

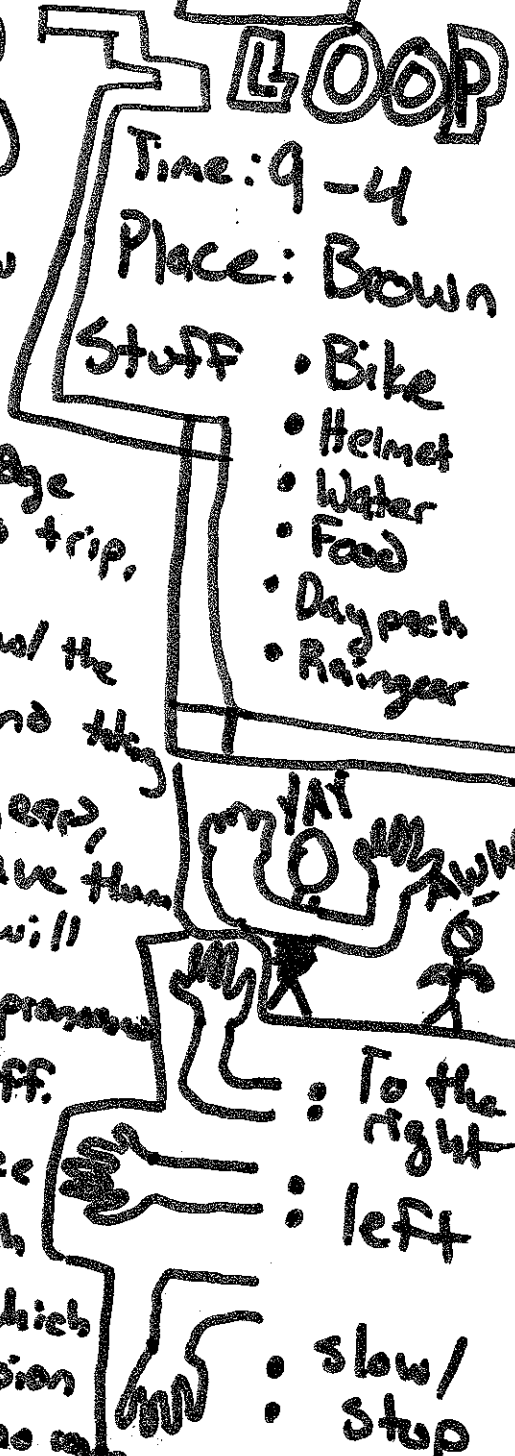
RIVER BIKE



Leaders: Jeff Hernandez (617-332-9506)
 Chris Leo-Palmarino (617-426-0319)

For those of you who do not know how to ride a bike, it would be utmostly important for you to acquire the knowledge required for riding a bike. In today's trip, we will go over biking basics, like going w/ the grain instead of against, or hand signals, and they off the training wheels. In previous years, we did water tests, but we don't have them in adequate supply this year so we will just go over what we would test (Ph [pressure Puh]), hardness, and other junk and stuff.

If you'll glance to the right, you'll see some amazingly drawn hand signals, which are the hand versions of car signals, which are the car version of the hand version of car signals, and so on until there are...



Zig
 Pow!
 Biking

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.



The Important

- Bring Part:
- o First off, a bike would help.
 - o Helmet
 - o Lunch
 - o Shoes (no need of boots today)
 - o Bike Tools (if you have them)

Meet @:

Brown Middle, 9-4

Leaders:

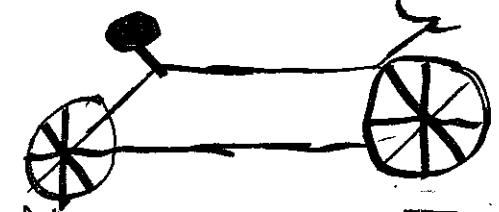
Chris Leo Palermo

(617 926-0311)

Jeff H.

