

July 12<sup>th</sup>, 2006

Tripship #6



Welcome to

# THE HARBOR ISLES

Once upon a time, long long ago, a drumlin was formed in the Boston Harbor as a result of glaciers. Skip a few hundreds of millions of years and we're about to go to this drumlin that the uninformed folk call George's Island. So what is a drumlin, might you ask? Well, a drumlin is formed when glaciers move over hard pieces of bedrock near the surface of the earth therefore giving it a curved shape. Drumlins usually have a steep side and a sloping side, as in the above picture.

Anyway now that we've got that science out of the way, I can tell you of the awesomeness that is better known as a trip to the Harbor Isles. We will be meeting at the Newton Centre (C) Stop, so make a note of that and hopping off the oldest transit system in America at Aquarium (a stop that isn't so old...) From there, we will enjoy (yes that's right, we will enjoy) a boat trip to a dimly lit fort known as Fort Warren on George's Island. From there on out, I'll let you wonder for yourself what we'll do, but let's just say that you shouldn't bring fear on this trip.

## THE IMPORTANT part

Leaders: Chris Leo Palermio (617) 926-0319

Jeff H.

Meet at: Newton Centre (C) Stop

Field Kit: a lot of H<sub>2</sub>O, large lunch, sunscreen

Money: \$15-20 for the T, boat

# See ya on the flip side!

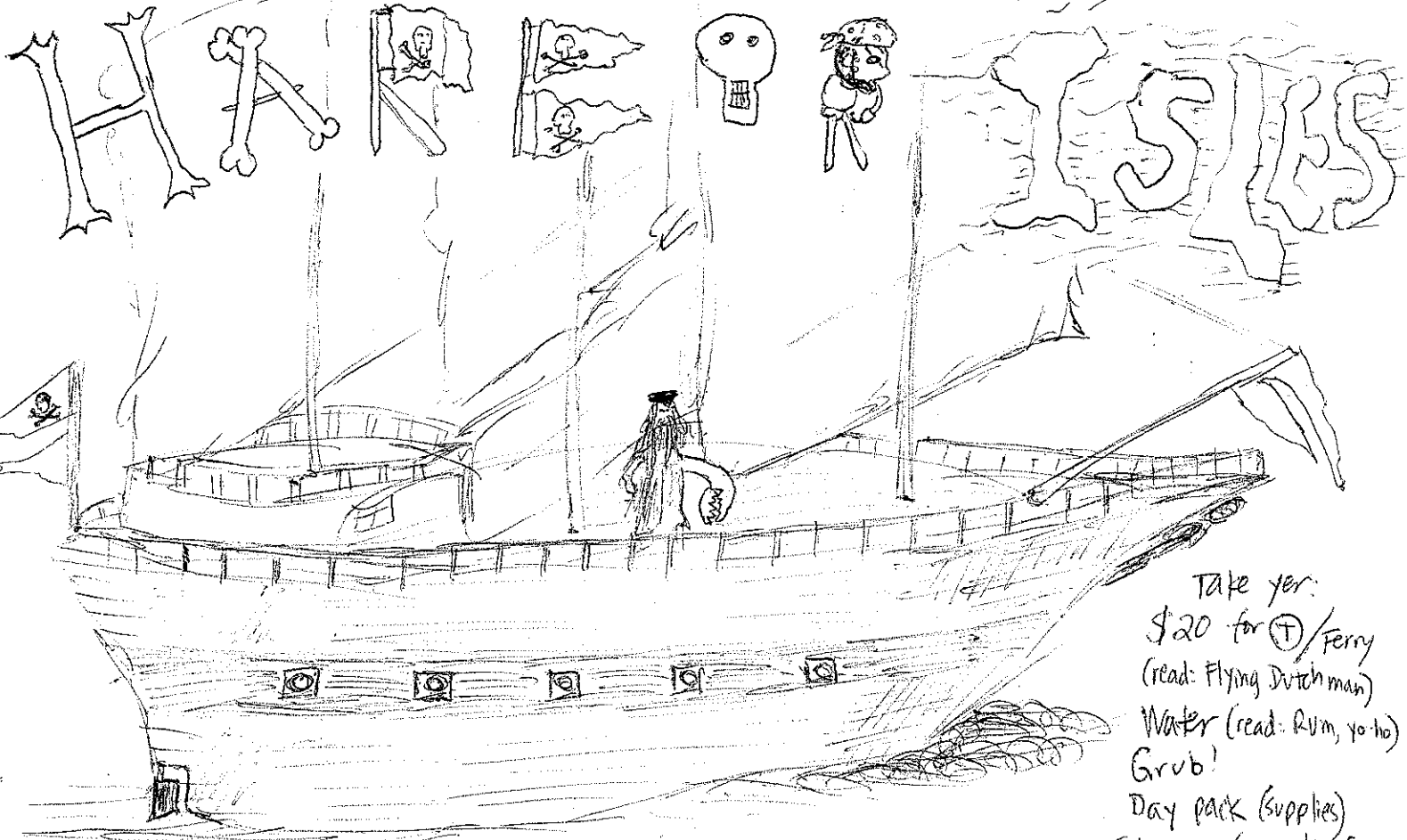
In case of emergency, your child will be brought to Newton Wellesley Hospital (617) 243-6600

This program must comply with the regulations of the WA Department of Health

Leaders: Nate "Lavery Jones" Kaufmann (617-969-4144)  
Justin "Barbosa" Chenevort (617-965-6378)

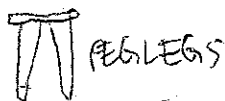
7/13/06  
TRIPSLIP #7

\*MEET @ 9:00 AM @ NEWTON CENTRE (T) STOP\*



Take yer:  
\$20 for (T) Ferry  
(read: Flying Dutchman)  
Water (read: Rum, yo-ho)  
Grub!  
Day pack (supplies)  
Sunscreen (gunpowder for  
the skin?)

Y'arrrr mateys. Welcome to the dreaded harbor isles. We will make our way across treacherous seas to the infamous George's Island, which was actually used to fight and defend the Union land during the petty, largely land-based Civil War. There's a lot of geological stuff to talk about too, y'arr. People will be jealous of you for a long time, sailor. Harbor Isles is a well covered voyage. And we're going to have a whale of time, y'arr.



WHITE PINE  
(5 NEEDLES)

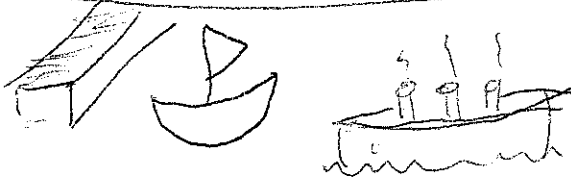
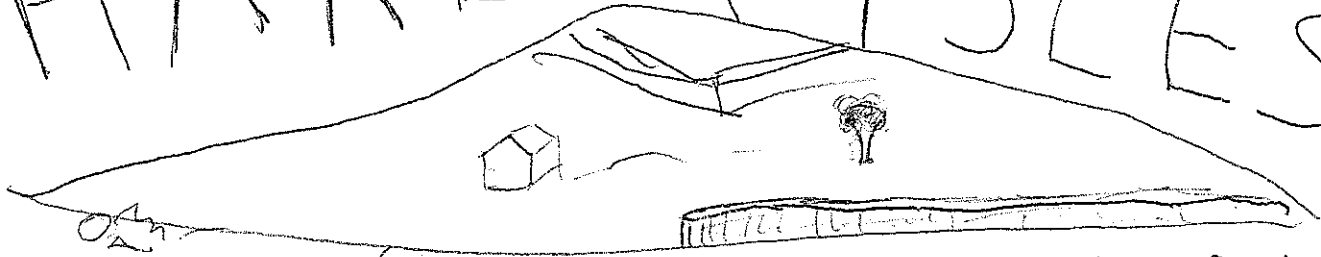
In case of Emergency, your child will be brought to:  
Newton Wellesley Hospital: 617-243-6000.  
This program must comply with the regulations of the Massachusetts Dept. of Public Health and must be licensed by the city of Newton Health Department.

Leaders: Justin "Chechevent" - 617-965-6378 7/13/06

Nate "Kaufman" - 617-746-7762

IMPORTANTE (MUY) → Meet AT NEWTON CENTER (T) STOP!

# HARBOR ISLES



neither of these look like the boat we will be taking.

Well Well. You've secured yourself a spot on the much-coveted Harbor Isles trip. Our journey will begin in Newton Centre where we will ride the (T) into Boston. From there we will take a boat out into the Harbor to explore one of the many little blips of land out there. We'll also learn a bit about glaciers, ~~glaciers~~ and a bit more about Boston's history.

(For better drawings, see Nate's tripslip)

In case of Emergency, your child will be brought to Newton Wellesley Hospital: 617-243-6000 This program must comply with the regulations of the Massachusetts Dept of Public Health. and must be licensed by the city of Newton Health Dept.

- Staffs for to be Bringing
- H<sub>2</sub>O
  - Lunch-a-lunch
  - Day pack
  - Rain gear
  - Sunscreen
  - Hiking Boots are optional

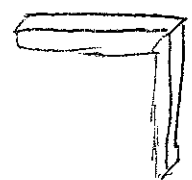
\$20 For T+boat

BILLS FOR THE FERRY  
BRING CHANGE FOR THE (T)



Harbor Isles (no needles)

Identification Guide wheeee!

