

# Big Fish Lake, Stearns County Grant Summary Report

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# Introduction

The watercraft inspection program's goal is to reduce the spread of aquatic invasive species into and around the state. To accomplish this we conduct watercraft inspections and decontaminations at public water accesses throughout the state, work with citizen groups concerned about AIS, and educate the public.

In 2017 grant dollars were available for watercraft inspections by DNR staff. The grant offers a maximum of 375 hours per lake and a maximum total request of 750 hours. The Big Fish Lake Association received a prevention grant for 320 hours for Big Fish in Stearns County. The contract dates were set from June 2, 2017 to Sept 4, 2017.

DNR inspectors were able to complete 311 of the 320 grant hours for the season. In addition to the grant, 60 tier hours were obligated to Big Fish on the DNR Tier list and 12 hours were completed.

#### **Inspection Process**

The inspection process involves the watercraft inspector visually and tactilely searching for aquatic invasive species or anything else that could potentially spread aquatic invasive species such as water, mud, plants or other debris. Watercraft inspectors also complete a survey while educating boaters about the issues surrounding aquatic invasive species. Survey questions focus on boater knowledge and behavior with information given on the impacts of aquatic invasive species and what can be done to prevent their spread.

Inspectors are trained to observe and document when watercraft enter a public water access with any violations, including boats with attached vegetation as well as watercraft whose drain plugs have not been removed. Information gathered by DNR and LGU authorized inspectors can help show potential risk of transporting AIS.

#### **Results**

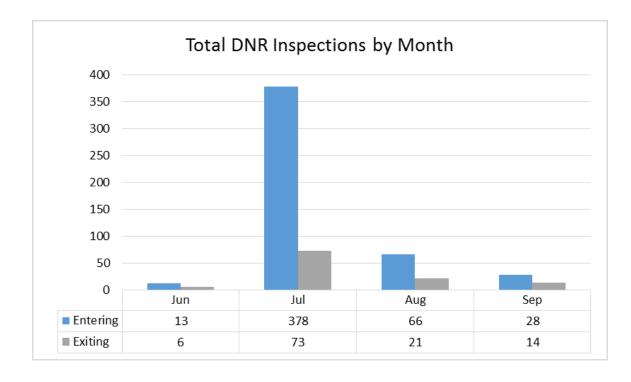


Table 1: Through the 2017 season, DNR inspectors completed 599 total inspections.

### Access and Drive Time During the Grant

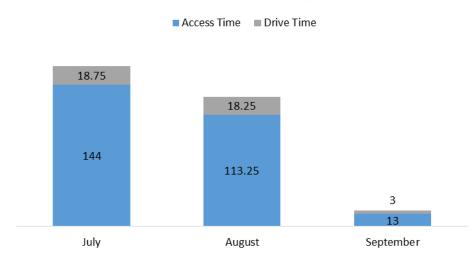
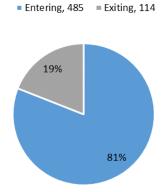


Table 2: Represents the total inspection hours completed per month along with the time the inspectors spent driving to and from the accesses during the grant period.

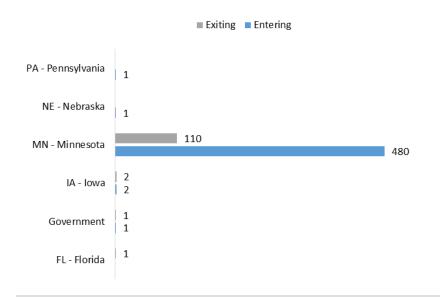
## Breakdown of Inspections:

#### Total Entering/Exiting Inspections



**Figure 1:** This pie graph shows the split between entering and exiting watercraft. Across the state a 40/60 split is typical. In 2017 more watercraft were inspected when coming to Big Fish than when leaving either access. This suggests most visitors to the lake come for the day and often at peak times when an inspector is present.

#### Entering and Exiting Watercraft by States:



**Table 3:** During entering and exiting inspections, the state of the tow vehicle from the license plate was recorded in the survey.

Minnesotans entering and exiting the lake make up 98.5% of the total watercraft inspections for the season.

Watercraft from other state makes up 1.5% of the total inspections.

#### Compliance with AIS Drain Plug Law:

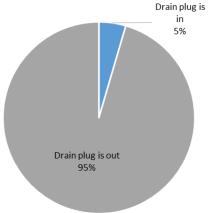
**Figure 2**: DNR inspectors visually check watercraft for compliance with the drain plug law. According to survey data, there is a 95% compliance rate with the law.

Of the 5% of watercraft with the plug in on arrival (22 boaters) to the access, only 10 had the plug in upon further questioning. However, no watercraft needed to be sent away for draining.

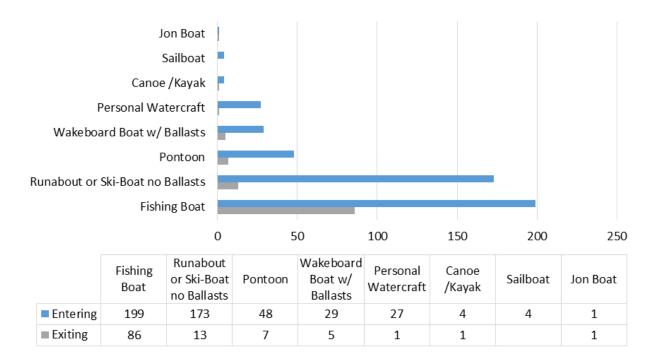
Only 1 watercraft had been out of the water less than 24 hrs. but said that they were last in Big Fish.

