

NATIONAL OCEAN
SCIENCES BOWL

6 - 8 February

2009

Seward, Alaska

Thank you to all the volunteers who make this event possible!

Moderator

Judy McDonald
Sarah Gerken
Carol Griswold
Stephanie Moreland
Naomi Fisher
Richard Hocking
Sherry Tamone
Russ Andrews

Science Judge

Denis Wiesenburg
Rob Campbell
Carole DiPoi
Doug DeMaster
Scott Pegau
Shannon Atkinson
Kris Holderide
Sarah Mincks

Rules Judge

Tara Borland
Roger Long
Dave Leech
Jim Sheehan
Jim Herbert
Fritz Klasner
Lisa Matlock
Mike Lasota

Score Keeper

Katie Murra
Christina Kriedman
Jenne Danzl
Pat Jacobson
Lynn Aderholt
Joanie Merritt
Kim Donohue
Amy Holman

Time Keeper

Georgina Gibson
Gwen Gerdson
Caroline Jezierski
Bonnie Moore
Linda Lasota
John Skinner
Betty Connor
Elise Kahl
Jeff Mow
Katie Springman

Runner

Todd Rennie
Alice Stone
Laura Hensley
Jenelle Gilding
Natalie Wilff
Vic Aderholt
Brian Lynn
Carin Bailey
Stephens
Ben Tucker
Teresa Thompson

TCQ Graders

Lori Polasek
Beate Litz
Ben Daly
Justin Jenniges
Mandy Keogh
Jacqueline Ramsey
Rebekka Federer
Jill Prewitt
Anne Hoover-Miller

Chief Science Judge & Project Judge

Dean Stockwell

Paper Reviewers

John Kelley
Jeremy Mathis
**Presentation
Judges**
Sarah Mincks
Sherry Tamone
Steve Okkonen

Art Show Judges

Sandy Stolle
Kerry Cline
Judy McDonald

Ocean Bowl Central

Phyllis Shoemaker
Sherri Pristash
Jennifer Elhard
Cathy Byars
Linda Lasota

Food

Nici Murawsky
Jennifer Elhard
Cathy Byars
Kelly Hartz
Mary Miller
Melody Hatch
Chelli Skoog
Cindy Clock

Question Review

Anne Hoover-Miller
Carol Griswold
Richard Hocking
Judy McDonald

Other participants

Hank Pennington - photographer
Jan Pennington - photographer
Denise Wartes - Rural Alaska Honors Institute
Carin Bailey-Stephens - SFOS Information
Officer
Rawlins Apperson - logistics
Chad Padgett - Alaska District Director
representing Congressman Don Young
Dan Oliver - welcome
Russ Andrews - guest speaker



Alaska Tsunami Ocean Sciences Bowl

WELCOME TO THE 12th annual competition February 6–8, 2009 • Seward, Alaska

The goal of this competition is to recognize and reward excellence among students interested in ocean studies. The bowl also aims to encourage high school students, their teachers and parents to increase their knowledge of the oceans and to broaden awareness of the critical value of ocean research.

Returning to the Tsunami Bowl in 2009 is the **research component** of the competition, in which teams of four or five students prepare a 20-page research paper that is submitted in December, and present a 20-minute oral presentation at the Tsunami Bowl in February. The research project counts as 50 percent of the final score and complements the quiz competition, where teams of four students, plus an optional alternate, compete against each other in a timed quiz match, which contributes the other 50 percent of the final score.

In the **quiz competition**, students must be the first to “buzz-in” for the opportunity to answer a multiple-choice or short-answer question. The game is organized as a series of matches in a round-robin/double-elimination format. In each match, two teams compete against each other and the clock, trying to be the fastest to answer the toss-up questions. Team challenge questions, more complex questions which require critical analysis and written answers, test students’ critical thinking skills.

The winning team of the 2009 Tsunami Bowl will have all expenses paid to travel to Washington, DC, April 25–27, 2009, to compete against 24 other regional teams from across the United States.

To encourage participation by students of a more artistic persuasion, the Tsunami Bowl includes an optional art show. The **NOSB Ocean Connection Juried Art Show** is open to all “ocean-theme” artwork created by high school students (grades 9–12) from schools participating in the NOSB competition. Students with art entries do not have to be members of a NOSB team to submit art.

For more information about the Tsunami Bowl please check out the web site at:

<http://seagrant.uaf.edu/nosb/index.html> or contact:

Phyllis Shoemaker, fnpas1@uaf.edu, Alaska Region NOSB Coordinator
University of Alaska Seward Marine Center, PO Box 730, Seward, AK 99664
(907) 224-4312

NOSB SCHEDULE OF EVENTS: 5 - 8 February, 2009

Thursday, 5 February

4:00 - 9:00 pm Check in and optional practice at the Seward Marine Center's
K.M. Rae Marine Education Building, 125 Third Avenue

5:00 pm - 10:00 pm Nocturne program at Alaska SeaLife Center for NOSB teams

Friday, 6 February - All Oral Presentations are open to the public.