(617 352-9506)

Larger Scale Bike if you need to remember what a bike is... (or you know, make one)



Note: This bike is NOT to scale.



Well, after wishing me a happy birthday, we will be biking enroute to and on the highly popular Charles River Bike Loop. Anyway, if you didn't already know, we will be... *drumroll please* biking on the Charles River - wow!

Anyway, we will be visiting the trails of the Charles River far and wide including many parts that I'm sure you have never had the amazing experience of... experiencing. Before we start the biking part of this trip that is solely biking, we will review the rules of the road - and go over the geology of the road - yes, that's right...

that's an important part.

Biking Signals	
Left	Right
Stop	

So remember to enjoy the Charles while you are biking around it because you're going to be enduring the wrath of it over the Come Trip . No, I didn't say that - and remember your bike!

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Trip/Challenge of the Day: Can you find all 4 members of the Teenage Turtles

Charles River

Bike Loop



Raphael



Donatello

Leonardo



Michelangelo

Leaders: Mike Melikian
(617-244-0998)
Nate Kaufman
(617-796-7762)

When: 9am-4pm

Where: Brown

Who: you 7/2/03

What to bring: H2O
Lunch, packback,
bike, helmet, field
kit, sneakers not
hiking boots

Well today we are headed out to the river they call the Charles, "they" referring to them. We will be going by bike (bicycle for the more classy folks among us) as going by foot would take a very, very, very, very, very, very, very, very, very, very long time. When we get there you shall discover that the Charles River is rather dirty and the banks are covered in trash. Perhaps we'll play an old Envi-Sci classic, and one of my all time favorite games, Garbage Man which isn't what it sounds like at all and is quite fun. Also, if you are a returning student, good for you. You should remember Charles, the kid who came to the program last year and was from France. Well the Charles River Bike Loop was Charles' favorite trip. I assume, he does share a name with the river so it must be true. Since this was Charles' favorite day, we will celebrate this as reach out to our brothers in France by proclaiming this "Charles Is From France Day". Feel free to bring in all sorts of French products and giving them to Nate and I (food=extra points)



← waterfall

← Don't Do This!

CHARLES RIVER

BIKE LOOP

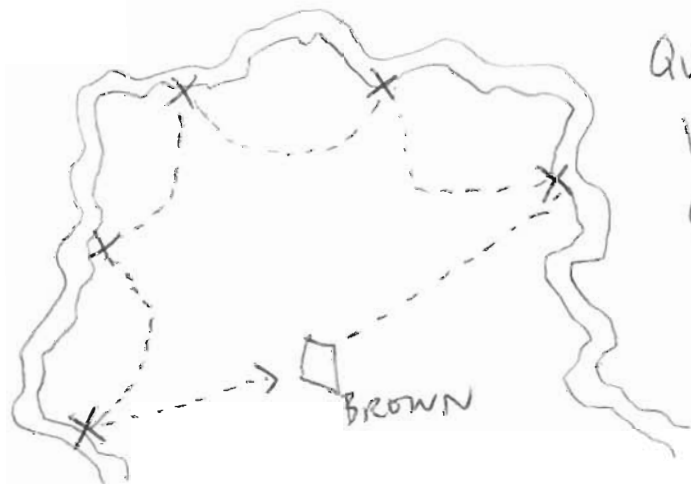


LEADERS: NATE "PYONGYANG" KAUFMAN (617) 796-7762
MIKE "KHATMANDU" McLELLAN (617) 244-0998

TIME/PLACE: 9AM-4PM JULY 8, 2003; BROWN M.S.

EQUIPMENT: BIKE, water, lunch, field kit, HELMET, sneakers, (not boots), a Savoy truffle

So, kiddies. We're going, on our bikes, around the city to different points along the Charles River where we'll take some water tests to figure out just how dirty that water really is. But you and I both know that I love that dirty water. Oh, Boston, You're my home.



QUESTION OF THE DAY:
Why is the water
so gosh darn brown?

