National Ocean Sciences Bowl
Northern New England Regional Competition

Saturday, February 1, 2020

Hosted & Sponsored by
The University of New Hampshire School of Marine Science and Ocean Engineering
New Hampshire Sea Grant
UNH Cooperative Extension
UNH Marine Docents

Co-Sponsors
Maine Sea Grant
The University of Maine
The University of New England
The Consortium for Ocean Leadership
Recommended Parking – A and B Lots – Red Circles
Competition Building – Hamilton Smith Hall – Yellow Circle
Lunch – Holloway Commons – Blue Circle
2020 Nor’easter Bowl  
University of New Hampshire  
February 1, 2020 Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 – 8:00 AM</td>
<td>Registration</td>
<td>Ham Smith Hall 1st floor atrium</td>
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<tr>
<td></td>
<td>Coffee/snacks</td>
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<tr>
<td>8:00 – 8:30 AM</td>
<td>Welcome and instructions</td>
<td>Ham Smith Hall Rm 210</td>
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<tr>
<td>8:30 – 9:00 AM</td>
<td>Round Robin Round 1</td>
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<tr>
<td>9:05 – 9:35 AM</td>
<td>Round Robin Round 2</td>
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<tr>
<td>9:40 – 10:10 AM</td>
<td>Round Robin Round 3</td>
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<td>10:10 – 10:25 AM</td>
<td>Break</td>
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<td>10:30 – 11:00 AM</td>
<td>Round Robin Round 4</td>
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<td>11:05 – 11:35 AM</td>
<td>Round Robin Round 5</td>
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<td>11:40 – 12:10 PM</td>
<td>Round Robin Round 6</td>
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<tr>
<td>12:10 – 1:10 PM</td>
<td>Lunch</td>
<td>Holloway Commons</td>
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<tr>
<td>1:15 – 1:45 PM</td>
<td>Round Robin Round 7</td>
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<tr>
<td>1:55 – 2:25 PM</td>
<td>Quarter Finals</td>
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<tr>
<td>2:30 – 3:00 PM</td>
<td>Semi Finals</td>
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<tr>
<td>3:05 – 3:35 PM</td>
<td>Finals</td>
<td>Ham Smith Hall Room 210</td>
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<tr>
<td>4:00 PM</td>
<td>Awards/Thanks/Goodbye</td>
<td>Ham Smith Hall Room 210</td>
</tr>
</tbody>
</table>

For up-to-the-minute scores for the Round Robin and Double Elimination results, please visit:  
[https://nosb.ccom.unh.edu/](https://nosb.ccom.unh.edu/)
## Round Robin Scorecard

<table>
<thead>
<tr>
<th>Team</th>
<th>RR1</th>
<th>RR2</th>
<th>RR3</th>
<th>RR4</th>
<th>RR5</th>
<th>RR6</th>
<th>RR7</th>
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<tbody>
<tr>
<td>Belfast A</td>
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<td>York B</td>
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</tbody>
</table>
Divisions

Division 1
Belfast A  
ConVal A  
Cranston A  
Poland  
Sanford B  
Sound Regional A

Division 2
Falmouth  
Morse B  
Narragansett  
Sanford A  
Windham  
York B

Division 3
Belfast B  
Cranston B  
ConVal B  
Morse A  
Sound Regional B  
York A

Round Robin Ranking Tie Break Rules

The seeding/tie-break process will be based on the following:
1. Won/loss record for the Round Robin, then;
2. Highest cumulative total points scored, then;
3. Lowest cumulative total points allowed, then;
4. Highest cumulative point differential between scored and allowed, then;
5. Coin toss
## 2020 Nor'easter Bowl Round Robin Schedule
February 1st, 2020 - University of New Hampshire

<table>
<thead>
<tr>
<th>Room</th>
<th>Round 1 - 8:30 - 9:00 AM</th>
<th>Round 2 - 9:05 - 9:35 AM</th>
<th>Round 3 - 9:40 - 10:10 AM</th>
<th>Round 4 - 10:30 - 11:00 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>ConVal A</td>
<td>Cranston A</td>
<td>York B</td>
<td>Sanford A</td>
</tr>
<tr>
<td>205</td>
<td>Windham</td>
<td>Falmouth</td>
<td>ConVal B</td>
<td>Morse A</td>
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<tr>
<td>202</td>
<td>Belfast B</td>
<td>Sound B</td>
<td>Sanford B</td>
<td>ConVal A</td>
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<tr>
<td>201</td>
<td>Belfast A</td>
<td>Sanford B</td>
<td>Morse B</td>
<td>Falmouth</td>
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<tr>
<td>108</td>
<td>ConVal B</td>
<td>York A</td>
<td>Sound A</td>
<td>Belfast A</td>
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<tr>
<td>107</td>
<td>Morse B</td>
<td>Sanford A</td>
<td>York A</td>
<td>Sound A</td>
</tr>
<tr>
<td>102</td>
<td>Narragansett</td>
<td>York B</td>
<td>Belfast B</td>
<td>ConVal B</td>
</tr>
</tbody>
</table>

| Bye  | Everybody else...         | Everybody else...        | Everybody else...         | Everybody else...         |