6 - 8 AM Breakfast at Breeze Inn Motel for NOSB teams & out-of-town volunteers

7:00 AM Doors open at Seward High School (2100 Swetman Avenue).

Final team check in

8:15 AM Welcome & Introductions

8:30 AM Guest Speaker - Russ Andrews

9:00 AM 1st Oral Presentation - Kodiak SMART

9:30 AM 2nd Oral Presentation - Seward The Zin

10:00 AM 3rd Oral Presentation - Cordova Visceral Mass

10:30 AM 15 Minute Break - snacks

10:45 AM 4th Oral Presentation - South Starfish

11:15 AM 5th Oral Presentation - White Mountain Wolves

11:45 AM 6th Oral Presentation - Wasilla Omega Alpha
Marine Wolverine Delta Squad

12:15 PM Lunch at Seward High School for NOSB teams and volunteers

1:00 PM 7th Oral Presentation - JD/TM Coo Coo for Coccolithophores

1:30 PM 8th Oral presentation - Cordova New Fish on the Dock

2:00 PM 9th Oral presentation - Petersburg W.O.A.A.

2:30 PM 15 Minute Break - snacks

2:45 PM 10th Oral presentation - JD Naughty Nautili

3:15 PM 11th Oral presentation - Eagle River Oceanic V-Caps

4:00 PM Field trips / Tours

6:00 PM Dinner at Alaska SeaLife Center for NOSB teams and
out-of-town volunteers

7:00 PM **NOSB Art Show "Ocean Connection" - Opening Reception and
award presentation at the Alaska SeaLife Center lobby.
Open to the public.**

**Saturday, 7 February – All Oral presentations, Quiz Matches
and programs are open to the public.**

6 – 8 AM Breakfast at Breeze Inn Motel for NOSB teams & out-of-town volunteers
7:00 AM Doors open at **Seward High School (2100 Swetman Avenue)**
8:15 AM Opening comments & speakers
8:45 AM 12th Oral presentation – Mountain Village Team A
9:15 AM Guest speaker – Chad Padgett representing Congressman Don Young
9:45 AM 14th Oral presentation – Mountain Village Team B
10:15 AM **15 minute break – snacks**
10:30 AM Announcements and Rules Review
11:15 AM Round 1 RR-1
12:00 PM **Lunch at Seward High School for NOSB teams and volunteers**
12:30 PM Coaches' meeting & team photos
1:30 PM Round 2 RR-2
2:10 PM Round 3 RR-3
2:50 PM Round 4 RR-4
3:30 PM **Break – snacks**
3:45 PM Round 5 RR-5
4:25 PM Round 6 RR-6
5:05 PM Round 7 RR-7
5:45 PM **Dinner at Seward High School for NOSB teams and volunteers**
7:00 – 9:00 PM **Alaska Ocean Film Festival – Seward High School –
free for NOSB participants (just show your name tag!)
Open to the public for only \$5.00!**

**Sunday, 8 February – All Quiz Rounds and the Awards Ceremony
are open to the public.**

6 – 8 AM Breakfast at Breeze Inn Motel for NOSB teams & out-of-town volunteers
7:00 AM Doors open – **Seward High School (2100 Swetman Avenue)**
8:30 AM Announcements
9:00 AM Quiz competition resumes – Round 8 DE-1
9:45 AM Round 9 DE-2
10:30 AM Round 10 DE-3
11:15 AM Round 11 DE-4
12:00 PM **Lunch at Seward High School for NOSB teams and volunteers**
1:00 PM **Awards ceremony – Open to the public**

2009 NOSB Teams

Alaska Region National Ocean Sciences Bowl

Asterisks (*) denote returning coaches and students. Multiple asterisks signify multiple years' participation.

Anchorage: South Anchorage High School

Team Starfish

Laura Crews*
Kate Backstrum
Petra Davis*
Hailey Hosken*
Tara Brodie*

Chris Backstrum*, coach

Eagle River High School

Oceanic V-Caps

Maggie Hepler
Kalli Doenges
Kim Shields
Jessica Shoemake
Sarah Poggi

Mark VanArsdale, coach

Anchorage: South Anchorage High School

Team Urchin

Lindsey Coulson*
Sophie Massey
Lauren Duran
Nick Warner*

Chris Backstrum*, coach

Eagle River High School

Mobulidae

Kristian Anderson
Wilson Puryear
Elizabeth Stevens
Paul Grotelueschen
Nikolai Reitz