Hint: It's not because
it's "dirty"

Leaders: Daniel Ordorica (244-5023) & Delio Tramontozzi(244-3377)

Time: ~~8:30am~~ 2pm

Equipment: Bicycle, bicycle helmet, bicycle tools (if you have any),
field kit, lunch, & sneakers-NO BOOTS!!!

The Charles River Bike Loop is a bicycle trip (if you haven't noticed yet). You will need to be there at least 1 half-hour early (hence-8:30) so that we can be sure that your bicycle is in proper order. We will be stopping at least 5 times along the Charles, a few of the stops are Norumbega, Auburdale Park, and possibly Echo Bridge. At each stop we will be testing the water, from this information we will be able to hypothesize how industry effects the water.

Does anybody know why parts of the Charles are brown? Most people would guess pollution, but in many cases the correct answer is the oak tree. Does this mean that oak trees are major pollutants? Not at all, when the oak leaves drop into the water, and decompose, they release Tannic acid, this colors the water brown.

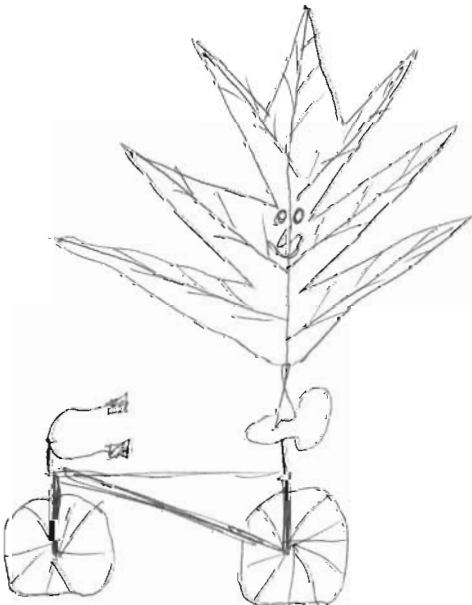
PS- The rules of the road-

(1) Use hand signals

A: left 
 B: Right 
 C: Stop 

(2) Keep to the right side of the road

(3) Stay spaced out (well, you know what I mean)





we will see many cattails

BIKE SAFETY:

This is your first bike trip of the program! We will cross many busy streets, so it is important you observe several rules. We will bike together as a group - no one is allowed to go off on their own. Make sure you always wear your helmet, and signal before every turn. We will ride single file close to the curb, and we will leave a good distance between each of us. If we follow these rules, we'll have a great trip!!!

In 1892, there were over 4000 sources of pollution of the Charles, and the river had the reputation of being dirty.

Nowadays, efforts have been made to clean the Charles, such as installing bubbles (6 to be exact) which circulate and aerate the bottom!

TRIP SLIP # 4

Pam Mahoney Agatha Clark
(527-5831) (969-7407)

July 6, 1993

NOTE THE TIME CHANGE!

TIME: 8:30 - 2pm

EQUIPMENT: bike, helmet, NO BOOTS, lunch, extra water.
[If you do not have a bike/helmet, let us know so that we could possibly provide one for you.]

We will be biking along the shores of the Charles River along the MDC bike path. We will examine the urban impact on the river. How do cars effect the river environment? what about the salt used to melt ice on the roads? These are important issues to discuss - how do humans impact the environment?

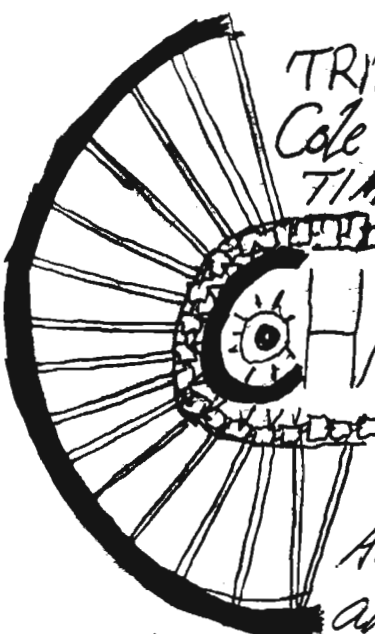
Have you ever noticed that the Charles River is brown? Many people believe it is very polluted. The truth is that upstream, the river flows through a peat bog. Furthermore, oak leaves fall into the river and decompose. They both form TANNIC ACID, a brown acid, when they decompose, which causes the brown color in the water.

