

**REPORT OF THE
GAME AND INLAND FISHERIES ON**

Boating Safety

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



House Document No. 9

**COMMONWEALTH OF VIRGINIA
RICHMOND
1987**

TO: The Honorable Gerald L. Baliles
Governor of Virginia

and

The General Assembly of Virginia

The report contained herein is pursuant to the House Joint Resolution No. 60 of the 1986 Session of the General Assembly of Virginia.

This report comprises the response by the Commission of Game and Inland Fisheries to the request that a study be made to determine what measures can be instituted to reduce the number of boating-related injuries and fatalities in Virginia.

Respectfully submitted,



R. H. Cross, Jr.
Executive Director

HOUSE JOINT RESOLUTION NO. 60

Requesting the Commission of Game and Inland Fisheries to study boating safety.

Patron--Jester

Agreed to by the House of Delegates, February 10, 1986

Agreed to by the Senate, March 6, 1986

WHEREAS, the waters of the Commonwealth represent a natural resource used for a wide variety of recreational purposes; and

WHEREAS, the number of individuals using the waters for boating purposes continues to increase with 10,000 new boats on the waters during the past year; and

WHEREAS, there are 158,907 registered boats in Virginia and an additional 40,000 unregistered boats; and

WHEREAS, the number of boating accidents increased from 77 in 1984 to 105 in 1985; and

WHEREAS, the most acute crowding problems are found on Smith Mountain Lake, where the number of boating accidents increased from thirteen in 1984 to twenty-one in 1985, compared to the entire Chesapeake Bay, which experienced only five accidents; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Commission of Game and Inland Fisheries is requested to conduct a study to determine what measures can be instituted to reduce the number of boating-related injuries and fatalities. It should consider the licensing of motor boat operators as one possible approach.

The Commission shall complete its work prior to November 15, 1986, and report its findings soon thereafter.

PROCEDURE

This study involved the following procedures:

A detailed analysis of boating accidents over the most recent two year period.

A survey of a segment of Virginia's recreational boaters to determine their perception of safety and the quality of the boating experience on our waters.

Four meetings of a study committee which included representatives of the U.S. Coast Guard, U.S. Coast Guard Auxiliary, and the Commission of Game and Inland Fisheries.

Aerial observations of high density boating areas on holidays.

A survey to determine the extent to which alcohol contributes to boating accidents.

The analysis of boating accidents involved a review of each accident investigation over the past two years to attempt to discover the causes of the majority of them with a view towards arriving at recommendations that could curtail accidents in the future. This review also included a comparison of fatalities occurring in the adjacent states of Maryland and North Carolina over the past five years.

A total of 10,000 boaters were selected to receive a questionnaire which was designed by the study committee. One thousand were sent to each of the high boating density regions of the state and the remaining 2,000 were sent to boaters selected at random. The questionnaire was designed to determine the boater's perception of the safety level and the quality of the boating experience on our waters, as well as his perceptions concerning problems involving alcohol and the availability of boating safety information.

Four meetings of the study committee were held between March and September of 1986. The committee openly discussed problems encountered statewide and assisted in the analysis of data collected. The conclusions offered are the result of findings by this committee. The committee also addressed the issue of operator licensing.

Three aerial surveys were flown over high density boating areas during the summer, including the Fourth of July. Although the numbers of boats registered in given areas throughout the state are known, the surveys were flown to obtain actual data as to the number of boats on the water during these peak use periods. These data were compared to the number of boating accidents that occurred on summer holidays.

During the months of June and July game wardens recorded the number of boats they inspected that had alcohol aboard. In addition, accident records were reviewed to determine the number of fatalities in which alcohol was a factor.

SUMMARY

Analysis of Accidents

The failure to exercise good judgement is the primary cause of boating accidents in the Commonwealth. An analysis of the 41 boating fatalities that occurred in the Commonwealth during the two year period ending December 31, 1985 reveals the following:

<u>Cause</u>	<u>No. Accidents</u>	<u>Fatalities</u>	<u>Remarks</u>
Capsizing	21	24	Overloading; failure to heed weather warning; boat leaked; alcohol.
Falls overboard	8	8	Some related to health problems; carelessness and alcohol.
Collisions	2	2	One hit by tug boat; the other hit another boat.
Miscellaneous	7	7	Ran canoe over dam; motor snapped into gear throwing out occupant; two jumped overboard; person in inner tube towed by boat struck shore; jumped to avoid fire on board.

The most common accident is a collision with another boat, either moving or stationary. In nearly all cases these accidents occurred in conditions of good visibility. Also common are accidents involving hitting an underwater object. Neither has figured significantly in fatalities. Over the past five years Virginia, with 110 fatalities, has experienced fewer than North Carolina (178) or Maryland (117).

Collision Accidents

	<u>Boat to Boat</u>	<u>Object in Water</u>	<u>Total</u>
1984	25	18	43
1985	29	23	52

Boating Survey

Ninety percent of the 10,000 questioned responded. A summary of the responses is as follows:

How safe are Virginia's waters?

Safe 41%
Some risk 43%
Moderate risk 14%
Dangerous 2%

What is the main use of your boat?

Fishing 69%
Cruising 13%
Skiing 10%
Other 8%

Have you been checked for safety equipment?