Jan Tomsen***, coach

Cordova High School – Prince William Sound Science Center

Visceral Mass

Ian Americus*
Trae Lohse*
Drew Lindow*
Grafton Schikora*
Craig Bailer*

Lindsay Butters**, coach

Juneau-Douglas High School

Naughty Nautili

Kayla Harrison*
Stephen Kubota*
Jacob Pernula
Molly Emerson*
Tyler Houseweart

Ben Carney**, coach

Cordova High School – Prince William Sound Science Center

New Fish on the Dock

Darrin Gilman*
Shannon Lindow
Keegan Irving*
James Allen
Christina Morrisette

Lindsay Butters**, coach

Juneau-Douglas High School – Thunder Mountain High School

Coo Coo for Coccolithophores

Laurel Stark
Ross Douglas*
Thomas Emerson
Carly Casipit
Seth Brickey-Smith

Jake Jacoby, coach

2009 NOSB Teams, cont.

Kodiak High School

SMART

Margaret Carmel
Adilene Castaneda
Cassidy Ray Garcia
Sam Horton

Switgard Duesterloh and Kevin
Lauscher, coaches

Seward High School

The Zin

Nathan Feemster*
MacKenzie Barnwell
David Herbert*
Maggie Herbert
Nat Aderholt

Carlyn Nichols, coach

Mountain Village: Ignatius Beans Memorial School Complex

Team A

Corrine Beans
John Lamont III
Hazel Andrews
Eric Joe
Serina Joe

Raphia Maglinao, coach

Wasilla High School

Omega Alpha Marine Wolverine

Delta Squad

Colton Newman
Jesse Victors
Brandi Ringgenberg
Brittaney Newman

Roger Saft, coach

Mountain Village: Ignatius Beans Memorial School Complex

Team B

Jareth Andrews
Janelle Santa-Cruz
Kenneth Hunter
Cindy Lawrence
Leanna Wilde

Hazel Walters, coach

White Mountain School

Wolves

DeAnne Lincoln*
Roberta Charles*
Michelle Simon*
Scotty Ashenfelter

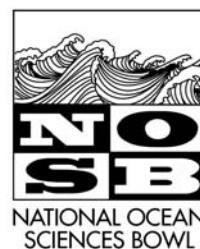
Jack Adams**, coach

Petersburg High School

W.O.A.A.

Tessa Hasbrouck
Kristin Neuneker
Stephanie Randrup
Rachael Satterwhite
Molly Volk

Joni Johnson and Sunny Rice, coaches



2009 Tsunami Bowl Division 1

Team Name	Cordova New Fish on the Dock	Eagle River Oceanic V- Caps	JD/TM Coo Coo for Coccolithophores	Mt. Village Team A	Petersburg W.O.A.A.	South Starfish	Wasilla Omega Alpha Marine	TOTAL POINTS*
Cordova Team New Fish on the Dock	BYE							
Eagle River Oceanic V-Caps		BYE						
JD/TM Coo Coo for Coccolithophores			BYE					
Mt. Village Team A				BYE				
Petersburg W.O.A.A.					BYE			
South Starfish						BYE		
Wasilla Omega Alpha Marine Delta Squad							BYE	

2009 Tsunami Bowl Division 2

Team Name	Cordova Team Visceral Mass	Eagle River Mobulidae	JD Naughty Nautili	Kodiak SMART	Mt. Village Team B	Seward The Zin	South Sea Urchins	White Mt. Wolves	TOTAL POINTS*
Cordova Team Visceral Mass	BYE								
Eagle River Mobulidae		BYE							
JD Naughty Nautili			BYE						
Kodiak SMART				BYE					
Mt. Village Team B					BYE				
Seward The Zin						BYE			
South Sea Urchins							BYE		
White Mt. Wolves								BYE	

* Teams get 2 points for a win, 1 point for a tie & 0 points for a loss

Top four teams in each division move into the championship bracket

Bottom three or four teams in each division move into the consolation bracket

SATURDAY, FEBRUARY 7 - ROUND ROBIN MATCHES

	Auditorium	Room 101	Room 102	Room 103	Room 106	Room 202	Room 203	Room 205	Team with BYE
judging team #	1	2	3	4	5	6	7	8	4
Round # 1- 11:15 am	Cordova Team New Fish VS Wasilla Omega Alpha	Eagle River Oceanic V-Caps VS South Starfish	JD/TM Coo Coo VS Petersburg W.O. A.A.	BYE	Cordova Visceral Mass VS White Mt. Wolves	Eagle River Mobulidae VS South Sea Urchins	JD Naughty Nautilli VS Seward The Zin	Kodiak SMART VS Mt. Village Team B	Mt. Village Team A