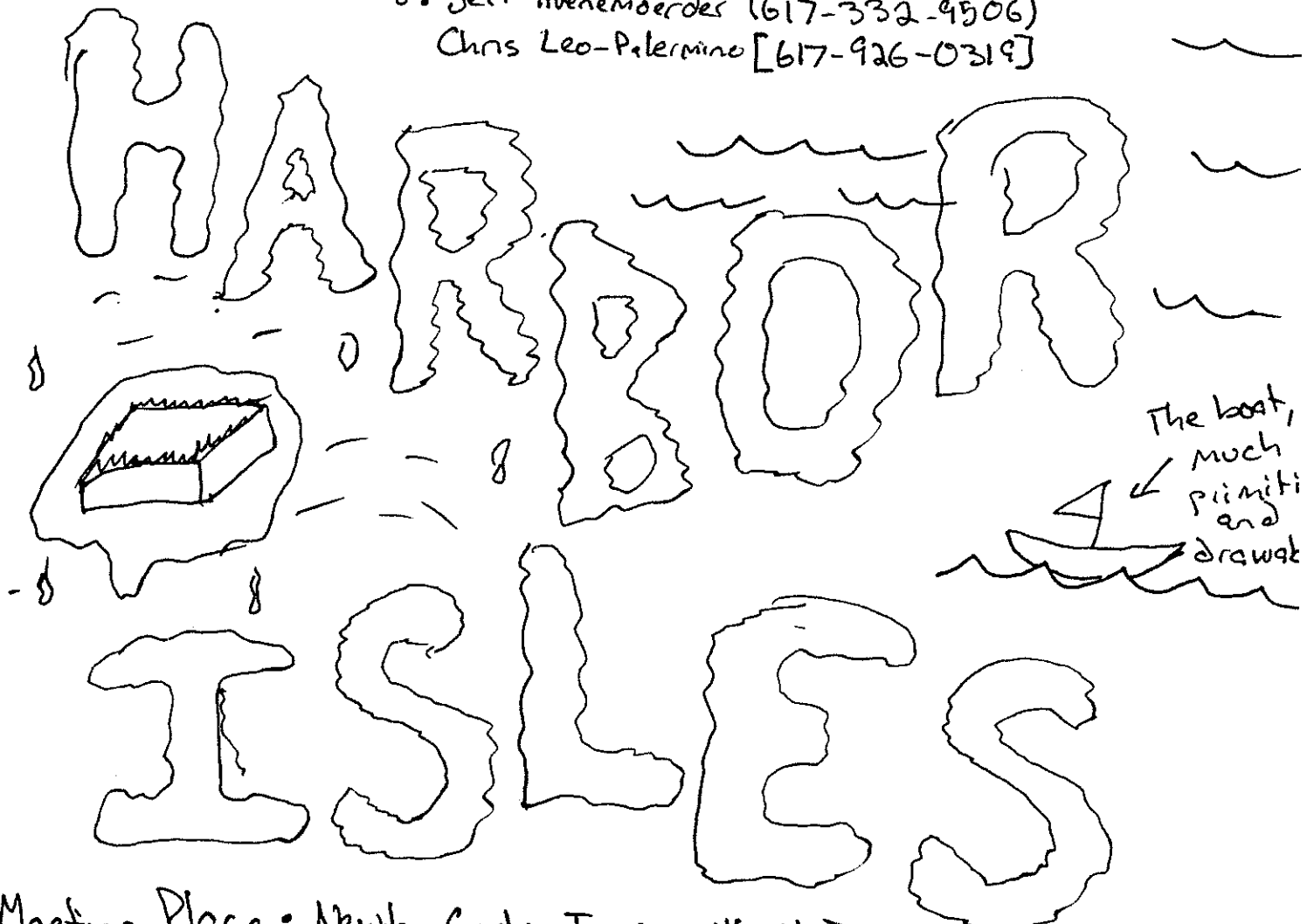


Cantalver (one big wooden needle)



White Pine (S needles)

Leaders: Jeff Avenemoerder (617-332-9506)  
Chris Leo-Petermino [617-926-0319]



Meeting Place: Newton Centre T-stop \* NOTE THE CHANGE

Meeting Time: 8:45 am, so we can get a head start

Equipment: daypack, field kit, sneakers, lunch, Flashlight, ~\$1500 for the ferry  
water

Lucky for you, this is one of the more awesome trips of  
Envi-Sci. Not that they all aren't awesome, this is just of the higher  
calibre on the awesome scale. We will start off taking the  $\text{\textcircled{D}}$  to  
the Aquarium stop, then hopping on a ferry for a ride over to  
George's Island. Neat. This is where Fort Warren was used  
in the civil war, and hopefully we can use it to wage war on  
each other when we're there if we run out of exploration to do.  
Make sure to meet at Newton Centre and Not Brown  
11-21st School!!

# Harbor Isles


- Leaders: Lynda "the"
- Kovalchuk
  - 617-584-2626
  - Ari "Bebop" Miller
  - 617-894-8160
  - Nate "Fortune Cookie"
  - Kaufman
  - 617-796-7762

When: 7/11/05, 9am-4pm  
Meet@: Newton Centre

+ pick up from → **T** Stop

Equipment: water, sneakers, notebook + pencil, big lunch, rangear, flashlight, \$15-20 for **T** and ferry

Trip slip #6

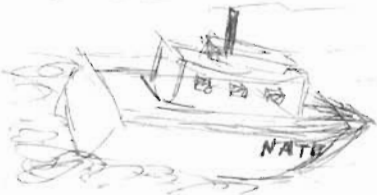
Get ready for one awesome trip! Harbor Isles, in my humble opinion, is THE BEST day trip at Envi-Sci. We'll be taking the **T** to the Aquarium and from there taking a ferry to George's Island, located in Boston Harbor. Hopefully you enjoy exploring creepy, dark rooms, because we'll be doing lots of that. On the island sits Fort Warren, an aging fortress built during the Revolutionary War. You can still see the cannons to this day... BOOM On the scientific side, the Harbor Isles were created by glaciers; they are drumlins shaped like this:  Anyways, get excited because you made an excellent decision when you signed up for this trip!

\* Don't forget to come to Newton Centre instead of Brown!



In case of emergency, your child will be brought to Newton Wellesley Hospital. This program must comply with the regulations of the Mass. Dept. of Public Health and must be licensed by the City of Newton Health Dept.

# HARBOR ISLES



Trip slip #3

Leaders: Nate Kaufman

(617) 796-7762

Jeff "DQ" Decen

(617) 964-7845

July 7, 2003; 9A-4P

MEET @ NEWTON CENTRE (T) STOP

Equipment: water, \$ for (T) (3.50 total) and boat ticket (10) - bring about \$15.00 total. No boots needed.

Get psyched for your first trip at Envi-Sci in which you take the (T), and the first trip in which you take a boat, all in one incredible, amazing, adventure-filled experience. We will be going to George's Island in Boston Harbor, where we will explore creepy, dark rooms and other cool aspects of this island, which was used as a fortress during the Revolutionary War.

QUESTION OF THE DAY: Was the Revolutionary war justified? Did ~~we~~ really have the right to rebel? We'll discuss.



Leaders:

SARINA "WHACK" YOSPIN (617-969-3966) & JOEY "WHOA COOL" BACKER (969-0288)

7/8/02

TRIPSLIP #4

Woo-hoo! We're going to the...

# Harbor Isles

★ MAN OH MAN THIS IS IMPORTANT ★

MEET AT: The Newton Center T Stop

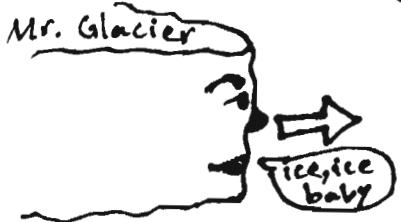
TIMES:  
EQUIPMENT:

This trip requires \$

- You need \$2.50 for the T trip there and \$1.00 to get back
- You need \$10.00 for the ferry ride
- You can bring extra \$ for snacks + such

...AND AS USUAL...  
- Boots, water (at least 2 L), Lunch, field kit, your sense of coolness

Woo-hoo! You guys must be peeing in your pants with joy for getting to come on this trip. I expect no less. So, you ask, what are these "Harbor Isles," and how did they form? It just so happens that my specialty is weather, so let's talk **GEOLOGY!** In our region, and especially in Boston Harbor, we can see lots of evidence of glaciers passing through. Dude! This trip rocks.



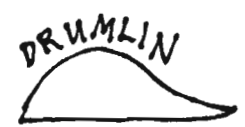
Glacier is cruising  
①



Glacier hits a big snag. Ay!  
②



Glacier struggles over snag, depositing debris that gets caught as it goes.  
③



Voila! A drumlin! science is cool!  
④

The Harbor Isles are also really cool because of their neat history of battles and ghost sightings and the like.

# HEY! BRING \$! DON'T COME TO BROWN!

Leaders: Joey (617-969-0288)  
Sarina (617-969-3966)

Where: the NEWTON CENTRE (T) STOP  
make sure you show up on time so that we can  
get in on time and have enough time on the  
island!

Times: 9 AM-4 PM

Date: Monday, July 8<sup>th</sup>, 2002



TRIPSLIP #34

**EQUIPMENT**

Field kit, warm layer for when it gets  
cold, big lunch, sunblock, water,  
a flashlight, and moola: \$10 for the ferry  
about \$5 for the (T)

Well, Congratulations you Lucky Student. You have been selected to  
embark on the best trip ever in Esp. We are going to meet (on time)  
at the Newton Center T stop where we shall board the Green  
Line train. Once safely delivered in Boston, we shall take a ferry  
from the Aquarium into the wide open seas. It is there that  
our journey will begin. We are going to George's Island, part  
of a bunch of islands out in Boston Harbor. Why this island? you  
may ask. Well, to you I say be quiet and allow me to finish.  
George's Island just happens to be the site of Fort Warren, a  
civil war era fort. The Fort is filled with lots o' great rooms and  
most excellent stories. Bring your flashlight...

And now for the Educational Segment of this Trip Slip. Yay!  
George's Island, and the other islands that make up the "Harbor Isles"  
is the remnant of a cold, icy past. Back when Glaciers roamed the  
Earth, the Glaciers would scrape up against stuff like bedrock and  
get stuck and make some trouble. The result is a drumlin:



We'll talk more about drumlins and the history of the Harbor Isles,  
but for now I will let you agonize in suspense. Have a good  
Fourth of July and BE ON TIME on Monday! Huzzah!



# HARBOR ISLES

Staffing:

Danny Yagoda (617)-738-0269

Jon Rivnay (617)-527-1849

Starts Wednesday June 10, 2002

Special Sneak Preview 9AM-4PM

At Newton Centre (T) Stop

(Free admittance with 2L H<sub>2</sub>O, big Lunch, sneakers or boots, \$5 (for train and ferry), x-tra \$ for food and/or ice-cream, flashlight, field kit)

Critics Rave

- "The train ride to Boston + the Ferry to Georges Island is a kick-butt adventure that will keep you at the edge of your seat"
- "Fort Warren on G's Isle is very cool!"
- "Harbor Isles are formed by GLACIERS which moved across very hard pieces of bed-rock near the surface of the earth and left behind the hills of George's Isle called DRUMMINS"
- "The best leaders"

Leaders: Amelia Runyan (617-244-8836)  
Julie Greenwald (617-964-7248)

Times: 8:30AM - 4PM

where: **Newton Centre** (T) stop

meet @ the Newton Centre (T) stop and be on time because we need to get on a train to get to our ferry on time!