Inspectors that observe plug violations direct users to remove the drain plugs to ensure no residual water is found and educate users on the law.





#### Types of Watercraft Inspected:



**Tables 4:** Inspectors monitor and record the type of watercraft entering and exiting during the inspection process. The following chart shows the breakdown of types of watercraft visiting Big Fish.

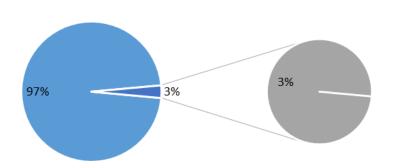
The majority are fishing boats followed by runabouts or ski boats that do not have ballast tanks and pontoons.

#### Locations and Items Found During Inspection:

DNR inspectors also observed and recorded the location of any plants, invasive animals, water or mud found during the inspection process. Potential threats were remedied according to DNR protocols. (Removing by hand, providing authorization forms, DNR decontamination, and Lake Service Provider transport).

According to inspection data, plants that were removable by hand were found 7 times during incoming inspections. The plants were removed before the watercrafts were allowed to launch. The majority of watercraft had last been in Big Fish. Inspectors also remind watercraft users that it is against the law to transport aquatic plants. No zebra mussels were found on the plants and no watercraft were sent away for a decontamination.





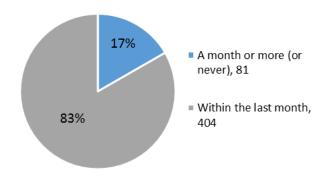
**Figure 3:** 471 watercraft arrived at the access cleaned and drained.

Mud was found on 5 watercraft. Twice an inspector recorded finding Spiny Waterfleas. Samples were brought to the office and confirmed **not** to be spiny waterfleas.

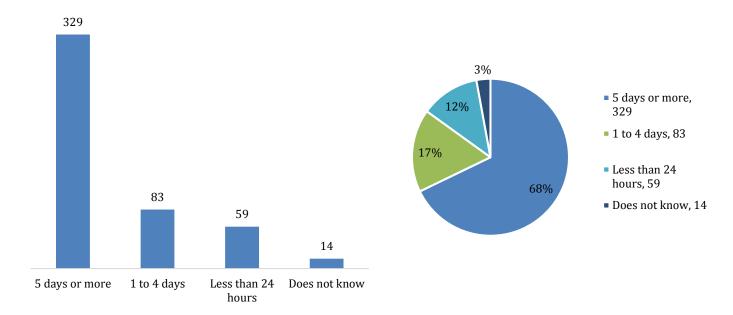
#### *Incoming Inspections- Spoken with a Watercraft Inspector*

**Figure 4:** Watercraft users are asked at each incoming inspection when they last spoke to a watercraft inspector. Within the last month, 83% percent of folks had spoken to a watercraft inspector at the access.

When staff encounter users that have not spoken to an inspector within a month or more, or never, it is an opportunity to educate users about AIS and AIS laws.



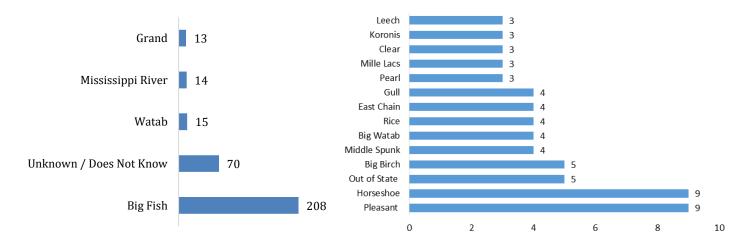
#### How Long Has a Watercraft Been Out of the Water?



**Table 7 and Figure 5:** When asked how long a watercraft has been out of the water, the majority of watercraft had been out of the water for 5 days or more before coming to Big Fish.

#### *Incoming Inspections-Previously Visited Waterbody*

Watercraft users are asked during an incoming inspection which waterbody the watercraft had been at previously. This information can be helpful when determining risk of an incoming watercraft. According to the inspection data below in Tables 8, 42.89% (208) of users coming to Big Fish are return users. Users that said they did not know the last body of water used only comprised of 14.43% overall. Table 9 shows the next most previously visited lakes. Lakes with 2 or less responses were omitted from the graphs.



When inspectors recorded the counties in which users had last visited, 57.94% of the users came from a waterbody within Stearns County. Unknown made up the 34%, with Kandiyohi County third overall. With the top most previously visited lakes, outside of Big Fish and Unknown, users are coming from the Mississippi River and Watab Lake, which is infested with zebra mussels and Grand Lake in Stearns which was confirmed infested with starry stonewort in 2017.

# **Summary**

Incoming inspection data was reviewed for this report because of the inherent risks associated with incoming watercraft. It is excellent to see that overall violation rates are low at Big Fish. DNR inspectors conducted 599 total watercraft inspections throughout the 2017 season. Inspectors spent a total of 40 hours driving to and from the access during the grant and 271 hours conducting inspections.