12:00 LUNCH AT SEWARD HIGH SCHOOL FOR NOSB PARTICIPANTS & VOLUNTEERS

judging team #	2	1	3	4	5	6	7	8	1
Round # 2 - 1:30 pm	JD Naughty Nautilli VS Kodiak SMART	BYE	Eagle River Oceanic V-Caps VS Mt. Village Team A	South Sea Urchins VS White Mt. Wolves	South Starfish VS Wasilla Omega Alpha	Cordova Visceral Mass VS Seward The Zin	Eagle River Mobulidae VS Mt. Village Team B	Cordova Team New Fish VS Petersburg W.O.A.A.	JD/TM Coo Coo for Cocolithophores
judging team #	1	2	3	4	5	6	8	8	3
Round # 3 - 2:10 pm	Mt. Village Team B VS South Sea Urchins	Seward The Zin VS White Mt. Wolves	BYE	Eagle River Oceanic V-Caps VS JD/TM Coo Coo	Eagle River Mobulidae VS JD Naughty Nautilli	Petersburg W.O.A.A. VS Wasilla Omega Alpha	Cordova Visceral Mass VS Kodiak SMART	Mt. Village Team A VS South Starfish	Cordova Team New Fish
judging team #	1	2	3	4	5	8	7	8	5
Round # 4 - 2:50 pm	Cordova Team New Fish VS Eagle River Oceanic V-Caps	JD Naughty Nautilli VS South Sea Urchins	Mt. Village Team B VS White Mt. Wolves	Kodiak SMART VS Seward The Zin	BYE	JD/TM Coo Coo for Cocolithophores VS South Starfish	Mt. Village Team A VS Wasilla Omega Alpha	Cordova Visceral Mass VS Eagle River Mobulidae	Petersburg W.O.A.A