Equipment: Field kit, boots or sneakers, Flashlight, warm layer (it can get cool on the water) a BIG lunch, \$10 for the ferry ticket, about \$4 in change for the (T), I'm not quite sure how much it costs now.

7/11/01

Out in the harbor there are a lot of other islands that are also drumlins. One island we will see on our ferry trip is Deer Island. Does anyone know what purpose Deer Island serves for Boston and the areas around it?

# HARBOR



Today we are going to take the (T) into Boston and get off @ the aquarium, there we will get onto our boat and go party on George's Island, a drumlin which has so nicely on top of it, a fort called Fort Warren. What's a drumlin you say? Why, I'll tell you! A drumlin is a sloping hill formed by glaciers. All the Harbor Isles are drumlins. They were formed when glaciers moved over very hard pieces of bedrock near the surface of the earth and gave them the "drumlinesque" shape, like this:



Drumlins usually have one sort of steep side and one sloping side from glaciers moving over them and depositing debris in this shape. There are tons of cool big dark scary rooms in Fort Warren and lots of creepy stories about the fort, so get psyched!

SEE YOU WEDNESDAY!

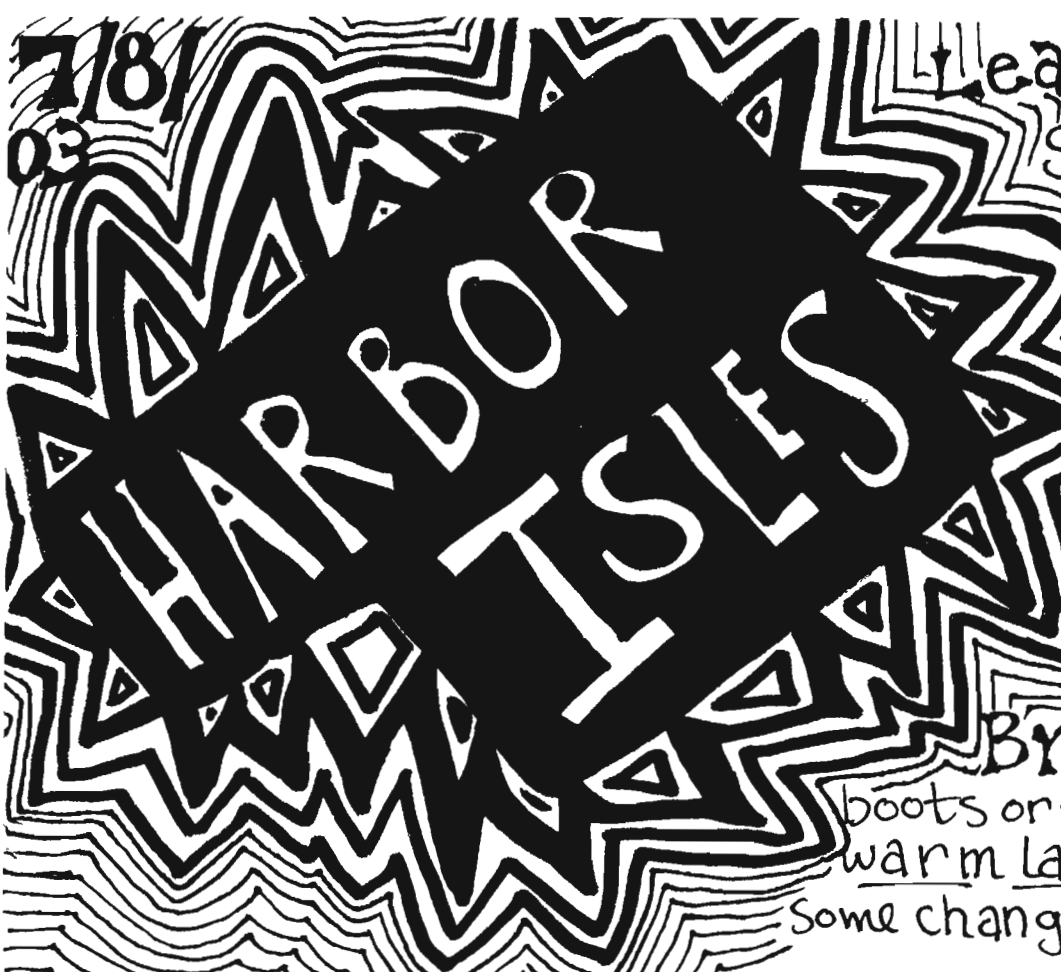
7/8/03

# Leaders:

- Sarina "Captain Obvious"
- Yospin (617-969-3966)
- Amelia "Captain Vegetable" Runyan (617-244-8836)

Times: 9am-4pm  
 Meet @ Newton Center **T** stop!!

Bring: field kit, H<sub>2</sub>O, boots or sneakers, flashlight, warm layer, BIG LUNCH \$15-20, some change for the **T**



Hold on to your hats because the wind on the ferry might blow them into the ocean. Also because this trip is awesome!! Harbor Isles is a **T**/Ferry boat trip that takes us out to George's Island, one of the many Harbor Islands. Who cares about those crappy Harbor Isles anyway? I do! They are really cool because they were left in the harbor by glaciers! You can tell because of their shape which looks this:



That shape was caused by glaciers moving over and depositing debris in that shape. Another island in the harbor is Deer Island. What is the purpose of Deer Island? Figure it out and let me know. Another totally awesome thing about George's Island is that it is home to Fort Warren, a big creepy stone fort. Kickin' chicken. Ok, so I'll see you at the NEWTON CENTER **T** STOP tomorrow morning!



# HARBOR ISLES

you can't  
tell, but  
this is all  
BLUE!

DATE: 7<sup>th</sup>, the JULY of  
TIME: 8:45 AM  
PLACE: The NEWTON  
CENTER (T) STOP!  
VERY IMPORTANT!

JOEY "LAME!" BACKER  
(617-969-0288)

JEFF "WÜT" HUENEMOERDER  
(617-332-9506)

## STUFF TO BRING

- Sneakers
- Lunch (a big one)
- water
- sunblock
- \$15 for the (T) and ticket
- flashlight
- field kit
- raingear

In case of emergency,  
your child will be taken  
to Mass. General Hospital:  
617-726-2000

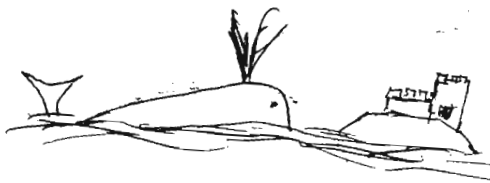
THE ECOLOGICAL  
TOPICOLOGICAL  
OF THE DAY:

# GLACIERS

Ohh yeahhh...! I LOVE HARBOR ISLES! For all of you who didn't select this as your first choice, you are in for a surprise, because this is the best trip ever! We are taking the (T) train to the Aquarium, where we will take the Harbor Ferry out to George's Island. On George's Island is Fort Warren, an old citadel built in Revolutionary War times. I can't disclose everything we will do, but swash your buckles because this is going to be some kind of adventure (the good kind)!

This program must comply with the regulations of the Mass.achusetts Dept. of Public Health and must be licensed by the City of Newton Health Dept.

# HARBOR ISLES



Gordon R. 244  
Trip slip #17  
7/12/95

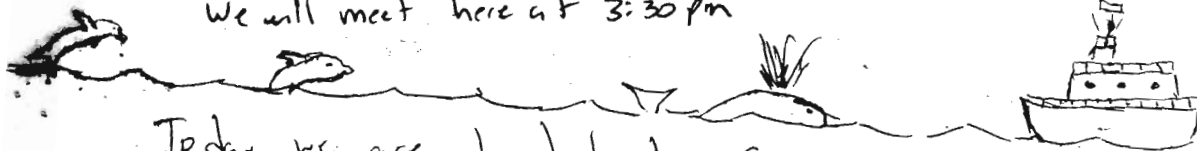
Leaders - Gordon R. - 244-9304  
Pete M. -

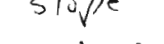
Times - 9: AM - 3:30 PM

Location - Meet at Newton Ctr. T-Stop

We will meet here at 3:30 pm

Equipment - field kit, boots, \$2.00 in charge  
for the T, \$8.00 for the ferry



Today we are headed to Georges Island in the Harbour Isles, a group of Islands found in Boston Harbor. Now every one of these Islands has one thing in common they are all drumlins. Hmmm you ask, what's a drumlin; well now a drumlin is a glacial hill that is very steep on one side and a smooth slope on the other - i.e. -  kinda looks like a whale, don't it? We'll talk about the hypotheses of how these were formed when we get to the island.

Now rumor has it that the Boston Harbor is extremely polluted. Well, it was 20 years ago. Now it has become significantly cleaner due to the hard work of groups like, Save the harbor, Save the bay. Though on the bottom of the harbor is still a substance that is kinda like a toxic mayonnaise, comprised of all sorts of toxic debris. They can't move it because if they try to lift it, it will spill back into the water. So now they are waiting for it to harden on its own.

But there is a lot of evidence that the harbor is recovering. Indicator species, (species of plants and animals that first appear in recovering areas) like rock weed, (the seaweed with the sacs filled with anti-freeze) and white perch are returning to the area, attracting things like porpoises and other larger fish. - And every day more and more work is being done to try to clean the harbor even more. And amazingly enough people even try to swim in the harbor.



# HARBOR ISLES

9AM-4PM

the "T"

7/18/05

Trip slip #11

Joey Backer:  
617-969-0288  
Mike Mclellan:  
617-244-0998  
Dan Swartz:  
617-244-2339



Ah, what a great two weeks it has been; we've swum in mud, canoed the Charles, and walked a ton. Today we're gonna be switching it up and taking the T into Boston then hopping on a ferrey to the Harbor Isles, specifically one isle. We'll talk about how glaciers formed all the islands though, as well as explore the intensely dark civil war fort on the island. And, well, that's about it. Get ready for one of the best trips you'll ever take and don't forget to go to the T station in Newton Center at 9pm.

