

## Marine Ecology 2021



Your son or daughter has the opportunity to be a part of this year's Florida trip as part of the Marine Ecology class. The class has two portions: class at TRHS from June 11<sup>th</sup>-17<sup>th</sup> and Marine Lab in Key Largo, Florida from June 18<sup>th</sup>-23<sup>rd</sup>. This successful course has been running since 1992 at Two Rivers with over 275 students experiencing the ecology of southern Florida. Students love the experience and talk about it years later. One half of a high school science credit is earned through the instruction both here at TRHS and in Florida, but the experience is far more valuable.

Total cost of the class/trip is about \$1750. This includes the Marine Lab fee (almost all meals, room, boat trips and instruction) and transportation. Three fast food meals and souvenirs are not included. There is a deposit of \$500.00 to be paid immediately. This deposit is the commitment to the program and reserves their spot. Once everyone's deposit is collected, airline and travel arrangements will be made and exact costs calculated. Payment plans are available.

Included is a course outline for the material that will be covered in class before we leave for Florida along with an expected itinerary of the trip. If you have any questions, please call: 793-4325 ext 5213 or jeff.schmid@trschools.k12.wi.us Check out their website at marinelab.org.

I am really excited about taking another group of students down to Key Largo this next summer. I can personally say that they have top quality instructors, programs, and field trips. I'm sure the students will feel the same way I do.

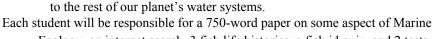






## Marine Ecology Outline

- I. Animal Phyla
  - A. Characteristics
  - B. Examples
- II. Ecosystem Ocean and Freshwater
  - A. Terms physical and biological features
  - B. Habitat Description
    - 1. Coral reef
    - 2. Sea Grasses
    - 3. Mangroves
    - 4. Inter Tidal Zone
    - 5. Hard bottom
    - 6. The deep 'blue'
  - C. Food Webs
  - D. Ocean Currents
- III. Fish ID
  - A. Fish anatomy
  - B. Family characteristics
- IV. Snorkeling Technique
- V. Environmental threats
  - A. Hurricanes
  - B. Eutrophication (Nutrients)
    - 1. Natural
    - 2. Man-made
  - C. Warming
- VI. Threatened and Endangered Marine Species
  - A. Over harvest
  - B. Whales and seals
  - C. Sea otters.
  - D. Destruction of habitat
  - E. Sea turtles
  - F. Manatees
  - G. Invertebrates
- VII. How Florida ecology (or Hydrology) relates



Ecology, an internet search, 3 fish life histories, a fish id quiz, and 2 tests.

Covid Precautions - Depending on the size of our group, at most there will be one other group that will be on the other side of the building with different meal times. Disinfection between groups and cleaning regularly. Issued your own snorkel. Masks/Buffs at all times not snorkeling. Marine Lab fee is refundable if COVID causes our cancellation.







Day	Time	Activity		
Friday	3:00AM	Leave High School for MKE		
6/18/21	6:15AM	Board Flight		
	12:00PM	Arrive in Ft Lauderdale, Gather Luggage, Get in Vehicles, Quick Eat		
	2:00PM	Arrive at Everglades National Park		
	5:00PM	Supper at Fast Food Restaurants in Florida City		
	5:30PM	Leave Florida City for Key Largo		
	6:00PM	Arrive, orientation		
	7:15PM	Discussion: Introduction to the Keys		
	8:15PM	Lab: Cassiopeia		
Saturday	8:00AM	Breakfast		
6/19/21	9:00AM	Lab: Water Quality		
	10:00AM	Gear orientation, swim test		
	11:00AM	Lagoon snorkel		
	12:30PM	Lunch		
	2:00PM	Discussion: Seagrass Ecology		
	3:00PM	Field Trip: Seagrass Ecology		
	6:00PM	Supper		
	7:00PM	Discussion: Coral Reef Ecology		
	8:15PM	Lab: Invertebrate Behavior and Morphology Lab		
Sunday	9:00AM	Field Trip: Mangrove Ecology		
6/20/21	2:00PM	Field Trip: Coral Reef Ecology #1		
	7:00PM	Discussion: R.E.E.F. Fish ID & Survey prep		
	8:15PM	Lab: Zooplankton identification		
Monday	9:00AM	Field Trip: Rodriguez Key		
6/21/21	2:00PM	Field Trip: Coral Reef Ecology #2		
	7:00PM	Lab: Invertebrate diversity followed by fish test		
	8:15PM	Lab: Microplastics		
Tuesday	9:00AM	Field Trip: Hardbottom		
6/22/21	2:00PM	Field Trip: Coral Reef Ecology #3 with Fish Survey		
	7:00PM	Data Summary		
	8:15PM	Summary Test		
Wed.	8:00AM	Breakfast, then leave for airport		
6/23/21	12:40PM	Board flight at FLL		
	4:30PM	Arrive at MKE, gather luggage, head to vehicles to Two Rivers.		

General Itinerary (changes based on travel arrangements and weather)

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I have outlined payment options below, please choose and mark which will work well for you and have your student return it along with the down payment. If you have any questions, please email or call: 793-4325 ext 5213 jeff.schmid@trschools.k12.wi.us

Please return at least this portion of the sheet and the non-refundable deposit of \$500 now. Credit/debit card payments can be made on Revtrak.

Choose a payment option.

Lump Option \$500.00 Deposit	Scheduled Bimonthly \$500.00 Deposit	Scheduled Monthly \$500.00 Deposit
(ASAP)	(ASAP)	(ASAP)
\$600 Due January	\$300 Due December	\$200 Due Dec 16th
16th	16th	\$200 Due Jan 16th
~\$600.00 Balance	\$300 Due February	\$200 Due Feb 16th
(Due May 1st)	16th	\$200 Due Mar 16th
	\$300 Due April 16th	\$200 Due April 16th
	~\$300.00 Balance	~\$200.00 Balance
	(Due May 1st)	(Due May 1st)
Check for this	Check for this	Check for this
option	option	option

Student Name\_\_\_\_\_

Parental Signature\_\_\_\_\_