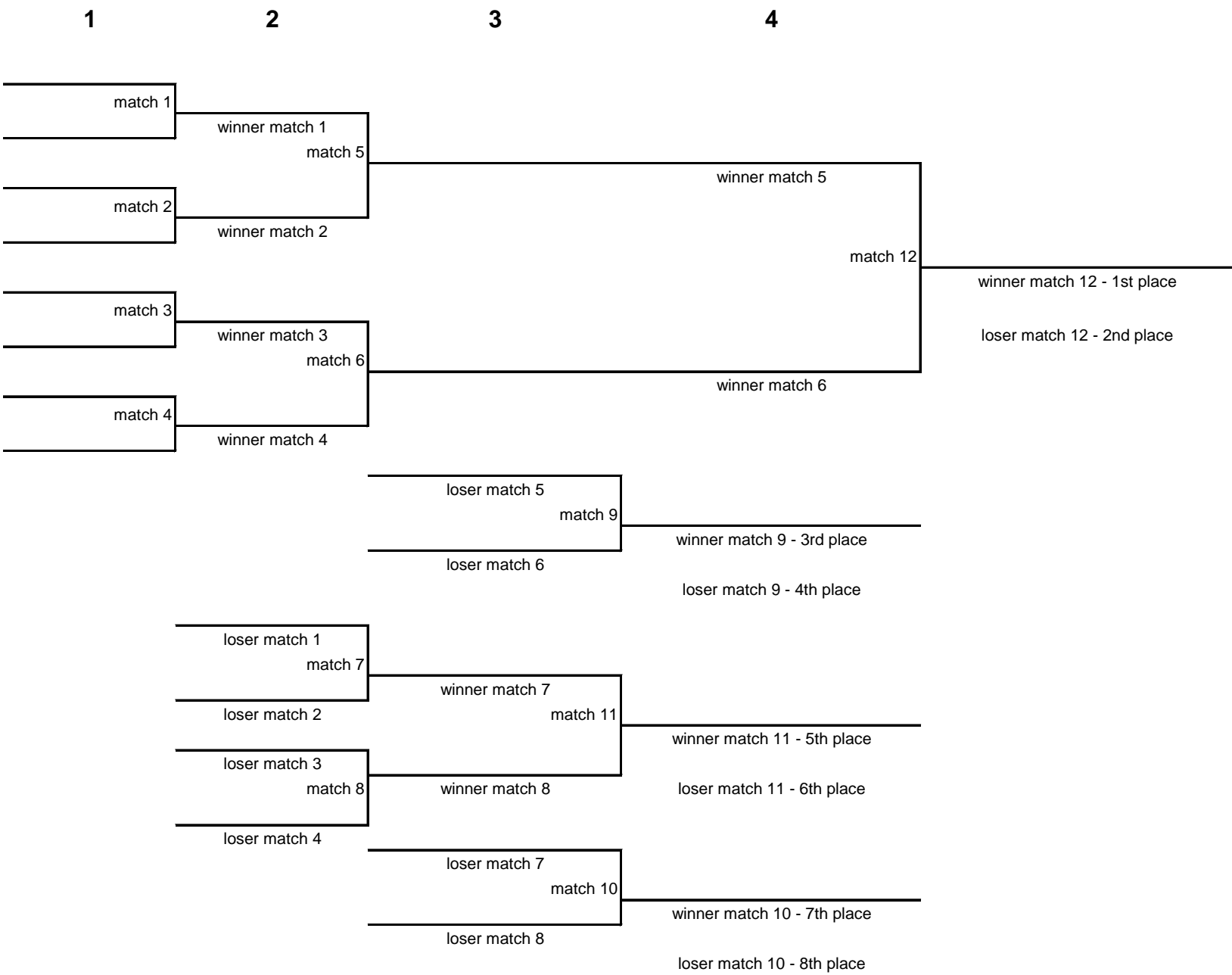
3:30 - BREAK & SNACKS

judging team #	1	2	3	5	4	6	7	8	6
Round # 5 - 3:45 pm	Eagle River Mobulidae VS Seward The Zin	Kodiak SMART VS White Mt. Wolves	Cordova Visceral Mass VS South Sea Urchins	Cordova Team New Fish VS South Starfish	JD/TM Coo Coo for Cocolithophores VS Mt. Village Team A	BYE	Eagle River Oceanic V-Caps VS Petersburg W.O.A.A.	JD Naughty Nautilli VS Mt. Village Team B	Wasilla Omega AlphaMarine Wolverine Delta
judging team #	1	2	3	5	4	6	7	8	8
Round # 6 -4:25 pm	Petersburg W.O. A.A. VS South Starfish	Cordova Visceral Mass VS Mt. Village Team B	Eagle River Mobulidae VS Kodiak SMART	JD/TM Coo Coo for Cocolithophores VS Wasilla Omega Alpha	Seward The Zin VS South Sea Urchins	Cordova Team New Fish VS Mt. Village Team A	JD Naughty Nautilli VS White Mt. Wolves	BYE	Eagle River Oceanic V-Caps
judging team #	1	2	3	5	4	6	7	8	7
Round # 7 - 5:05 pm	Kodiak SMART VS South Sea Urchins	Mt. Village Team A VS Petersburg W.O.A.A.	Cordova Team New Fish VS JD/TM Coo Coo	Cordova Visceral Mass VS JD Naughty Nautilli	Eagle River Oceanic V-Caps VS Wasilla Omega Alpha	Mt. Village Team B VS Seward The Zin	BYE	Eagle River Mobulidae VS White Mt. Wolves	South Starfish

SUNDAY, FEBRUARY 8 - DOUBLE ELIMINATION MATCHES

judging team #	1	2	3	4	5	6	7	8	2
Round # 8 - 9:00 am	CHAMPIONSHIP MATCH # 1	BYE	CHAMPIONSHIP MATCH # 2	CONSOLATION MATCH # 2	CHAMPIONSHIP MATCH # 3	CONSOLATION MATCH # 3	CHAMPIONSHIP MATCH # 4	CONSOLATION MATCH # 4	
judging team #	1	2	3	4	5	6	7	8	6
Round # 9 - 9:45 am	CHAMPIONSHIP MATCH # 5	CONSOLATION MATCH # 5	CHAMPIONSHIP MATCH # 6	CONSOLATION MATCH # 6	CHAMPIONSHIP MATCH # 7	BYE	CHAMPIONSHIP MATCH # 8	CONSOLATION MATCH # 8	
judging team #	1				5	6	7	8	2, 3, 4
Round # 10 - 10:30 am	CHAMPIONSHIP MATCH # 9				CONSOLATION MATCH # 9	CHAMPIONSHIP MATCH # 10	CONSOLATION MATCH # 10	CONSOLATION MATCH # 11	
judging team #	TBD								
Round # 11 - 11:15 am	CHAMPIONSHIP MATCH # 12								