Yes 56%
No 44%

Is sufficient information provided about -

safety equipment? Yes 88%; No 12%
navigation rules? Yes 78%; No 28%
boating courses? Yes 81%; No 19%

Have you taken a boating safety course?

Yes 30%
No 70%

How long should a boating safety course be?

One night 23%
Three nights 34%
Six nights 11%
Nine nights 9%
No course 23%

How do you describe alcohol use by boaters?

Of little consequence 15%
Only a moderate problem 42%
A serious problem 31%
The major boating problem 12%

What conditions detract from your boating experience?

- Overcrowding 24%
- Reckless boat operation 10%
- Inconsiderate boaters 45%
- Excessive speeds 9%
- Intoxicated boaters 4%
- Other 8%

What remedies do we need?

- More "No Wake" areas 15%
- Operator licensing 12%
- Mandatory training 14%
- Mandatory wearing of PFD's 25%
- Restrictions on horsepower 20%
- Zoning of waterways 6%
- Other 8%

Were you aware that the law requires reporting of boating accidents?

- Yes 68%
- No 32%

Operator Licensing

Only one state, New Jersey, requires licensing of boat operators. The only prerequisite is having the price of the license.

The National Association of Boating Law Administrators has not endorsed licensing.

The following charts depict the ages and hours of experience of persons involved in boating accidents in Virginia during the period 1980-1985.

<u>Age</u>	<u>Accidents</u>	<u>Hours Experience</u>	<u>Accidents</u>
0-10	6	0-20	63
11-20	48	20-100	102
21-40	307	100-500	163
41-60	151	Over 500	233
61 and over	27	Unknown	71
Unknown	93		

Aerial Observations

Three flights over major boating areas were conducted during the late spring and summer of 1986. Because of varying weather conditions only the flight of July 4, 1986 provided any data and this was inconclusive.

Alcohol and Boating

In June and July game wardens checked 11,769 boats. Of these, 6,019 or 51% had alcoholic beverages aboard.

Twenty-eight percent of the fatalities investigated in Virginia over the past two years involved alcohol.

Frequently, investigators are notified of a boating accident too late to determine the involvement of alcohol.

In open air conditions found in boating, alcohol is more difficult to detect than in automobiles.

No standard exists for stipulating that a boater is under the influence of alcohol.

The National Transportation Safety Board estimates that in excess of 65% of boating fatalities are alcohol related.

CONCLUSIONS

Boating Accidents

Poor judgement and lack of attention are the primary causes of boating accidents. Most personnel involved are experienced boaters who should reasonably be expected to exercise better judgement. The fact that only 30% of the 10,000 boaters questioned had attended boating courses points out a need to encourage attendance at these courses which are readily available statewide.

It was determined, after a review of the available boating literature, that it should be simplified to make it easier for the average boater to understand.

The study committee arrived at the conclusion that more law enforcement presence was needed on Smith Mountain Lake and Chesapeake Bay.

Boating Survey

A survey of 10,000 boaters revealed that 84% considered boating to be safe or less than a moderate risk. The fact that more than half of the boaters queried had been checked for safety equipment indicates a strong law enforcement effort on the water. Boaters generally accept boating information provided as adequate, but relatively few have attended boating safety courses. Most agree that a safety course should not exceed three nights.

The use of alcohol is perceived to be a problem of varying degree by 85% of the boaters contacted. Inconsiderate boaters are perceived as a problem. Since 69% of those questioned were primarily fishermen, the inconsiderate boater is perceived to be a boater who proceeds too fast or too close to them.

There was no consensus as to the remedies for the perceived problems.

Operator Licensing

An inspection of the age and hours of experience of boaters involved in accidents offers no support to the concept that licensing will reduce accidents. Only one state has tried it, but it has not reduced accidents there. There is little (12%) support for licensing among the boaters questioned.

Alcohol and Boating

Eighty-five percent of the boaters questioned consider alcohol to be a problem. This is reinforced by the presence of alcohol on 51% of the boats checked last summer. Game wardens agree that there is a need for a standard such as the .10 blood alcohol standard used on highways, and most wardens would like to see an alcometer (breathalyzer) approved for use on the water.

RECOMMENDATIONS

Legislative

1. Enact an implied consent law for boaters giving the courts authority to suspend boating privileges if a boater refuses to submit to the appropriate test.
2. Establish a blood alcohol standard similar to that for motor vehicle operators, providing the courts accept readings obtained by the use of an alcometer.
3. Permit courts to suspend boating privileges in cases of reckless or intoxicated boat operation or for repeat offenders. Also encourage courts to require mandatory boating education for offenders.
4. Enact a law requiring coroners to determine blood alcohol levels in victims of boating accidents.
5. Authorize the Commission to hire four more game wardens; two for Smith Mountain Lake and two for Chesapeake Bay.
6. The study committee does not recommend the licensing of boat operators.

Game Commission

The Game Commission plans to do the following:

1. Through various media campaigns emphasize:
 - a. Arguments against alcohol use when boating;
 - b. The need to pay attention;
 - c. Wearing of life preservers by all boaters and passengers.
2. Produce simplified boating literature.
3. Provide first time boaters with comprehensive boating booklet.
4. Expand Game Commission boating safety training program and increase support of the training efforts by the U.S. Coast Guard Auxiliary and the U.S. Power Squadron.