Bring:  
field kit  
H<sub>2</sub>O (at least 2)  
boots/sneakers  
flashlight  
warm layer  
Big lunch  
15-20\$ + change T

Don't Bring:  
**FEAR**

In case of Emergency, your child will be brought to:  
Newton Wellesley Hospital: 617-243-6000.  
This program must comply with the regulations of the Massachusetts Dept. of Public Health and must be licensed by the city of Newton Health Department.

Har! Har! Har!

# HARBOR TISLES

July 11<sup>th</sup>, 2005

Trip slip # 6.001

Super Rad Leaders:

R.E. Miller (617)-894-8160

Nate the cougher Kaufman  
(617)-969-4144

Lyuda "Anvilface" Kovalchuk  
(617)-584-2624

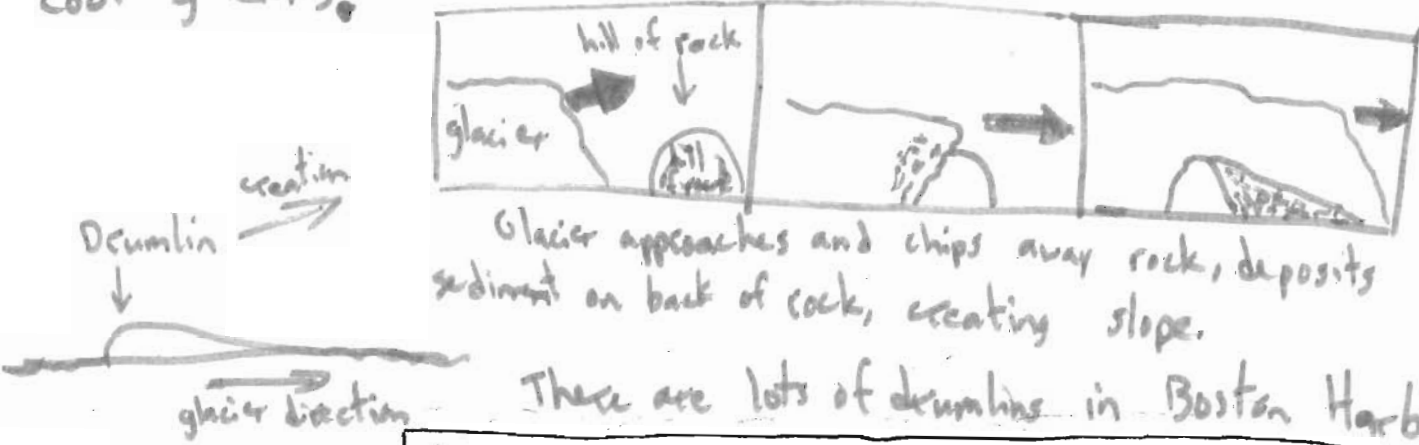
When/Where

Newton Center **(T)** stop  
9 AM - 4 PM

Are you ready for the super coolest day trip of all time? Well, I hope so, because this Monday you'll be on it! Don't forget at least \$15 and we're meeting at the **NEWTON CENTER (T) Stop**

- Bring - at least \$15 for **(T)** and ferry, preferably \$20 to be safe.
- day pack
  - 2 liter o' water
  - raingear
  - notebook + pencil
  - lunch
  - smarts for writing limericks

cool glaciers:



Glacier approaches and chips away rock, deposits sediment on back of rock, creating slope.

There are lots of drumlins in Boston Harbor

In case of Emergency, your child will be brought to: Newton Wellesley Hospital: 617-243-6000. This program must comply with the regulations of the Massachusetts Dept. of Public Health and must be licensed by the City of Newton Health Department.

# Important!

# HARBOR ISLES

WHO:

Jeff DeCew

964-7845

NATE KAUFMAN

796-7762

Where:

NEWTON

CENTER

T-STOP

When:

9:00 AM

July, 8, 2003

What:

Raingear, Daypack,

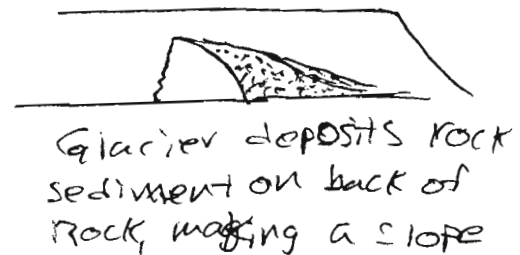
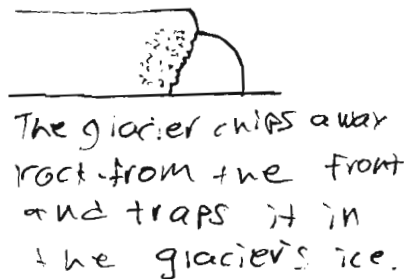
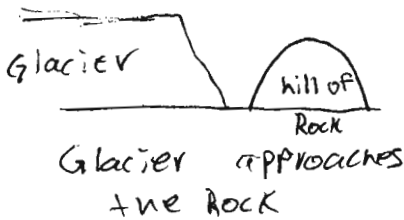
Field Kit, 2 Liters  
of water

\$15-\$20 for  
the T and  
Ferry.

That's Right! The coolest trip

of the year... Well... Coolest day  
trip. Well, I love it. And you will too.

SO! Remember we are meeting at the  
NEWTON CENTER T-STOP, with AT Least \$15,  
preferably a little more. So. Lets learn:



And that is a Drumlin:

and why do we care? because

Boston Harbor is full of



If you know  
what island we  
are going to, you  
win?



Date: 7/7/04

Location: Newton Centre T-stop

Time: 8:45 A.M.

## HARBOR

## ISLANDS




Leaders: Jeff Huenemoerder (617-332-9506)  
Joey Bactor (617-969-0288)

Things to bring: \$15 for the T and Ferry,  
lunch, water, daypack, Flashlight, sneakers

Harbor Islands is one of the coolest trips in the program. We will take the T and the Ferry, so everyone make sure to bring their \$15. The Harbor Isle that we will be going to is George's Island. George's Island is the home to Fort Sumter\*, which is why there is a big fort on it.

When we get to George's Island, we will wander around looking at everything the fort has to offer us. Hopefully we will find the "completely" dark room which we didn't make it to last year. By "completely" dark, I mean that there is a little hole in the ceiling that lets enough light through to ~~see~~ see one person.

Harbor Islands was originally formed by glaciers. The glaciers pushed over the land and left debris in the shape of a drumlin, which looks like this:  Cool.

Everyone make sure that you make it to the Newton Centre T-stop at 8:45 so we can make it to the Ferry and then Island on time. See you there

\* actually Fort Warren, Fort Sumter is in South Carolina

In case of emergency, your child will be brought to Mass General Hospital 617-726-2000  
All Department of Public Health and must be licensed

JULY 8, 2003

Trip slip # 5

Who?

Captain Sarina McSteel

617-969-3966

Ironamelia Runyanshanks

617-244-8836

★ ★ **WHERE?** MEET AT

AND PICK UP FROM NEWTON CENTER (T) STOP, NOT BROWN MIDDLE SCHOOL!

**WHEN?** 9am-4pm



What to bring: backpack, water, lunch, field kit  
 IMPORTANT: BRING AT LEAST \$15 -- THE (T) COSTS \$3.50 AND THE FERRY COSTS \$10 also, you don't need to wear your boots

ARRRR, me mateys, today we be castin' off into yonder bay to brave the swarms of vicious cod, explore ye isles, and find our booty! This be one of this humble pirate's favorite trips, so make ye sure to be at ye (T) stop on time and prepared. ← Newton Center, you fiends!

Once we get to the Isles, be we on the lookout for evidence of ye olde glacial history:



③ Glacier cuts into one side of snag, drops debris on other -- voila! ie drualin!



# HARBOR

# ISLES



7/6/04  
 WHEN: 8AM-4PM  
 WHERE: MEET AT THE NEWTON CENTRE  
 (T) STOP!! FOR DROP-OFF AND PICKUP!

WHO: NATE "SWASHBUCKLING" KAUFMAN - (617) 796-7762

JEFF "Y'ARRR" DECEW



(617) 964-7845

HOW: BY (T)  
 WHY: IT'S AWESOME!

WHAT: LUNCH, H<sub>2</sub>O, RAIN GEAR  
 FLASH LIGHT, \$15

GEORGE'S ISLAND has an incredibly cool, rich history. It was built in the 1820s as part of an effort to keep Britain from ever returning to the now not-so-new world. But the war of 1812 was long over, as were British hostilities.

Fort Warren, the fort on George's island, was used in the civil war not only as fortification, but also as a PRISON for evil confederates. The VICE PRESIDENT of the confederacy was locked up there at one point! Get to the T on time (8:45) so we don't miss the ferry!



REMEMBER: 8:45AM @ NEWTON CENTRE (T)

In case of an emergency, your child will be brought to: MASS GENERAL 617-726-2000

This program must comply with the regulations of the Massachusetts Department of Public Health and must be licensed by the City of Newton Health Department

# BOSTON HARBOR ISLES

7/6/04

Trip Slip #3

Leaders:

Jeffrey DeCew

617 964 7845

Nate Kaufman

617 796 7762

Important!!

Time: 8:~~45~~<sup>45</sup> AM - 4:00 PM

READ CAREFULLY!

Meet at the Newton Center (T) stop!

Equipment:

2 Liters of  
H<sub>2</sub>O (Min)

\$15 for T  
and Ferris

HUGE Lunch

Sunglasses/hat

flashlight

**MONEY** (see  
above)

REMEMBER: 8:45!!

The harbor isle we will visit is George's Island, which was formed by a glacier long ago when it was cold (no, not winter... the all powerful ice age).