THINGS TO THINK ABOUT: what is zonation?
what is pH?

TRIP SLIP: #6
Cole Stanton (954-5857)
TIMES: 9am-2pm



** BIKE
TRIP **



CHARLES RIVER ^{Bike} LOOP

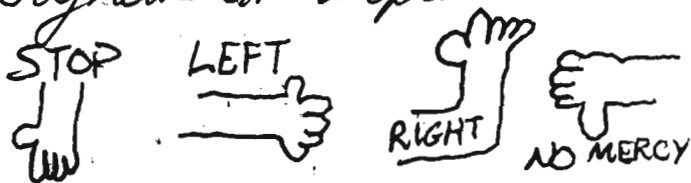
EQUIPMENT: A BICYCLE

Sneakers, shorts, vials, field kit, Map and Compass,
An extra canteen, PLUS Useful bike TOOLS like
an extra inner tube, bicycle flat tire repair kit.

Today is our last day of preparation during WATER CONSERVATION & TEST WEEK, before we hit the canoes. By now you are familiar with water testing and the kits. Mostly however we have been testing only at one site per day. This trip allows us to test the same water body at several different points so we can draw conclusions about how surroundings affect water quality.

We will be testing for pH and DO at five sites. The first is at the Newton Incinerator. The second is at Auburndale Park. The third is at the Charles River Canoe Service where we will do Canoe Prep on Thursday. The fourth stop is on Quinabequin Rd. in Waban and the fifth is at Echo Bridge.

We bike single file in the program and follow the rules of the road. Hand signals are imperative



GRIST FOR THE MILL:

Take along a readiness to observe these river environments because on Thursday and Friday we will be amidst them instead of on the edges.

Why is the water brown?
How do rivers evolve?
What is a watershed?
What is purple loosestrife?

LET'S GET SOME EXERCISE
BIKED,
AND LET'S GET ~~DUDE~~ DUDE

CHARLES RIVER

BIKE LOOP

Trip slip # 6

Date: 7/8/92

Time: 8:30 - 2 pm

Leader: Delio Tramontozzi

Phone # 244-3377



Equipment: A BIKE (preferably ^{not} a 10-speed) wear sneakers, field kit, Large lunch, two water bottles - one with something sweet (to replenish some quick energy!), bike tools if you have any (an Extra Inner tube), a Bike Helmet!

Well this is probably the first bike trip for ^{Mandatory*} some of you, that's o.k. because it's fun! Besides biking being a great exercise, it beats walking! We will be taking 4 maybe 5 water tests at

- 1.) River St. (Past Incinerator in Waltham)
- 2.) Auburndale Park
- 3.) Norumbega Reservation
- 4.) Quinobeguin Rd.
- 5.) Echo Bridge

I wonder how clean the Charles River is? Do you know why the water is brown? - It is brown from oak leaves and the such falling into the water. When they decay they give off tannic acid which is brown. Therefore coloring very brown over many years. We will also talk about and draw conclusions about how the surroundings effect the quality of the water and the living animals within.

Now for some rules of the road:

- 1.) Stay on the right side of the road
- 2.) Stay well spaced out!

3.) HAND SIGNALS!
(you have arms, so) use them!



Right



Stop



and
* 4.) whistle at pretty girls along the way.

TRIP SLIP #7

Charles River Bike Loop

Rachel 332-5932

and
Eiling 965-5698

10 July 1991

8:30 AM to 2:30 PM

Field kit

Bicycle

Helmet

Water Test

Kits (to be
handed out)

NO BOOTS

SUNBLOCK and EXTRA WATER
are a good idea, too.