<table>
<thead>
<tr>
<th>Room</th>
<th>Round 5 - 11:05 - 11:35 PM</th>
<th>Round 6 - 11:40 - 12:10 PM</th>
<th>Lunch - 12:10 - 1:10 PM</th>
<th>Round 7 - 1:15 - 1:45 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>Morse A</td>
<td>Cranston B</td>
<td>Falmouth</td>
<td>ConVal A</td>
</tr>
<tr>
<td>205</td>
<td>Sound A</td>
<td>ConVal A</td>
<td>Sound B</td>
<td>ConVal B</td>
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<td>Belfast A</td>
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</tbody>
</table>

| Bye  | Everybody else...         | Everybody else...         | Everybody else...        | Everybody else...         |
2020 Nor’easter Bowl Single Elimination Bracket
Top 8 teams from Round Robin

Round 1 - 2:15 PM  Round 2 - 2:50 PM  Round 3 - 3:25 PM  Awards - 4:00 PM

1A - Rm 210  1A Winner  
2A - Rm 210  2A Winner
1B - Rm 205  1B Winner
1C - Rm 202  1C Winner
2B - Rm 205  2B Winner
1D - Rm 201  1D Winner
3A - Rm 210

2020 Nor’easter Bowl Awards

1st Place
- 2020 Nor’easter Bowl Champion Plaque
- Qualify to represent the region at the NOSB National Finals in Mississippi

2nd Place
- 2020 Nor’easter Bowl 2nd Place Plaque
- First Choice of Field Trip Prizes

Sportsmanship Award
- 2020 Nor’easter Bowl Sportsmanship Plaque
- Special Sportsmanship Trip

Name Tag Design Award
- UNH Apparel

3rd through 18th Place
- Field trip selection by finish
2020 Nor’easter Bowl Field Trip Prizes

**Sportsmanship Trip: University of Maine/Darling Marine Center**
A two-night stay at the Darling Marine Center in Walpole, Maine. Visit includes: Time sampling aboard a research vessel, lab time with scientists, meals on Saturday and Sunday breakfast. *Specific dates will be offered by the Darling Marine Center.*

**Explore Appledore Island Walking Tour– UNH/New Hampshire Sea Grant**
Join scientists and docents aboard a UNH research vessel to the Shoals Marine Laboratory for shipboard and island activities.

**Maine Maritime Academy Boat trip**
A one-day sampling cruise and guided tour at Maine Maritime Academy, starting at the campus in Castine, Maine.

**Visit the Bigelow Laboratory for Ocean Sciences**
A one-day visit featuring sessions with the scientists of this world-renowned facility at their location in East Boothbay Harbor, Maine.

**Kayak trip at the Great Bay National Estuarine Research Reserve**
A one-day guided, interpretive, kayak trip in the Great Bay Estuary. Tour starts at the Great Bay Discovery Center in Greenland, New Hampshire. *Email or call in early spring, around April, to plan trip.*

**Visit the Wells National Estuarine Research Reserve**
A one-day tour with the stewardship coordinator and research associate. Features lab work and perhaps some boat sampling. Meet at the Wells reserve in Wells, Maine. *Early booking is required.*

**Visit the Gulf of Maine Research Institute**
A one-day visit featuring sessions with the scientists and staff of this cutting-edge oceanographic research institution on the waterfront in Portland, Maine. Dates in March and April will be offered.

**New England Aquarium – Behind the Scenes Tour**
Trip includes admission and a guided “behind the scenes” tour for a group of 7 at the New England Aquarium on Long Wharf in Boston Harbor, Massachusetts.

**Visit the University of New England Marine Science Center**
A one-day tour of the Marine Science Center and time aboard the UNE research vessel. Includes sessions with scientists and marine staff. Tour starts on the campus in Biddeford.

**Visit the scientists at the State of Maine Marine Fisheries Department.**
West Boothbay Harbor, Maine
We couldn’t do this without you!

Special thanks to all these groups and individuals. We appreciate you volunteering your time and energy to put on a wonderful event for our participants.

- Maine Maritime for providing a Judging Team
- University of New England for providing a Judging Team
- University of Maine for providing a Science Central Judge
- Mr. Jon Manley for organizing the Field Trip Prizes
- UNH Marine Docents for your tireless participation today and the week leading up to the Nor’easter Bowl!
- University of New Hampshire CCOM staff
- Our Science Judges at Science Central
- Sea Grant Staff for all your help
- University of New Hampshire for hosting the Nor’easter Bowl
- Roland Arsenault and Brian Calder from the Center for Coastal & Ocean Mapping for taking care of the scoreboard and website updates all day
Congratulations to all NOSB seniors heading off to college or employment next year. We hope that you will continue to be involved in the program and stay in touch regarding your future careers. Now that you are a program alumnus, here are some tips for staying connected with the NOSB at the regional and national levels:

**REGIONAL OPPORTUNITIES**

**Volunteer at a regional competition**
Visit the competition map at [www.nosb.org](http://www.nosb.org) to find bowl dates and contact information.