It is called a drumlin, which is ~~islands~~



In case of an emergency, your child will be brought to:

Mass General Hospital: 617-725-2000

This program must comply with the regulations of the Massachusetts Department of Public Health and must be licensed by the City of Newton Health Department

Trip slip #5  
July 8, 1994

\* TIMES: 8:45 - 3 PM \* DON'T BE LATE!!  
\* → MEET AT NEWTON CENTER T-STOP ←  
PICK UP AT T STOP ALSO

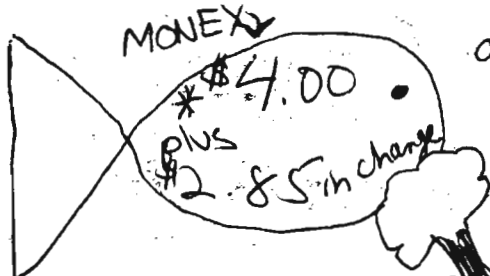
LEADERS:

EQUIPMENT: Day Pack, sunscreen, boots,  
LUNCH, extra water,  
Money for T  
and ferry\*

Kathy Thorp 527-3681

Dan Thomases 527-2763

0000



# ISLANDS

# HARBOR

As you probably figured out by now, we'll be taking the ferry over and then the ferry to Lovell's then there we'll explore the island and how all the islands including Grape, Bumpkin, Georges, Lovells, and Peddocks were formed. They are a series of drumlins formed by glaciers.

We'll explore the environment and compare it to Kittery. (Remember spartina grasses?)

We'll also take a look at Fort Warren, built in the mid-1800's and used during several wars, such as the Civil and Spanish-American.

SOME IMPORTANT TERMS TO THINK ABOUT:  
Glacial Geology  
Ecosystems  
Zonation

QUESTIONS: → Has man successfully built around the ~~harbor~~ sea environment or has he caused many problems?

→ The Harbor is polluted as you can probably tell. How do we go about cleaning it up? Where should we put the waste?

And LASTLY - don't forget your money, lunch, or anything and BE ON TIME!!! \*

Leaders  
 Allan Tello 957-1157  
 Jeff Wang 332-3317  
 Date: July 8, 1996  
 Times:  
 Trip slip #4  
 Meeting place: NEWTON  
 CENTRE ① STOP!!!!  
 Equipment: Field kit, lunch,  
 water, warm layer is a  
 good idea, \$11 for the  
 ① and Ferry fees

# HARBOR

Located on Georges  
 Island, Fort Warren was  
 completed in 1850. The  
 fort was used as a POW  
 camp for the north  
 during the Civil War.  
 There are several hiking  
 and pecking trails. Sections  
 of the fort including  
 an observation tower  
 and a guard house.  
 We'll tell you more  
 on the way  
 there.



Here is a question  
 to ponder about how  
 were the harbor is-  
 lands formed? Well,  
 to answer this, you  
 need to know what a  
 drumlin is. Drumlins  
 are dome shaped land forms composed  
 of sand, gravel, and rocks accumulated in the course of  
 glacial movement. Most of the islands in the Boston  
 Harbor are drumlins. What happened was  
 about 12,000 years, glaciers moved across  
 Boston depositing these drumlins which  
 eventually formed...



Leaders:

Jenny Casavant  
(969-2776)

Alex Kraus  
(964-7768)

BE ON TIME!

Trip #7

July 11, 1996

8:45 AM - 3:30 PM

MEET AT:

NEWTON CENTRE

(T) STOP

# HARBOR ISLANDS

## EQUIPMENT

- Fieldkit
- Big Lunch
- Water
- Sunblock + Sunglasses  
(OPTIONAL)

\$3.00 in charge for (T)  
(2.00 inbound + 1.00 outbound)

\$10.00 for the ferry

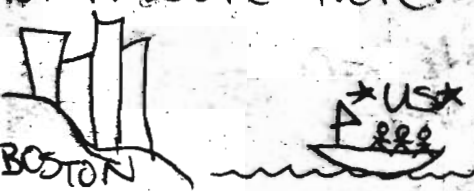
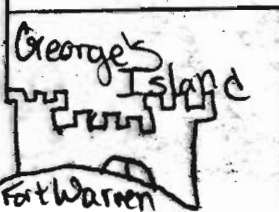
You may want to bring extra money for things like the snack bar.

Well today we're going to be taking the (T) to Rowe's ~~Wharf~~ Wharf then taking the ferry over to George's Island. When we get to George's Island we'll be exploring Fort Warren. Fort Warren was a POW camp for the North during the

Civil War. Besides exploring inside the Fort we will also be exploring the area around it. We can look at the plants and trees. We can try to tell what stage the surrounding forest is in by the types of trees there. Does everyone know about pond and forest succession? Well, if not it's okay because we'll go over it again. If there's time we may be able to take the water taxi to Lovells Island and look around, we'll see. Oh yeah, if you have a

small flashlight, you may want to bring it because it may be dark inside the fort. See you all at the (T) STOP @ 8:45 AM!

The Harbor Islands are drumlins. Gee Whiz, what's a drumlin? Well drumlins are mounds of earth that were deposited by a glacier and then smoothed over as the glacier moved over them. Well there's a bit of glacial geology for the day. We can talk more about drumlins when we're there.



\*USA  
FREE

Leaders:

Jenny Casavant  
(969-2776)

Agatha Clancy  
(969-7407)

July 11, 11  
★ 8:45 AM - 5:00 PM

# HARBOR ISLANDS

MEET AT:

NEWTON CENTRE (T) STOP

★ BE AT THE (T) STOP

AT 8:45 SHARP! DON'T BE LATE!!! ★



★ NOTE DIFFERENT TIMES AND LOCATIONS

Today we will be taking the (D) into

Boston then taking a

ferry to George's Island which is also called Fort Warren. It was used as a POW Camp for the North in the Civil War.

The islands are drumlins. We will explain <sup>in detail</sup> what a drumlin is when we are there but basically a drumlin is formed when a glacier deposits a mound of earth and then smooths it over as it moves past.

## EQUIPMENT

Field kit, Bio

Lunch, Water,

Sunblock, Sunglasses

\$2.00 (change)

\$10.00 in all

★ You might want to

bring extra money

for the snack &

and for the water

taxi



George's Is



trip strip # <

July 3

# HARBOR ISLANDS



Jennifer McKenna

9AM - 4PM

(332-7724)

\* Important

We will start the day not at NSHS

but at Newton Highlands T. Stop. \*

equipment needed: your field kit, a large lunch (the sea air will make you hungry), hiking boots, sunscreen, a bathing suit and towel if you choose.

We will be taking a ferry out to George's Island then taking a water shuttle to one of the smaller islands. The Harbor Islands are a series

of Drumlins. They are piles of debris formed by an upside down lake under a glacier

We will get to see mans impact on nature and it's taking back of the area. This can be seen

in the plants growing all over the Ferts but on the Islands. We can go swimming on the

Cobble Beaches and do salt water water tests

Remember to meet at the Highlands T-stop

Please Dont Be Late!!!!

Trip # 7

7/12/2000

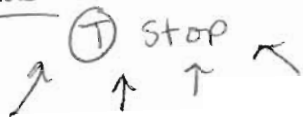
Times: 8:45-3:30

Place: Newton Centre

# HARBOR ISLANDS

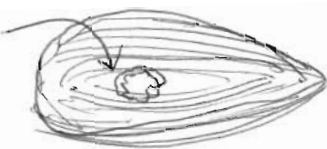
Leaders: Gabe Yospin  
969-3966  
Jesse Sayles  
965-2719

Equipment: Field kit, H<sub>2</sub>O,  
yammy lunch, extra food  
for starving leader (me),  
flashlight, extra-long  
attention span, \$ for ①  
and boat-hire



Boston Harbor has some islands. They look like this from above:

The closest thing in the middle is a tree. No, really.



And they look like this from the side:

## WHY?

I know, and I'm not telling. Oh wait, yes I am. These islands are all glacial hills called DRUMLINS. When a glacier carrying sand and dirt and stuff moved through Boston Harbor about 12000 years ago, it rubbed up against big pieces of granite, and propped off all this sediment (sand, gravel), leaving big hills, or islands. Some of these hills are on land, like Bunker Hill, but ones in the Harbor are the famous islands. There are tons of stories associated with the islands, which we will discuss on the boat.

Here are more awesome drawings of drumlins, by me.



Think about this, and all see you are tomorrow at the ① stop.

# Harbor Islands

Trip Slip #


Times:

~~\*\*\*~~ Location: Newton Center  
T Station

Leaders: Jesse Sayles 965-2719 and his pal Gabe Yospin 969-3966

## Equipment

Boots, 2 Quarts H<sub>2</sub>O,  
Field kit, Sun Screen,  
lunch, extra \$

For train: 

For boat: \_\_\_\_\_


also, bring a flash light


Basically, we are going to the Harbor Islands to day. The Islands are interesting geological formation's. They are drumlins, or rounded mounds of rock and clay, that were rounded by glaciers. Get ready for fun.

PLEASE NOTE THE TIME & LOCATION CHANGE !!

Why do Glaciers move? Hint, Squeez an ice cube in your hand. What happens?

(Both Mounds are Drumlins)

Smooth Gradual slope 

Steep rock scabbled slope 

Right

Left

Which way do you think the Glaciers Travelled?  
left to right / Right to left

# Hudson

TRIP SLIP #5  
7/7/99

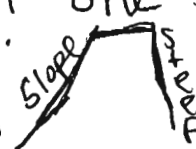
Leaders: Julie (964-7248)  
Gabe (969-3966)

Meeting place: NEWTON CENTRE  
T STOP

Times: 8:45 - 3:45 (please be on TIME)

Pickup at Newton Centre T.

Equipment: Boots or sneakers, Field kit, Lunch, water  
You may want a long sleeved shirt, all for  
T and ferry fees, extra money if you want  
snacks or other things.

We will be visiting George's Island, which is located in Boston HARBOR. There is a fort on George's Island which was used as a prisoner of war camp during the Civil war. ON a Geological note the HARBOR Islands are called Drumlins. They are steep on one side and have a slope on the other side.  These hills are composed of sand, gravel and rocks. So how are these islands created? Take a Guess... yes, bingo → Glaciers. These glaciers were carrying sediments & rocks that got left behind when the glacier melted. So, I can't wait this is going to be a great trip. Please be on time so we can get the trip started early. If you want to take the train home, please have a parent call me or gabe the night before the trip. See you then!!  
xix



# HARBOR ISLANDS


Some important topics = Drumlins, tidepools, ecosystems, zonation.

Date: 7/6/92 & 7/7/92 .