If you do not have any of
these items (namely a bicycle
and/or a helmet), please call one
of us as soon as possible so
that we can hook you up with it.

As long ago as 1892,
there were over 400 sources
of pollution of Charles, and
the river already had a
reputation for being dirty.

Much work has been done
to clean up the Charles, such
as the installation of
six diffusers, or bubblers, which
mix, circulate and aerate
the bottom.

The river above Watertown
has been given a "B" grade,
meaning that it's swimmable
and fishable.



BICYCLE SAFETY

We will be crossing
some busy streets, so
it's important that you
follow basic bike safety.
This includes wearing
your helmet at all times,
signalling before turns,
waiting for your leader's
signal to cross the
street, staying signifi-
cantly close to the curb,
remaining single file,
and leaving a good
distance between you
and the person ahead
of you. Let's all ride safely!

The Charles is a good
place to think about
ZONATION, since the
different zones or sections
are easily seen.

The middle of the
river is basically
clear on the surface.

Moving towards the shore,
floating-leaved plants like
the white water lily
become apparent.



We will be stopping
at various points along
the Charles to observe the
different conditions and
take water tests. By
testing the water for chemical
content and oxygen levels,
we can determine whether
life in a given area is
possible.

It's important to think
about what factors might
alter the character of a
water body. Natural disasters,
man-made pollution and time
all have an effect on
the river.

Further out, emergent
plants like purple
loosestrife and cattail
appear.



These zones show how
different environments can
support different life, even
if the environments are
very similar.

Why does the Charles meander?

Eric

Charles River Bike Loop

Starring: Mike D. 244-0285

Gabe Y. 969-3966

Showing from: 8:30 - 2:00

Date of show: 7/13/98 (tripslip 9)

Equipment: Field kit, sneakers (no boots), lots of water, big lunch, a good bike, a bike helmet.

What are we going to do?

BIKE!!!!!!

Where?

AROUND THE CHARLES RIVER!!!!

What are going to do there?

WATER TESTS!!!

Why?

SHUT UP, TO MANY QUESTIONS!!!!!!

As hopefully you figured out, this is a bike trip so bring your bike. We will be going around the Charles and doing tests. Now stop whining and saying that all this was explained above because whenever I tell you once it's not enough. So here it is again. We are going on a bike trip and we will be conducting water tests. We will be visiting crazy places like Auberdole Cove, and Ruaford Recycling plant. You got that? OK, I guess.

I hope you all know your hand signals. If not we will be going over them before we go for our ride. We we also be riding single file on the right side of the rode. OK... good.

Trip #9
7-13-98
Place: Brown

Stuff: Bicicleta (Bike), Sneakers,
field kit (with notebook!) daypack,
extra bike stuff (tubbs, etc.), helmet
plenty of water, 4 steel belted
tires, 1 rubber hose

Leaders:

Mike "I'm Dyen to get goin'"
[244-0285] Dyen
and...

Gabe "The man with all the
stupid jokes" Yospin
[969-3966]

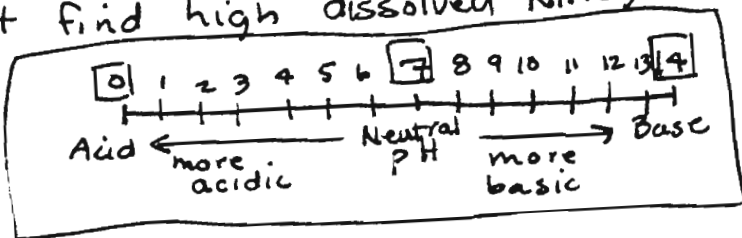
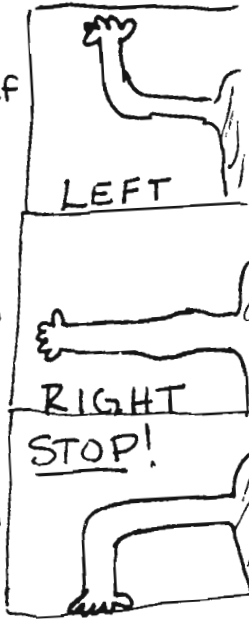
Eric

Charles River Bike Loop

Hey Hey Hey! Today we're going on a kickin' bike trip: we'll

be making five stops along the Charles river to do things like observe
the river, it's surroundings, and record all of the results of
the water tests that we'll do. It is very important that
you have your notebook & something to write with.

