Lake Champlain Live! UVM Watershed Alliance
Field Data Sheet Introductory

Team Members: __________________ _____________________ _________________
School: ___________________________ Grade: ________________ Date:__________
Current Weather:______________ Weather last 48 hours: __________________

To complete on the R/V Melosira:

**Geography**
What direction does Lake Champlain flow? ________________
What two rivers does it flow into before reaching the Atlantic?
_________________________ and ____________________________

**Technology**
How does the depth sounder work? Besides depth, what else can it tell you?

What information does a GPS (Global Positioning System) give us?

**CTD (Conductivity, Temperature, Depth)**
Latitude/Longitude: ________________ Depth: ________________
Looking at the graph on the boat, draw the following:
- Draw **oxygen (O2) bubbles** where the most **oxygen** is
- Draw **plankton (phyto or zoo)** where the **temperature is the highest**
- Draw **fish** where you think they would find the **most food**
- Shade in where you think it is **darkest** in the lake
**Water Clarity: Secchi Disk**

*Turbidity* is the cloudiness or haziness of the water caused by the amount of sediment present. It is also called *water clarity*, and is measured with a secchi disk.

**Latitude/Longitude:** ___________________________ **Depth:** ____________

Trial 1: _________ ADD Trial 2: _________ DIVIDE BY 2 =
Average: ___________

Would you find more or less plankton in *turbid* water? __________________

**Zooplankton**

**Latitude/Longitude:** ___________________________ **Depth:** ____________

**Using the Scientific Method:**

Ask a question about Zooplankton in Lake Champlain:

________________________________________________________________________________________

What *background research* do we know about zooplankton in the food cycle?

________________________________________________________________________________________

What is your *hypothesis* about the health of zooplankton in Lake Champlain?

________________________________________________________________________________________

How can we test your hypothesis about zooplankton health?

________________________________________________________________________________________

Report here if, based on the zooplankton sample, you think that zooplankton are healthy in Lake Champlain:

What did the zooplankton look like? ______________________________

How many of each family of zooplankton did you see?

Family 1: ___________ Family 2: ___________
Zebra Mussels
Lat/Long: (start) ______________(end)_________________Depth: ________________

Tow length: ________________ Width of sled: ________________

# of zebra mussels/cluster: ________________

Circle the object the zebra mussels in the cluster are attached to:
Dead native mussel  live native mussel  wood  rock or stone
Other Zebra mussels  Other: ________________

If time, conditions permit:

To find Zebra Mussel Population Density (in mussels/m2):

Find the average # of mussels in 1 coffee can  X  total # of coffee cans  =  total # of mussels

_________  X  ___________  =  ___________ (total # of mussels)

Find the width of sled  X  length of tow  =  total area of bottom sampled

_________  X  ___________  =  ___________ (total area sampled)

(Total # of mussels) DIVIDED BY (total area sampled) = mussel population density

_____________  /  _______________  =  _______________