Leaders: Delio Tromontozzi & Jennifer McKenna

Phone #'s 244-3377 332-7724

Times:  8:45 A.M. - 3:30 P.M. 

Meeting place = at the NEWTON CENTRE "T" STOP   
NOT NEWTON SOUTH!

Equipment: field kit, enormous lunch, sunglasses and hat (optional)

Bathing Suit	\$ 2.00	for "T" inbound (in charge)
& towel	\$ .85	for "T" outbound
	\$ 6.00	for FERRY to Georges Island
	@ 3.00	if under 12 or 12 years old)

Bug Repellant, Money for the snack bar on the boat or island, Sun Block lotion, Extra water bottle, once again - **BIG LUNCH!**

Please arrive promptly at 8:45 am. at the Newton Centre "T" stop so we may catch the 10:00 ferry to Georges Island. We will transfer from the Green line D train to the Blue line at Rowe's Wharf. After arriving at Georges Island by ferry we will explore the island and check out its unique habitat and delicate dune eco-system. Many animals depend on the grasses to hold together the sand to provide protection and food. One thing that makes the Harbor Islands so unique is their history and formation. The Islands are Drumlins, 12,000 years ago when the glacier was here, it carried large piles of rubble within. When the glacier withdrew it left behind these piles of rubble which were hills. The water level rose and then they became drumlins that are islands.

Trip # 85  
July 8, 1974

\* TIMES: 8:45 - 3 PM \* DON'T BE LATE!!  
\* MEET AT NEWTON CENTER T-STOP  
PICK UP AT T-STOP AND

LEADERS:

Kathy Thorp 527-3681

Dan Thomases 527-2763

EQUIPMENT: Day Pack, sunscreem, boots,  
LUNCH, extra water,  
MONEY for T-STOP  
and ferry!

0.000

MONEY

\$4.00

plus  
\$2.85 in change

ISLANDS

As you probably figured out by now, we'll be taking the ferry over and then the ferry to Lovell's then Georges Island. Once we're there we'll explore the island and how all the islands including Grape, Bumpkin, Georges, Lovells, and Peddocks were formed. They are a series of drumlins formed by glaciers.

We'll explore the environment and compare it to Kittery. (Remember spartina grasses?)

We'll also take a look at Fort Warren, built in the mid-1800's and used during several wars, such as the Civil and Spanish-American.

SOME IMPORTANT TERMS TO THINK ABOUT:

Glacial Geology  
Ecosystems  
Zonation

AND LASTLY - don't forget your money, lunch, or anything and

QUESTIONS: → Has Man successfully built around the ~~environment~~ sea environment or has he caused many problems?

→ The Harbor is polluted as you can probably tell. How do we go about cleaning it up? Where should we put the waste?

BE ON TIME!!! \*

readers

Alex - (961-7768)

Jenny - (969-2776)

7/11/96

8:45-

3:30

# Harbor Islands



## Equipment

Day pack  
 Notebook & Pensils  
 Hiking boots  
 Lunch  
 \$20  
 \$ in change  
 \$0 for ferry  
 First Aid Kit

Tomorrow we will meet @ 8:45 at the Newton center T stop. From there we will travel to a place where we will get on a ferry to George's Island. Here we will talk about ~~Geology~~ Forest succession, and the Civil War (You think I'm kidding!)

## Forest succession

1. Pioneer Stage  
 This stage contains the pioneer organisms which are the first organisms to appear. Plants are usually smaller.

2. Mid Stage  
 Forest sometimes go through multiple mid stages, which are the various steps between pioneer stage and Climax Stage

3. Climax Stage  
 Relatively stable. The same species of organisms come back.

## What is a Drumlin?

The Harbor Islands are all Drumlin. A Drumlin is when debris builds up in an upside down lake under or inside a glacier. When the glacier recedes, the pile of debris stays put.

History Lesson ☺ - On George's Island there is a fort. It was built a long time ago and was used by the North during the civil war to store prisoners of war. We will get to explore the fort and learn more about its history tomorrow!

We will see a small forest on the island near the fort. What stage is it in?

# The Legend of...

# the Lady in Black

Of all the stories on the Boston Harbor Islands that have been shared with us over the years, the most popular tale has been the legend of the Lady in Black at Fort Warren. The following version of the legend is offered without any guarantee that it is a true story.

During the Civil War Fort Warren, located on Georges Island in Boston harbor, was used as a prison for Confederate soldiers. One young soldier, Samuel Lanier, had been recently married prior to his imprisonment at the fort. He was able to sneak a message through Union lines to his new bride, Melanie, giving her directions to where he was. Happy to hear from him and being very much in love, she managed a passage aboard a sloop and landed in Hull, Massachusetts, near Georges Island, a few weeks later.

Living with a Southern sympathizer she monitored the daily activities of the sentries guarding the perimeter of the fort. Dressed as a man and hiding a "pepperbox" pistol, she rowed herself across to Georges Island and put ashore. Slipping silently past the sentries, she reached the ditch under the Corridor of Dungeons where her loved one was held captive. Using a pre-arranged signal she waited anxiously, but then was quickly hoisted up and through a musketry loophole. The loving couple were at last united and quickly made plans to escape.

They decided to dig their way out of the dungeon and into the parade ground in order to strike a blow for the Confederacy. Their plan was to dig into the armory, overpower the small force there and arm themselves. Due to a slight miscalculation they came up under the peacetime powder magazine and the noise of their pick striking the granite was heard by the sentry. The time was early in the morning and the sentry knew that there should be no sound like he just heard, so he called the fort to arms.

The commanding officer of the fort was an old West Point soldier named Colonel Justin Dimmick. Within a short time the escape was exposed. Finding herself cornered with her husband, Melanie attempted to fire at Colonel Dimmick. Unfortunately her gun was very old fashioned and when she fired it exploded and a piece of the barrel passed through her husband's brain, killing him instantly. Colonel Dimmick was forced to condemn the grief stricken widow as a spy.

The day she was scheduled to be hung, Melanie made one last request. She was tired of wearing mens clothing and wanted to put on a gown once more. After a search of the fort, some black robes were found that had been worn by one of the soldiers during a play. This was the wardrobe that gave the ghost her name as it was the last worn by her as the unlucky woman bravely met her death.

Of all the men at the fort attending the execution, most were transferred within the next month except for a few. One of these Union soldiers was Richard Cassidy of South Boston and all of the new men tried to frighten him by telling of the "Lady in Black" roaming the fort. He ignored their remarks. One night, seven weeks after the execution, he was walking his post near where the hanging took place. Suddenly a pair of hands started choking him. He twisted around and saw it was the Lady in Black! He broke free and went screaming to the guardhouse. He was not able to convince anyone of his experience and was given 30 days for leaving his post.

Since the initial sighting, the ghost of the Lady in Black has been seen by soldier and civilian alike many times over the past 120 years prowling the haunts of Fort Warren. Ah....., but who believes in ghost stories anyway!!



**Metro Parks**



Start: 8:45am (SHARP)  
 End: 3:30pm (at Newton Centre T)  
 Leaves From: \*Newton Centre (T)-stop  
 Leaders: Me, Garen Corbett(332-4015),  
 Cole Stanton(964-5857)

Molly Smith 965-1979  
 Trip slip #4  
 Friday, July 5<sup>th</sup>

# HARBOR ISLANDS

Equipment:

Field kits (regular equipt. from other trips)  
 \$1.50 for inbound (T)  
 \$0.60 for outbound (T)  
 \$3.00 (\$5.00 if over 12) for ferry  
 Bathing suit/Towel  
 Xtra Water, Money for snack bar  
 BIG LUNCH  
 Sun-block

*\$200 more for water taxi*

TIME TABLE

8:45am(sharp)- be at Newton Centre (T)  
 10:00am - Ferry leaves from Boston  
 1:45pm - Ferry leaves from Island  
 3:30pm - Expected time of arrival at Newton Centre (T)

\*\*\*Note unusual times, starting and ending locations. Don't forget your money and bring extra incase we go to other islands by water taxi(\$2.00)

The Harbor Islands have a very interesting history. They are called drumlins(we will define a drumlin on the trip) that were created by the glaciers. Georges Island is the main island of the Boston Harbor so that is where we will begin our trip, though we may venture onto other islands if we have enough time.

Between 1834 and 1860, Fort Warren was built on Georges. This fort was used during the Civil War as a prison for captured Southerners. One of the most famous stories surrounding the fort is The Legend of the Black Widow. It is from the time when Fort Warren was still a prison.

While on Goerges Island, we will explore the mysterious Fort Warren, adventure into the caves located along its shores(if we are lucky) and investigate the sea environment(which will be very similar to Kittery in many ways). Another topic that we will discuss is how has the influence of Man affected the Harbor Islands? Has he totally messed up the natural environment? Or has he been able to cultivate around the sea environment without disrupting its habitat? Glacial geology and zonation are other key topics that we will explore.

\*Don't forget about the time changes, money necessities, and location changes! SEE YOU FRIDAY!

ESP 1991  
Swimming Permission Slip

trip: Harbor Islands  
date: July 5, 1991  
beach: North side of Lovell's Island, Outer Harbor

I give my son/daughter \_\_\_\_\_, permission to swim at the above location under the supervision of the Environmental Science Program. I understand this permission slip is for this trip only. I understand my child can only swim on this trip if this slip is signed.

---



Signature of parent or guardian


# HARBOR ISLANDS

Date: 7/6/92 & 7/7/92

Leaders: Delio Tramontozzi & Jennifer McKenna

Phone #'s 244-3377 332-7724

Times:  8:45 A.M. - 3:30 P.M. 

Meeting place = at the NEWTON CENTRE "T" STOP   
**NOT NEWTON SOUTH!**

Equipment: Field kit, enormous lunch, sunglasses and hat (optional)

Bathing suit	\$ 2.00	for "T" inbound (in charge)
&	\$ .85	for "T" outbound
towel	\$ 6.00	for FERRY to Georges Island
	@ 3.00	if under 12 or 12 years old)

Bug Repellant, Money for the snack bar on the boat or island, Sun Block lotion, Extra water bottle, once again - **BIG LUNCH!**

Please arrive promptly at 8:45 a.m. at the Newton Centre "T" stop so we may catch the 10:00 ferry to Georges Island. We will transfer from the Green line D train to the Blue line at Rowe's Wharf. After arriving at Georges Island by ferry we will explore the island and check out its unique habitat and delicate eco-system. Many animals depend on the grasses to hold together the sand to provide protection and food. One thing that makes the Harbor Islands so unique is their history and formation. The Islands are Drumlins 12,000 years ago when the glacier was here, it carried large piles of rubble within. When the gl. withdrew it left behind these piles of rubble which were hills. The water level rose and then they became drumlins that are islands.

some important topics = Drumlins, tidepools, ecosystem zonation.