Championship Round #

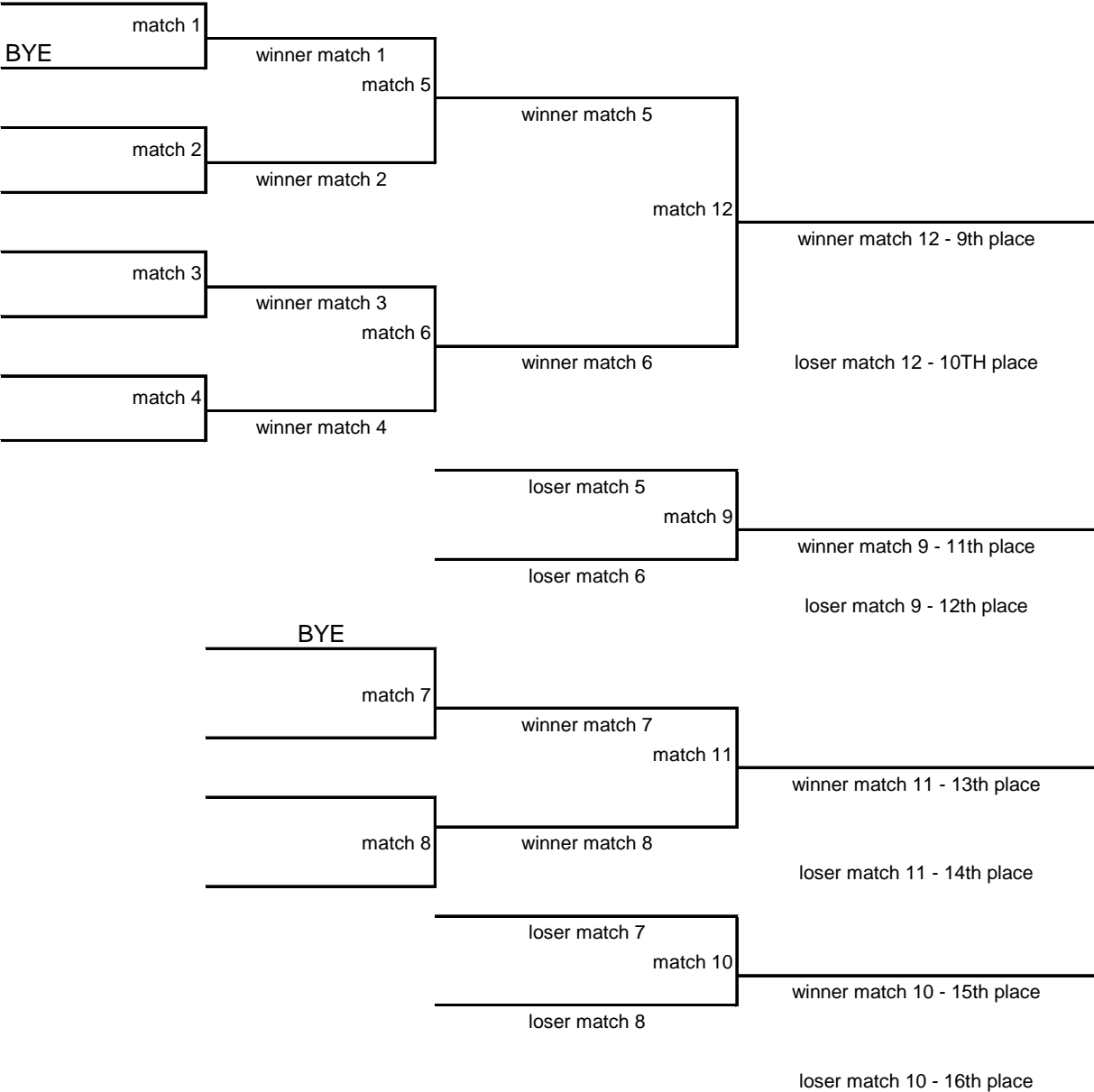


Consolation Round #

1

2

3



School Name	scores
South Anchorage	<u>paper score</u>
Team Starfish	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
South Anchorage	<u>paper score</u>
Team Urchin	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Cordova - PWSSC	<u>paper score</u>
Visceral Mass	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Cordova - PWSSC	<u>paper score</u>
New Fish on the Dock	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Eagle River	<u>paper score</u>
Oceanic V-Caps	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Eagle River	<u>paper score</u>
Mobulidae	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Juneau-Douglas	<u>paper score</u>
Naughty Nautili	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Juneau-Douglas/ Thunder Mountain	<u>paper score</u>
Coo Coo for Coccolithophores	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>

School Name	scores
Kodiak	<u>paper score</u>
SMART	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Mountain Village	<u>paper score</u>
Team A	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Mountain Village	<u>paper score</u>
Team B	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Petersburg	<u>paper score</u>
W.O.A.A.	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Seward	<u>paper score</u>
The Zin	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>
Wasilla	<u>paper score</u>
Omega Alpha Wolverine	<u>oral presentation score</u>
Delta Squad	<u>quiz score</u>
	<u>total</u>
White Mountain	<u>paper score</u>
Wolves	<u>oral presentation score</u>
	<u>quiz score</u>
	<u>total</u>

The scoring for the 2009 Tsunami Bowl consists of three parts:

The research paper is worth a maximum of **25 points**.

The oral presentation is worth a maximum of **25 points**.