We'll be doing lots of tests, including pH, dissolved oxygen,
nitrogen, and other things. pH measures acidity (see chart
below). Everything in the water needs dissolved oxygen to breath,
both plants and animals. Nitrogen is a by-product of industrial
production. More of this is bad. Where do you think we
might find high dissolved Nitrogen counts?



Although having very acidic
water is bad, having very basic
water is bad, too. Water should
range from about 5.5 → 7.4

We'll go over bike safety on Monday. See Ya!

Ripslip #5
Date: 7-11-01
Time: 8:30am - 4pm

Meet at: BMS



Leaders: Sarina Yospin 969-3966
Jon Rivnay 527-1849

Charles River Bike Loop

Equipment: Bike, Helmet, sneakers, H₂O (don't drink the river water), lunch, field kit, x-tra bike tools if you have 'em

Today, we'll be biking to several spots along the Charles (or "Chaz," if you will) River and doing water tests. We test for dissolved oxygen, nitrogen, pH (level of acidity), and all sorts of crazy stuff. We'll learn more about what each test means as we do them. And what's cool about this trip is that the water test results you guys come up with are actually given to and used by the City of Newton. Dude!

Some Chaz questions:

- How might water quality vary at different sites, like a landfill, a park, and a highway?
- Why is the river water so brown?
- Is it good for the environment to feed wild animals that live in & around the river? Explain.
- What is the airspeed velocity of a European swallow?

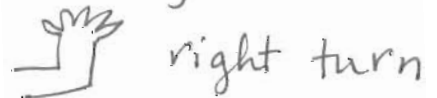
As we will be on BIKES, and we like to be SAFE, we will employ our powers of BIKE SAFETY!!

- Bike single-file, leaving a space cushion between your bike and the one in front of you.

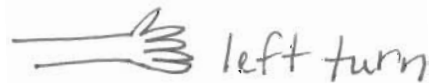


- wear a helmet. Ya only get one brain.

- use hand signals:



right turn



left turn



STOP!

All of these rules can be summed up into one basic bike principle:

When you bike, try not to get yourself killed.

Hooray for the Bike Loop!