July 12, 93 / Trip slip #

# HARBOR ISLANDS



Leaders: Kathy Thorp 527-3681  
Dan Ordorica 244-5023


Times - 8:45 - 3:30 Be ON TIME PLEEZE!!

\* → Meeting Place - Newton Centre T-stop \*

Equipment: boots, field kit, big lunch, sunscreen

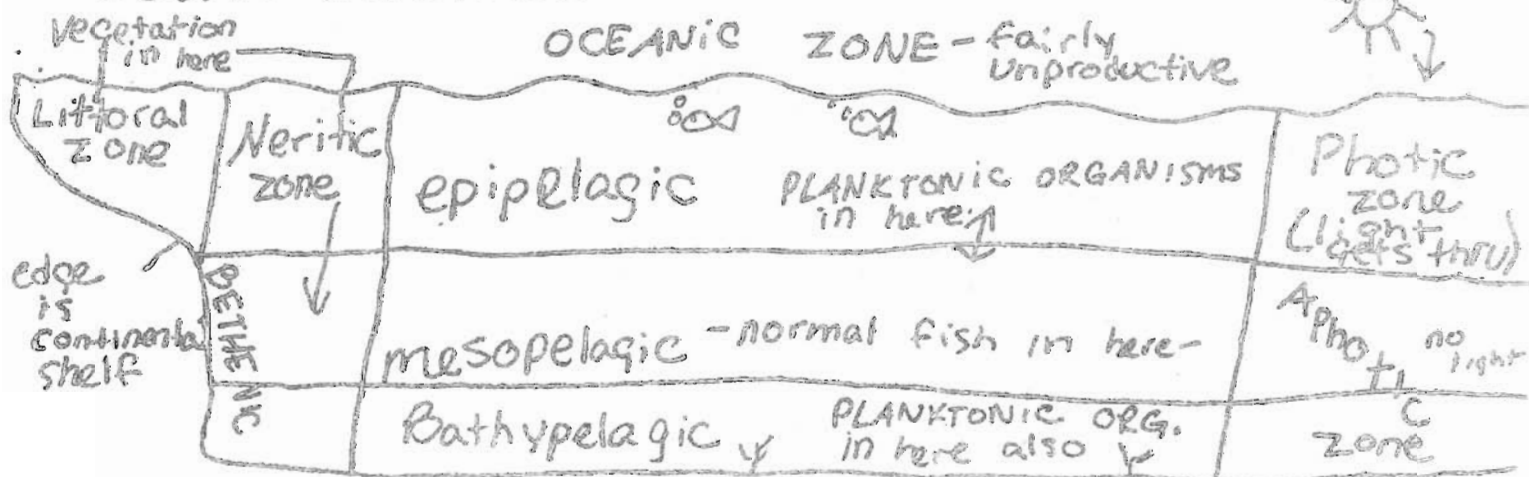
AND \$10 (\$2 for T, \$6 for ferry, \$2 in change)

Today we'll get to explore George's Island after arriving by the ferry. We'll explore this area and talk about the habitat.

The Harbor Islands were formed about 12,000 years ago when a glacier came across and left large piles of rubble (hill-sized) and eventually the sea level rose, and the hills ~~became~~ became islands, called drumlins.  ← drumlin

The Harbor is clearly polluted - what are some of the solutions to cleaning up the harbor? Where do we put the waste?

## OCEAN ZONATION:



# Harbor Islands

Garen Corbett  
Environmental Science Program

Date: July 5, 1991  
Times: 8:45 - 3:30 pm.  
Location: Newton Centre  
"T" Station.

Hello all! Get those Trip Slip #4 sea-legs ready, we're off to George's Island, and hopefully Lovell's Island. Please arrive at the Newton Centre "D" Line "T" stop, on time means 8:45 am - We will transfer to the Blue Line

Leaders:  
Cole Stanton (964-5857)  
Garen Corbett (332-4015)  
Molly Smith (965-1979)

at Rowe's Wharf. There we will buy our tickets for the 10:00 am. George's Island Ferry. (Clerk we might take a water taxi over to Lovell's Island).

Equipment: - Permission slip -  
Field Kit (yes, that includes your Hiking Boots), change for the "T" (bring \$2.50, might be less), and \$5.00 for the ferry (for those under twelve, only \$3.00).

We will be exploring the Island, as well as the famous Fort that was built to protect Boston from the British, and remained in commission until WW. II. But more importantly, we'll be exploring the unique environment of the island, and the history of its (and all the Harbor Islands) formation.

In addition, bring....  
Big Lunch  
Money for Snack Bar (optional)  
Bathing Suit / towel (depends if we go to Lovell's I.)  
Sunglasses and/or Hat (optional)  
Extra Canteen or water bottle  
Bug Repellent  
Sun Block Lotion (optional)

Returning back to Rowe's Wharf (via the 1:45 pm shuttle) we will return back to the Newton Centre "T" stop by 3:30 pm. Remember, tell your parents all pertinent info, or better yet, show them one of the trip slips for this trip.

Yourselves Bring flashlights as well. \$2.00 for water taxi

The Harbor Islands are a series of Drumlins. They are piles of debris formed by an upside-down lake under a glacier (we will explain that). When the glaciers retreated, these areas of debris are what remained. However, today these islands are natural gems only miles away from Boston. Besides numerous animal and plant species, the islands are home to Indian artifacts, old forts, and neat places to explore.

There are all sorts of things that we'll be talking about on this trip. Great examples of the first stage in Forest Succession (called pioneering stage) are seen around the fort (these trees include poplar, white oak, and smooth sumac).

Also are easy ways to learn about zonation from the surrounding environment, and Adaptation of the Animal Species.

To the left is a brief description of how the islands were formed. There will be plenty to do, between exploring a neat place, learning alot, and the time out for frisbee. This will be a FUN trip. See you at 8:45 In Newton Centre!

Terms:  
Glacial Geology  
Esker drumlin  
Cobble?



# HARBOR ISLANDS


Some important topics = Drumlins, tidepools, ecosystem zonation.

Date: 7/6/92 & 7/7/92

Leaders: Delio Tramontozzi & Jennifer McKenna

Phone #'s 244-3377 332-7724

Times:  8:45 A.M. - 3:30 P.M. 

Meeting place = at the NEWTON CENTRE "T" stop   
**NOT NEWTON SOUTH!**

Equipment: Field kit, enormous lunch, sunglasses and hat (optional)

Bathing Suit & towel	\$ 2.00 for "T" inbound (in charge)
	\$ .85 for "T" outbound
	\$ 6.00 for FERRY to Georges Island
	(@ 3.00 if under 12 or 12 years old)

Buy Repellant, Money for the snack bar on the boat or island, Sun Block lotion, Extra water bottle, once again - **BIG LUNCH!!**

Please arrive promptly at 8:45 am. at the Newton Centre "T" stop so we may catch the 10:00 ferry to Georges Island. We will transfer from the Green line D train to the Blue line at Rowe's Wharf. After arriving at Georges Island by ferry we will explore the island and check out its unique habitat and delicate dune eco-system. Many animals depend on the grasses to hold together the sand to provide protection and food. One thing that makes the Harbor Islands so unique is their history and formation. The Islands are Drumlins 12,000 years ago when the glacier was here, it carried large piles of rubble within. When the glacier withdrew it left behind these piles of rubble which were hills. The water level rose and then they became drumlins that are islands.

# HARBOR ISLANDS

Leaders: Leea Thomas 517-2763  
Delio Tromantozzi 244-3377

Date: July 10<sup>th</sup>

8:45am - 3:45pm

## WHAT YOU NEED:

full field kit, LUNCH, BOOTS, bathing suit + towel, bug-stuff, sunglasses/hat (optional)  
+ sweater + lots of money (see chart)

Note: We will not be meeting at Newton South. We will be meeting at the NEWTON CENTER  $\text{\textcircled{T}}$  stop at 8:45am we will be returning hopefully by 3:45pm.

Do NOT BE LATE!

# chart you need

1.35 $\text{\textcircled{T}}$	fare to Boston in quarters
1.75 $\text{\textcircled{T}}$	fare home
5	for an adult's fare for ferry to Georges
3	for kids under 12

## BOSTON HARBOR ISLES:

We will be taking the  $\text{\textcircled{T}}$  in to Boston. There we will be taking a ferry to Georges Island. In the best of all situations I personally would like to go then and take a water taxi to Lovells Island but this may not happen. The reason why I would like to see Lovells is that seeing only one of the many islands there are in the harbor can be boring, so let's all hope we can go to Lovells

How were the Harbor Islands formed?  
About 12,000 years ago when the glacier that once came across here retreated, it left large piles of rubble (as large as hills) in the plain that became our Harbor. When the sea level rose it filled in the lower plain areas and left the large piles (called drumlins) to become the islands. Since this time both Lovells Island and Georges Island have changed drastically (as well as the other islands). Most or all of the islands have been affected by man and all of the islands have grown more and more vegetation each year.

About some of the islands we will see on our ferry ride:  
Spectacle Island: Originally formed by two drumlins attached by a low sandbar Spectacle Island really did look like spectacles. Now however due to landfill and much erosion you can hardly tell what it used to look like. Due to nearly a century of abuse and misuse Spectacle island now only has sea gulls and rats living on it eating the large amounts of ~~waste~~ waste leftover from many different factories and other buildings which used to be there.  
Lovells Island: Many tales of pirates and hidden treasure surround Lovells Island yet history (recorded) is what we will learn. Mostly Lovells was farm land until it became a training camp for during the Civil War. They say that there is a hidden tunnels that leads from Lovells to Gallipoli Island. This was used during the war. They would put many explosives in the tunnel and then if a ship passed over the tunnel it would be blown up.

