anglers is recognized as a primary way for AIS spread to new waters. Billboard use began by a few states and provinces in the mid-1990s attempting to reach resident and non-resident boaters and anglers along key highways that had the greatest potential for intra- and interstate spread of AIS. However, little evaluation was conducted at the time to determine if boaters and anglers recognized billboards as a source for AIS information. Results of two studies are presented here. An earlier study showed that billboards were not a recognized source for AIS information for boaters, when billboards were not used statewide. A recent study showed that billboards are not only a recognized source for AIS information, but a preferred source when used statewide.

First effort to evaluate billboards in AIS outreach...

In 2000, Minnesota Sea Grant led an evaluation of AIS outreach efforts in five states (California, Kansas, Minnesota, Ohio and Vermont). This study determined how to reach boaters, determined their level of awareness, defined risks they pose for spread, and whether they had changed their behavior based on exposure to AIS prevention messages. An eight-page mail survey developed by a team of AIS and survey design experts was administered to randomly selected registered boaters in each state. Average response rate was 53% at 1,657 respondents. To determine how to reach boaters, the survey listed 22 sources used at that time to reach them about AIS (see left for 2000).

Did billboards work?

Survey results reflected the types of outreach for which boaters were exposed. Top five sources for information on AIS identified by boaters based on percent response were (in descending order): newspaper articles; magazine articles; regulation pamphlets; television news or programs; and signs at boat launches. Billboards ranked sixteenth out of 22 sources across all states surveyed. However, results from two states stood out. *While only a few billboards were used before this study, between 25-35% of Minnesota and Vermont boaters statewide recognized billboards as a source for AIS information.* In comparison, very few if any billboards had been used in California, Kansas and Ohio. When boaters in all states were asked which four sources from the list were their best sources for information on AIS, billboards were not in the top six based on percent response. At that time, top sources were (in descending order): newspaper articles; TV news and programs; regulation pamphlets; magazines and newsletters; signs at marinas or boat launches; and boat registration materials.

Lists of Sources for AIS Information As Presented in Two Surveys, 2000 and 2006-2007

2000	2006-2007
Newspaper articles	Billboards
Magazine or newsletter articles	Invasive species ID cards
Television news or programs	Highway radio messages
Radio news or programs	Signs at water accesses
Television public service announcements	Stickers
Radio public service announcements	Windshield flyers
Billboards	Television ads
Internet web sites	Displays at rest areas
Conferences, presentations or meetings	Kiosk at Cabela's
Educational exhibits or displays	Outside ads at gas convenience stores
Fishing contests, derbies or sailboat regattas	Radio ads
Booth at sport shows, fishing shows, etc.	Regulation booklets
Fishing or boating regulation pamphlets	Watercraft inspections
Boat registration materials	Signs along roadways
Creel surveys or inspection-education programs on roads	Newspaper ads
Boat launch signs or information provided at marinas or boat launches	Lawn banners
Signs or information provided at bait shops	Information panels at airports
Fishing, boating, sporting, or environmental organizations	
Brochures, invasive species D cards, fact sheets, etc.	
Books	
Educational videos	
Hot lines or information clearinghouses	

Similarly, when asked in a follow up question what would be “very effective” to lead them to take action in the future to prevent spread, billboards again ranked only sixteenth based on percent response across all states. *However, between 26-32% of Vermont and Minnesota boaters statewide, respectively, felt billboards would be “very effective.”* This lent our first piece of evidence that billboards might be a viable communication source for AIS information that could influence boater behavior, perhaps if billboards were promoted more widely.

Second effort to evaluate billboards in AIS outreach...

In 2006-2007, *Stop Aquatic Hitchhikers!*TM, a national campaign targeting boaters and anglers was extended and evaluated in Minnesota, Wisconsin and Iowa. Like the 2000 study, an objective was to determine best ways to reach boaters and anglers with AIS information. A face-to-face survey was administered to 2,261 boaters and anglers (total all states) mostly by DNR watercraft inspectors at water accesses. To determine what sources boaters and anglers were exposed, the survey offered 17 sources (see front page, 2006-2007).

Did billboards work this time?

Yes! Survey results reflected what boaters were exposed to. Top sources for information about AIS identified based on numbers of responses by boaters varied by state and year; however, in general they were: signs at water accesses; regulation booklets; watercraft inspectors; *billboards*; and TV ads. In Iowa, billboards ranked second and fourth in 2006 and 2007, respectively. In Minnesota, they ranked sixth and fifth, respectively. In Wisconsin, they ranked eleventh and fourth, respectively. (Note: 2006 data from Iowa and Wisconsin need to be used with caution due to low sample numbers.) Billboards used in states varied (see below). Most billboards were five month buys, but often billboards remained up for months after contracts expired, which resulted in more exposures (called impressions). According to Wildlife Forever, billboards exposed 59 million people (estimated) to the campaign's messages in 2006-2007.

Billboard snapshot... how many were used?

State	2006	2007	Totals
Minnesota	12	12	24
Iowa	0	3	3
Wisconsin	0	6	6
Totals	12	21	33

Importantly, when asked what the four most effective methods were to reach them in the future about Stop Aquatic Hitchhikers!, billboards ranked third in Wisconsin and fourth in both Minnesota and Iowa. Like the previous study, the top sources were: signs at water accesses, watercraft inspectors, television ads, and regulation booklets.

Conclusions...

Beyond identifying the best ways to reach boaters and anglers, these studies demonstrate not only that strategic AIS communication and outreach can raise awareness and empower them to take appropriate actions to prevent spread of AIS. Based on exposure to the *Stop Aquatic Hitchhikers!*TM-*Threats* campaign, survey results show that Minnesota boaters and anglers were more aware and likely to take future action at water accesses (99%) than the other two states. *Importantly, ~15% more Wisconsin and Iowa boaters and anglers in 2007 compared to 2006 were influenced to take future action at water accesses based on their exposure from the campaign!* Results strongly suggest that states and other jurisdictions that fully implement *Stop Aquatic Hitchhikers!*TM-*Threats* using the best methods can work to prevent the spread of AIS by recreational boaters and anglers.

Billboards appear to have played a significant role as one of the key sources for information to resident and non-resident boaters and anglers about *Stop Aquatic Hitchhikers!*TM-*Threats*. As testimonials for continued use, Wildlife Forever, Minnesota, Wisconsin, and Iowa DNRs, U.S. Forest Service, U.S. Fish and Wildlife Service, Minnesota and Wisconsin Sea Grant, and other local partners used more billboards after the study in 2008 to promote *Stop Aquatic Hitchhikers!*TM-*Threats* across Minnesota (16), Wisconsin (12), and Iowa (9). Plans are underway in Minnesota and Iowa to use them again in 2009. Although the elections are over, the public has clearly spoken – *Stop Aquatic Hitchhikers!*TM-*Threats* campaign partners are again using billboards because boaters and anglers recognize billboards as an important source for their AIS information.

Final thoughts...

Outdoor advertising is likely to be hit hard given the current economic crisis. While unfortunate for outdoor ad companies, it does provide an opportunity for organizations interested in promoting AIS to purchase billboards along high traffic corridors without as much competition from traditional outdoor advertisers.

Doug Jensen is the AIS program coordinator at the University of Minnesota Sea Grant Program, Duluth, Minn. He was a co-investigator or director on these studies. Contact: 218.726.8712 or djensen1@umn.edu. March 2009