Be sure to tell the bowl’s regional coordinator that you are a NOSB alumni AND if you’ve volunteered at any other bowls.

**Serve as a mentor to new teams**
Email your regional bowl’s coordinator to see if they can match you up with a new team.

**NATIONAL OPPORTUNITIES**

**Join the NOSB Alumni Group on LinkedIn**

**Follow NOSB on social media**
Facebook: National Ocean Sciences Bowl
Twitter: @NOSBRocks
Instagram: @NOSBRocks


**Serve as a competition question writer or reviewer**

**Participate each year in our past participant tracking study no matter your current major or field**

**Provide an Alumni Spotlight**
As you start your career, tell us where you are working and the job you perform, as well as the NOSB’s impact on your personal and/or professional life. We’ll share your story online and in Ocean Leadership’s Ocean News Weekly.

Email nosb@oceanleadership.org for more information.
The National Ocean Scholar Program offers tuition assistance (up to $1000) to rising college freshmen planning to major in an ocean science related field.

To be eligible, students must:

• have participated in the National Ocean Sciences Bowl (NOSB®) at least once during high school.
• be graduating from high school this year.
• be planning to pursue a post-high school degree in an ocean related field this coming fall.

Application materials are available online at www.nosb.org.

For more information or questions please contact Ocean Leadership at nosb@oceanleadership.org.

The NOSB is a program of the Consortium for Ocean Leadership.
National Ocean Scholarship Program

What is the National Ocean Scholarship Program?
As part of the National Ocean Sciences Bowl (NOSB) program’s continuing effort to recognize individual achievement as part of the NOSB program, the Consortium for Ocean Leadership offers the National Ocean Scholarship Program. This scholarship program is to provide tuition assistance for NOSB students who have an interest in pursuing an ocean or a marine related topic area in their post-high school education.

Criteria for the National Ocean Scholarship Program
All applicants for the National Ocean Scholarship Program must meet the following requirements:
- Participate in the National Ocean Sciences Bowl at least once during their high school career
- Pursue a career goal in the ocean sciences or a marine-related field
- Demonstrate academic success and integrity throughout their high school career
- Be scheduled to graduate high school in the spring of 2020

Application Process for the National Ocean Scholarship Program
Qualified students are required to submit the following materials:
- Completed application -available on the NOSB website at http://nosb.org/opportunities/national-ocean-scholar-program/
- Official High School Transcript(s)
  NOTE: If the student's GPA is NOT on a 4.0 scale, the student MUST provide a conversion to the 4.0 grade scale signed by their high school principal or counselor
- Photocopy of an official score sheet from either the SAT or the ACT
- 2 required essays – guidelines are available at http://nosb.org/opportunities/national-ocean-scholar-program/
- Two (2) letters of recommendation [One must be from an academic source such as a teacher or a coach]
- Proof of admission to an institution of higher learning (if available currently).

***NOTE: ALL the items listed above MUST arrive to the NOSB office in one package, including letters of recommendation. We suggest the envelopes be sealed, with the signature of the person writing the recommendation over the seal. Any applications received incomplete will NOT be accepted or reviewed.

Completed applications must be postmarked by MAY 25th, 2020 to be considered. There is no need to overnight or send by express any application packages, if they are postmarked by 5/25/2020!

All documents should be sent to the Consortium for Ocean Leadership at the address below:
Consortium for Ocean Leadership
Attn: Melissa Brodeur / National Ocean Scholarship Program
1201 New York Avenue, 4th Floor
Washington, DC 20005

Decisions will be made by the end of June 2020, and all applicants will be contacted whether they receive funding. An outside review team of educators, university scientists and marine agency professionals will evaluate all applications. Selection will be based on evaluation of transcripts, SAT scores, recommendation letters, essays and overall expressed interest in marine and coastal science. Funding is dependent upon attending an institution of higher learning.

If there are any questions regarding the criteria listed above, please contact the National Ocean Sciences Bowl Program Office at (202) 448-1230 or email mbrodeur@oceanleadership.org.
2019 - 2020 SPONSORS

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U.S. DEPARTMENT OF COMMERCE

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Gulf Research Program

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Deerbrook Charitable Trust

NASA

Shell

Lockheed Martin

Sharon & Wayne Sternberger

BOEM
Bureau of Ocean Energy Management

NREL
Transforming Energy

Marine Technology Society

NOSB is a program of the Consortium for Ocean Leadership