# HARBOR ISLANDS

Leaders: Leela Thomas 517-2763  
 Delio Tramontozzi 214-3377

Date: July 10th

8:45 AM - 3:45 PM

## WHAT YOU NEED:

Full field kit, LUNCH, BOOTS, bathing suit + towel, bug-stuff, sunglasses/hat (optional)  
 + sweater + lots o' money (see chart)

Note: We will not be meeting at Newton South. We will be meeting at the NEWTON CENTER (T) stop at 8:45 AM we will be returning hopefully by 3:45 PM.

Do NOT BE LATE!

## chart BOSTON HARBOR ISLES

- you need
- 1.25 (T) fare to Boston in quarters
  - 0.75 (T) fare home
  - 5 for an adult } fare for ferry to Georges
  - 3 for kids under 12 }

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Trip slip # 5  
7/11/01

Bring \$13.50 for  $\text{\textcircled{T}}$   
and ferry fares

Place: Newton Center  
 $\text{\textcircled{T}}$  stop.  
in front of Starbucks

Leaders: Julie - 617-964-7248  
Amelia - 617-244-8836

Equipment: Field kit, boots,  
Lunch,  $\text{H}_2\text{O}$ , warm  
layer incase it is cold,  
A scary story, Flash  
light, Money for trip  
on  $\text{\textcircled{T}}$  and ferry  
\* \* \*

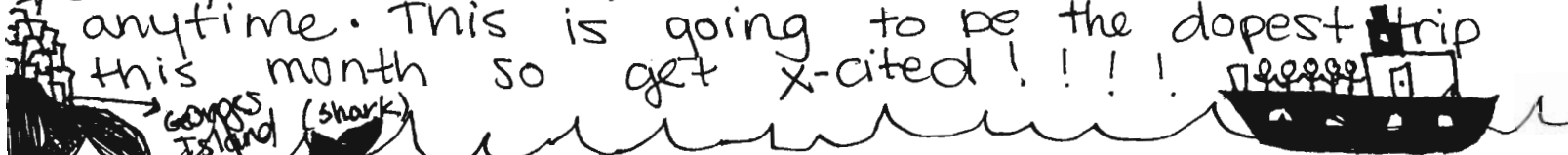


Today we will be meeting at the Newton Center  $\text{\textcircled{T}}$  stop. This is very important, because we want to leave on time so that we can have enough time to explore George's Island. A ferry will take us to the island. While we are on the ferry we can talk about the effects pollutants have on Boston Harbor. It should be pretty obvious. I will also talk a little about what George's Island was used for. Fort Warren is located on George's Island. It was built in the mid-1800's and used in the Civil War and the Spanish-American War. George's Island is a great place to tell scary stories, because inside Fort Warren it's pretty dark and scary!!

So... Here is my question: How did the Harbor Islands form? The Harbor Islands are actually a series of Drumlins formed by glaciers. Drumlins are dome shaped land masses (islands) made from rocks, and sand that were left over during glacier movement. Those of you that when to Nahant Woods may remember an ester. Well Drumlins are similar to esters, but drumlins are enormous.

Please Please Please be at the  $\text{\textcircled{T}}$  ON Time!

And Don't forget anything on the equipment list. If you have any questions feel free to call me at anytime. This is going to be the dopest trip this month so get x-cited!!!!



Leaders: Daniel Ordorica(me) 244-5023

Kathy Thorp 527-3681

& Leah Thomases 527-2763 (your director)

Times: 8:45AM to 3:00PM

Location: **MEET AT NEWTON CENTER T STOP** (by the by, **MEET AT NEWTON CENTER T STOP**) this is very important seeing as we will not be going to South, and if you go there it is very unlikely that you will be going with us.

Equipment: Bring your Field Kit, money for the T, the ferry, and other expenses (\$10.00 in all, 2.00 in change for the T)

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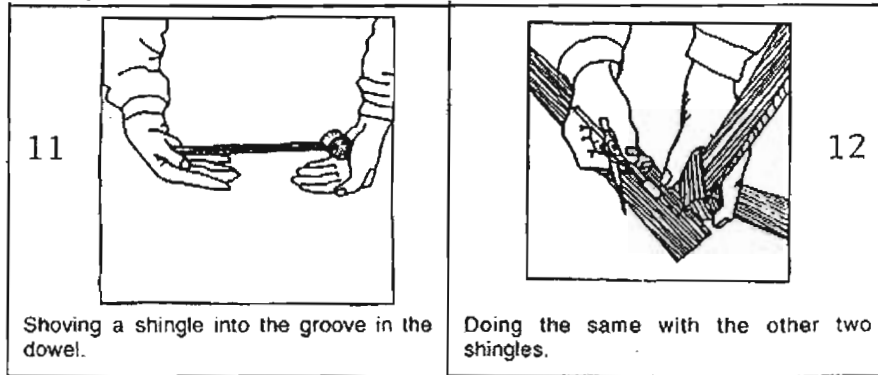
On this trip, we will be travelling to George's Island, the main Harbor island frequented by tourists each year. George's Island is thirty acres of land, most of which is called Fort Warren. This fort of the Civil War was used by the North as a prisoner of war camp

However, despite the historical importance of George's Island, it is also an example of a geological phenomenon. It is a drumlin, much like Drumlin Farm, however, obviously George's Island is mostly underwater. Do you know what a drumlin is? A drumlin is created when a glacier deposits a mound of earth, and then smooths it over as it sweeps on past. This results in a hill in the shape of an oval with it elongated in the direction the glacier moved. You can think of the drumlin as the glacier's way of saying, "Look guys, I went that way!" Drumlins can be quite high and long. It is not all that uncommon for a drumlin to be about 100 to 150 feet high, and more than 1/2 mile long.

Some history about George's Island-

- 1- Fort Warren was built between 1834 and 1860 with Quincy Granite.
- 2- George's Island was a decisive component in Boston's defenses, and remained so even through World War II, where it was used for field exercises.

Comedy Central's *Beat the Geeks* is not a good show. Stop watching it.



Shingles? Dowels? What the...

This trip slip conveniently printed on my-mom-bought-this-paper-by-accident-and-now-I-have-to-find-use-for-it yellow {look for other colors to appear on future trip slips, courtesy of Kinko's}

Today and/or tomorrow's trip (depending on when you read this):

## HARBOR ISLES.

OPEN WATERS. NO GAMBLING.

### Pertinent Information:

Ts# (trip slip number): 6

D|t (date and times): July 10, 2002 | 9am-4pm

Ml (meeting location): **Newton Center T-stop** (NOT Brown middle school)

L's (leaders): Jonathan Rivnay {617.527.1849} y Danny Yagoda {617.738.0269}

vEq (various equipment): *Hiking Boots, Water, Lunch, Field Kit (Raingear, First Aid, etc.), Sunscreen, about \$15 to buy tickets for the boat, and maybe extra if you want ice cream and goodies.*

### Informational Haikus {i5|7|5}:

At George's Island  
Great Fort Warren sits silent  
Civil War is done

Lady haunts the fort  
Woman, killed on this island  
She scares people still

Thirty four islands  
Drumlins of a past era  
Made by a glacier

Remnants of a war  
Built on remnants of glacier  
We'll explore them both

Dark room lies within  
Beam of light shines at center  
Observer sees ghost

Angry monkeys eat.  
I'm so very very sad.  
But his trip is fun!

### Boston.com predicts:

Boston.com's prediction is both not available and likely not accurate 8 days in advance (at which time this trip slip was written).

*The Weather channel claims they can handle such predictions: partly cloudy, H84/L62*

Trip slip #5

7-7-99

Leaders: Gabe "Pinhead" Yospin 969-3966

Julie Greenwald 964-7248

Times: 8:45 AM - 3:30 PM

Place: NEWTON CENTRE ⊕ STOP

Stuff: field kit, boots or sneakers, flashlight, a warm layer, \$12.85

\$10 for the ferry ticket,

\$2.85 in change for

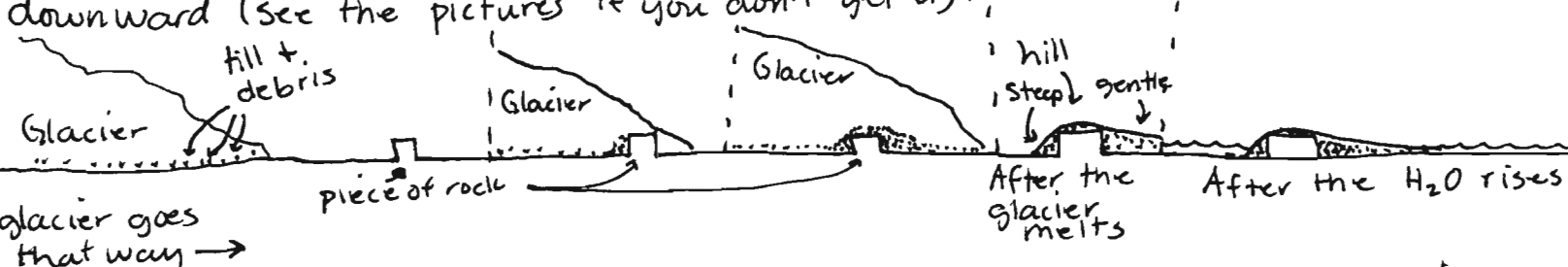
The ⊕ Optional: extra \$ for snacks or ice cream

Oh, yeah. don't forget a big lunch. The air will make you hangry!

A note to the parents: Yes, we do know what we're doing. We'll be taking the green line to the blue line Aquarium stop. The ride will take about an hour each way on the ferry, & since we have to follow the ferry schedule, everyone must arrive on time, at 8:45, at the Newton Centre ⊕ stop.

# HARBOR ISLES

Like everything else around here, guess what formed the Harbor Isles? That's right! The islands were formed by glaciers, during the last glacial recession (that's when glaciers melt & move back toward the poles). The islands are all DRUMLINS, which are long rounded hills formed when glaciers move over very hard pieces of bedrock near the surface of the Earth. They usually have one blunt side, & one side that gently slopes downward (see the pictures if you don't get it).



Just to let you know, that's the best drawing I've ever done in my life. Please save, so as not to hurt my feelings.

There are lots of stories that go with this trip, and you'll hear them all (especially the ghost stories).  
Until Tomorrow!