Points are awarded in the quiz competition based on the final place in the double elimination bracket according to this formula: $[15 \text{ total teams} + 1] - \text{place}] / (15 \text{ total teams}) \times 50$; so 1st place gets 50 points, 8th place gets 26.7 points, and 15th place gets 3.3 points

Alaskan Sponsors for the 2009 **Alaska Tsunami National Ocean Sciences Bowl**

Listed below and on the following page are the agencies, businesses and individuals that have dedicated resources toward the success of this year's Tsunami Bowl Competition.

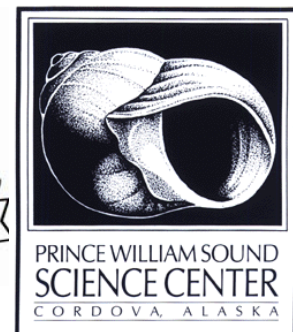
University of Alaska

- UAF
- UAS
- UAA
- Marine Advisory Program
- Alaska Sea Grant College Program
- School of Fisheries and Ocean Sciences
- Seward Marine Center
- Ocean Alaska Science and Learning Center (Kenai Fjords National Park & Alaska SeaLife Center)
- Kenai Fjords National Park
- Alaska SeaLife Center
- Pennington Photography
- Prince William Sound Science Center
- Dolly Dieter
- Carol Griswold
- Pat Williams
- Tom Smith
- Nici Murawsky
- Seward High School
- Icicle Seafoods / Seward Fisheries
- Norseman Maritime Charters & Paul Tate
- Kachemak Bay National Esuarine Research Reserve
- Aurora Energy Services
- Kenai Fjord Tours
- Glosten Associates



More sponsors of the Alaska Region National Ocean Sciences Bowl Teams:

- Marine Conservation Alliance
- Oceana
- Simpson, Tillinghast & Sorensen PC
- Taku Fisheries/Smokeries
- Juneau School District
- Anchorage School District
- Community of Petersburg
- Community, District and Corporation of Mountain Village
- Community of White Mountain
- NSEDC – White Mountain
- Community of Cordova
- Community of Eagle River
- Community of Wasilla

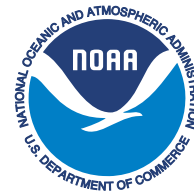


Thank you for helping the 2009 students get to
Seward for the Tsunami Bowl competition!



NATIONAL OCEAN
SCIENCES BOWL®

2009 NOSB® Sponsors



Smithsonian



NOSB® is a program of the Consortium for Ocean Leadership

Who lives on a planet covered mostly by water?

You do!

Oceans cover approximately
70% of the Earth's surface.

Are you interested in how you
affect the planet's oceans and the
life within them?

Share your ideas and send your own
message about why **biodiversity** in the
oceans is important by entering the...



National Ocean Sciences Bowl (NOSB®) “Living on the Ocean Planet” Video Contest

Who is eligible?

Any student enrolled in a high school that has a NOSB team competing in the region's 2009 NOSB competition. We encourage students to work in teams!

Top Prize:

An all-expense paid trip to Washington, DC to present your video to a national audience.

Deadline for Video Submission: Monday, March 2, 2009

For more details: www.nosb.org

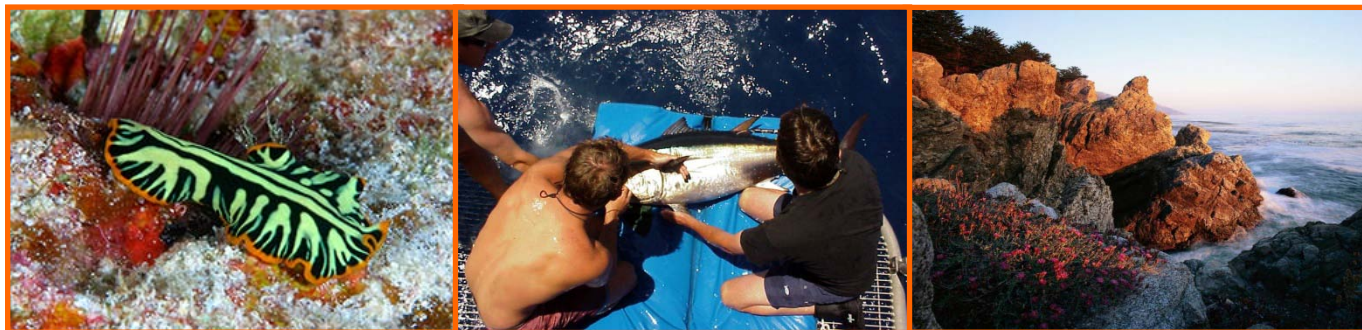


Need financial aid for college? Interested in pursuing a career in the ocean sciences?