CHARLES

RIVER BIKE

Trip slip #7 **LOOP** w/

Michael DIEN
247-0285

7/12/00

and
Dancy Vajdas
738-0269

8:30 - 3:00

DID YOU

Equipment: Fall kit
bike, helmet, cheese

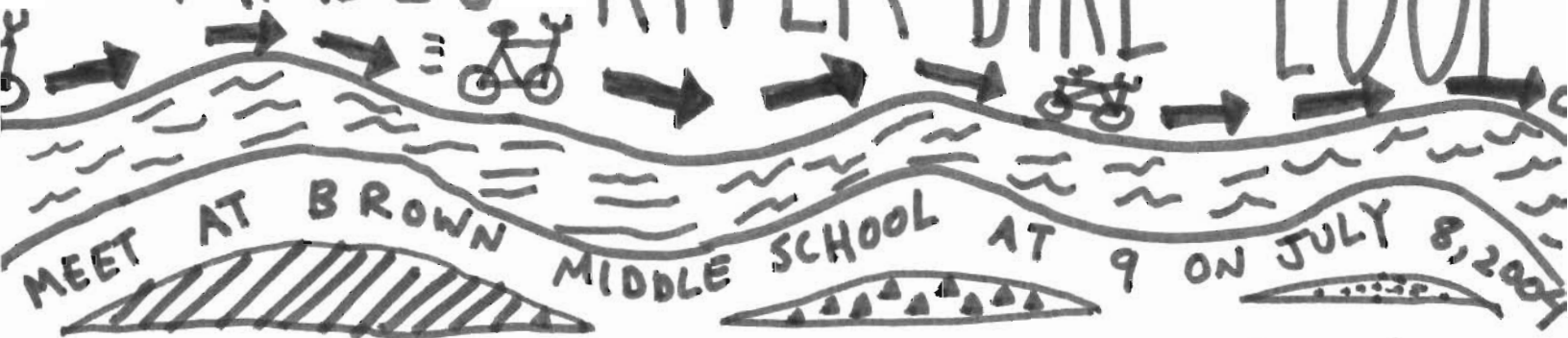
KNOW THAT
YOU CAN BIKE
FASTER THAN YOU
CAN WALK?

H₂O, lunch, repair kit
(if you have one)
funky Jazz. SNEAKERS

TODAY WE WILL BE BIKING
ALONG, AND GOING TO A COUPLE OF
CHOICE STOPS ON THE CHARLES
RIVER. WHILE IN THOSE SPOTS
WE MAY CONDUCT SOME WATER
TESTS AND RECORD THE RESULTS
FOR THE CITY. I HOPE YOU
ARE ALL READY FOR
BIKING FUN

Trip Slip #5... A trip of Epic Proportions...

CHARLES RIVER BIKE LOOP



JOEY "LANCE" BACKER
617-969-0288

NATE "FEDERICO" KAUFMAN
617-796-7762

EQUIPMENT:

- o BIKE
- o HELMET

- sneakers (not boots)
- Lunch • WATER
- Field Kit
- sunblock

Aight, fizz-olks. Today is a trip of special magnificence! We'll be riding our bicycles built for ~~two~~ one all along the banks of the Charles River, and speaking at great length about river and marine ecology. So brush up on your hand signals (Fig 1.1) and get ready to RIDE.



WHOA! I'm your guest trip slipper, ex-Leader of Ultimate Awesomeness: SARINA YOSPIN. I bring you important messages: ROCKS ARE AWESOME, and give me presents, and listen to Joey+Natey.

In case of an emergency, your child will be brought to Newton Wellesley Hosp
617-243-6000

FIGURE 1.1

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

CHARLES RIVER BIKE LOOP.

Tripslip number: Five (5)
Date: Wednesday, July Eleventh, 2001 (7/9/01)
Time(s): Eight-Thirty until Four (8:30am-4pm)
Meeting Location: Brown Middle School, in Newton
Leader(s): Jonathan Rivnay (617-527-1849)
Sarina Yospin (617-969-3966)

Required Equipment: Bike, Helmet, Sneakers (no Hiking Boots), Water, Lunch, Field Kit (Raingear, First Aid, etc.), and the need to learn, in addition to some fresh kiwi slices with light whipped cream on the side.
Tripslip Contents: "Loop." "River." "Tests."

LOOP.

after checking our bikes and going over the good-ol' quality bike safety shindig (?) with the hand signals and staying in a group and riding on the side of the road and such, we will be off to the mighty banks of charles river. following these rules, and always preventing forest fires will allow for an exciting and enhanced trip experience. we will be biking along the mdc bike path and to other points along this mighty river...and we will examine the quality of the water using different tests. using these so called tests, we can learn about what kinds of effects and urban impact there is on the river. what kinds of results would we find near a highway?, near train rails?, or, surrounded by lots of oak trees?...we'll find out, oh, we will find out...



no, this is not a map of new jersey...this is a very small map of the charles river watershed...can you see the river? can you see newton?

