

Riverside Biology 11 Bamfield Trip 2016



Dear Parents,

This spring Riverside Secondary and the Science Department are fortunate to be able to offer students a chance to participate in a truly memorable and worthwhile multi-day field trip to the Bamfield Marine Science Centre (BMSC) located on the West Coast of Vancouver Island. The BMSC is a world class facility funded by a consortium of Western Canadian universities and dedicated to the study and conservation of marine life.

The students will be exposed to hands on marine biology, guided by marine biologists in a part of the west coast of BC renowned for its pristine ocean shore and tidal pools. Students will also experience a two hour boat excursion to the Deer Group Islands on the MV Alta, which also includes sampling from the sub tidal environment and marine mammal and bird observation.

The days are very busy. The students will be engaged from 7:00am until 9:00-10:00pm. There is very little 'free time'. However, they will not be bored and they will be absolutely amazed at what they learn. The trip is a truly once in a lifetime opportunity.

Accommodation will be in the new dormitory at BMSC and all meals are provided in the cafeteria which overlooks Barkley Sound. The students will be accompanied by Ms. Bree Mireau and another staff member.

The cost of this trip is approximately \$700.00.

- Transportation to Horseshoe Bay
- Ferry ticket (x2)
- Charter coach to Bamfield and back to Nanaimo
- Accommodation (3 nights)
- Meals (3 days)
- Program fees
- Ocean boat trip on MV Alta (2hrs)

What we require at this point is an idea of our commitment level, since we are required to put up a deposit now to secure our space. **Therefore we are asking for a \$350.00 deposit cheque.**

This deposit is deadline is Oct 15th, 2015. The deposit is refundable until Nov 13th, 2015. The remaining \$350 will be due Feb 20, 2016.

The trip is open to ALL students who are currently taking senior (gr 11 and 12) Biology AND those who took gr 11 biology last year, since we will only run this field trip on alternate years.

Reservations will be made on a first come first served basis and a waiting list will be used. Those not being given a space will have their deposit refunded.

You are strongly encouraged to visit the BMSC website www.bms.bc.ca to view their facilities and program information.

If you have questions about this trip, please feel free to contact me via email.

Regards,

Bree Mireau
Riverside Science Department
bmireau@sd43.bc.ca

BMSC Sample Itinerary

Day 1

12:15 Pickup by BMSC shuttle at Nanaimo Ferry Terminal
Lunch en route (Nanaimo or Port Alberni)
16:00 Arrive at BMSC, check in at the Whale Lab, settle into accommodations
17:00 Tour of BMSC facilities and safety orientation
18:00 Dinner
19:00 Field trip: Oceanography and biodiversity in Grappler Inlet, plankton collections.
20:30 Slide Show: Marine Mammals of Barkley Sound.

Day 2 (Low tide of 0.5m @ 0900)

07:30 Breakfast
08:30 Field Trip: Introduction to intertidal ecology including zonation patterns at Aguilar Point.
10:30 Lab: Marine invertebrate diversity in Barkley Sound.
12:30 Lunch
13:30 Field Trip: Open ocean sampling (dredge) and seabird/marine mammal surveys on M.V. Alta
15:30 Field trip: Temperate rainforest ecology, biodiversity study
18:00 Dinner
19:00 Lab: Microscopic examination of the plankton
20:30 Video: "Life at the Edge of the Sea" A BBC documentary filmed here at BMSC.
21:30 Field trip: Bioluminescence in the inlets of Bamfield

Day 3 (Low tide of 1.0 m @ 10:53)

7:30 Breakfast
8:30 Field Trip: Brady's Beach. Measure water quality variables and diversity in tidepools. (Meet at docks)
12:30 Lunch
13:30 Lab: Experimental marine biology. Design and perform experiments on live animals, then present your findings to the class. (Whale Lab)
16:00 Souvenir sales in the Whale Lab, final embryo check and release of babies!
16:30 Workshop: Marine Conservation Case Studies (Rix A)
18:00 Dinner
19:00 Slideshow: Marine mammals of the west coast (Ross Hall)

Day 4 (Low tide of 1.1 m @ 11:48)

7:30 Breakfast, build a bag lunch and fill a water bottle.
8:30 Pack up and move out of accommodations, load luggage onto BMSC bus.
9:00 Field trip: Hike to Pachena Bay (Meet in Traffic Circle with life jackets)
12:30 Lunch on Pachena beach (if weather permits)
13:30 Depart for Ferry Terminal directly from Pachena Bay on BMSC bus.

What to Bring

Field trip participants can expect generally cool west coast weather with some likelihood of rain. (Average annual rainfall in Bamfield is over 3m per year!) The following list covers the essentials for all field trips:

- Good rain gear – jacket, pants, and **rubber boots**
- Flashlight or headlamp
- Camera and Binoculars (if you have them)
- Clothing suitable for cool, moist climate (including a hat and gloves) with at least one change
- Sleeping bag
- Personal items (toothbrush, shampoo, **Towel**, etc.)
- Pen, **pencil**, paper & digital device (pencils work well wet ☺ also remember that salt water and digital devices don't mix ☹)
- Field notebook or clip board with paper for all field excursions
- Waterproof bag (garbage bag) – to keep belongings dry on field excursions
- Water bottle
- Backpack to carry gear on excursions
- Motion sickness materials (tablets, pressure point bracelets, candied ginger etc.)
- Snacks and beverages if desired outside normal meals

Field trips often involve walking and a certain amount of travel over slippery rocks in the intertidal zone. Participants should be prepared with proper foul weather gear. Personal Flotation Devices (PFDs) or life jackets (provided by BMSC) must be worn at all times while on boats and on shore.