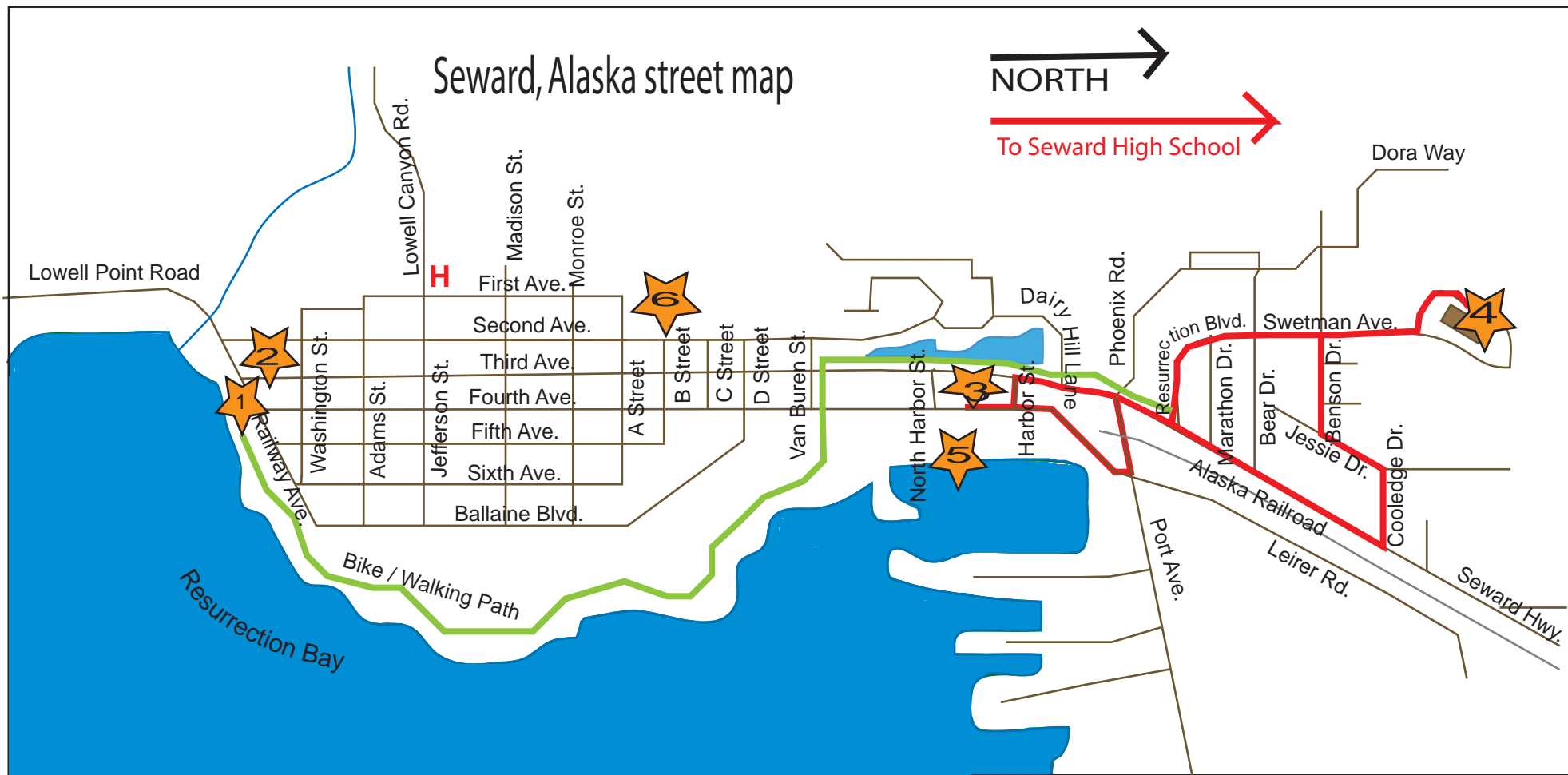
Apply for the National Ocean Scholarship Program!

The National Ocean Scholarship Program offers students:

- **Tuition assistance** for students who have an interest in pursuing a marine or ocean science post-high school education.
- To be eligible, students must have participated in a National Ocean Sciences Bowl (NOSB®) and be graduating from high school in 2009.



The application is available online at **www.nosb.org**. For more information, contact Ocean Leadership at 202-448-1238 or email at abyrd@oceanleadership.org.



- 1 Alaska SeaLife Center
- 2 Marine Education Building
- 3 Breeze Inn

- 4 Seward High School
- 5 Small Boat Harbor
- 6 AVTEC

Approximate distances: Breeze Inn to Alaska SeaLife Center: 1.4 miles
 Breeze Inn to Seward High School: 1.1 miles
 Breeze Inn to Alaska Rail Road Seward Intermodal Facility: 0.8 miles