TESTS.

water testing, as i mentioned in the "Loop." box, can be very useful. Here I will explain some common tests that we will use in the coming weeks, all leading up to the canoe trip. **ph** measures the concentration of hydrogen ions in the water, organisms that are in water that is too acidic or too basic can not survive, charles river water is slightly acidic, I will explain this on the trip. **dissolved oxygen** tests for the concentration of oxygen that is dissolved in a sample of water, the levels of d.o. can be affected by temperature, speed of the moving water, pressure, or photosynthesis. Those are just two tests, but I will explain other tests in later tripslips leading up to the canoe trip, am'cha excited!?

RIVER.

The Charles River is 80 miles long and flows through 23 towns in eastern Massachusetts.

35 towns and cities are in the river's watershed, which is 308 square miles in size. (A **watershed** is the area that drains into a river, lake or harbor. All land surface is in some watershed because all runoff goes somewhere.)

There are 20 species of fish found in the Charles, that are migratory and swim upriver from the sea to spawn (lay eggs) each spring. These fish must climb a series of fish ladders set up at each of the lower 5 dams on the river.

The Esplanade, part of the Metropolitan District Commission's Charles River Reservation, hosts more visitors than any other riverfront park in the nation.

Weather Forecast (by boston.com):

EnviSci takes no responsibility for the accuracy of the boston.com weather forecast. You must bring your raingear and lots of water, no matter what!

Wednesday,
July 11, 2001



partly cloudy:
H78 / L63

Partly cloudy skies, cooler and less humid. An isolated shower or two is possible during the afternoon. Highs 75 to 80. Clear to partly cloudy skies overnight. Lows 58 to 63.



007 - Pin Oak



008 - Ginkgo

TRIPSLIP #5
JULY 8, 2004
9AM - 4PM

CHARLES RIVER BIKE LOOP

MEET AT BROWN AT 9AM

BRING YOUR BIKE, A HELMET, WATER, LUNCH,
SHOES (NOT BOOTS), FIELD KIT, BIKE TOOLS IF YOU
HAVE THEM, A KRISPY KREME DONUT FOR NATE

WITH: YOUR TRUSTY LEADERS

NATE "LIVE AND LET DIE" KAUFMAN
(617) 796-7762

and JOEY "LADY MADONNA" BACKER
(617) 969-0288

Well, folks, it's the trip you've all been waiting for. That's right. The trip that takes you to parts of the Charles River that you didn't even know existed. We'll have our bikes, so we'll be able to cover plenty of ground by the end of the day.

We'll bike up to the Waltham border initially, make our way to the Cove, Norumbega, and eventually finish out down at Quinnobeguin, taking water tests all the while. (This is actually really important - the city uses the data we collect!) We'll talk more about these tests tomorrow. But what's more important right now is, of course, the trivia question of the day.

TRIVIA QUESTION?
OF THE DAY?
? ? ?

Who was the youngest person to ever be president of the United States?

VOTE FOR KERRY

CHARLES RIVER LOOP



Leaders:

NATE (THE GEAR)
KUAFMAN

↳ 617-969-4194

DAN (THE HANDLE
TASSLE) SWARTZ

↳ 617-244-2339



MEET @ BROWN,
MIDDLE SCHOOL
9AM-4PM

Trip slip #5 7/8

Bring: YOUR BIKE

helmet, water,
lunch, Shoes (no boots)

Field Kit, bike tools,
a GU's packet for
NATE



Now that that's
out of the way, today
we'll be biking all around
the Charles River, talking
all about river and marine
biology, and testing it's
semi-gross water all the
way; so be sure to bring
your bike and we'll see ya on
the road.

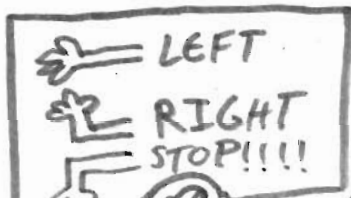
brown
actually.

YOU HAVE A MISSION:

to test the water at
several points on the
Charles River.

WHY? Because the City o'
Newton needs to know
how... HOW?

On your bikes
of course!



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.

