

¿So you want to be a Billion-Year Walk Organizer?

Great. In the end you will have made some life-long friends and have a project under your belt for which you can rightly be proud. Besides, you will have helped lots of kids and a more than a few grown-ups appreciate the immensity of time over which life on Earth has developed. Without that appreciation of Deep Time, it is impossible to accept many scientific developments in geology, astronomy, biology, and climatology, among others.

Our Billion-Year Walk resource won't guarantee your success but will possibly save you hundreds of hours in preparations that we have already invested, and you might find a tip here that will keep your project from derailing. You may use and/or revise our signs, logos, documents, etc.

Selecting a Trail

Ideal: A path that

- ends near where it started
- is between 4 and 10 kilometers in length
- is highly used by walkers/hikers
- crosses no roads or railways
- has good access by public transportation
- has plenty of free or cheap parking
- has restroom facilities at beginning, end, and in-between
- has no difficult or treacherous portions – even in inclement weather
- anywhere along its length can be reached by a short walk from a vehicle
- you can license for use at a reasonable cost or for free

The Ancestor's Trail Hike near Toronto and the Ancestor's Trail Hike in Great Britain violate the first two items on the list. The first ends over 12 kilometers from where it begins, and the second nearly 20 kilometers from its start. For the Canadian event, however, there is adequate public bus service for walkers to get back to their cars – for walkers who use cars. The event in Great Britain leases buses to return people. But 20 kilometers? Well hey, they're British.

The path used for the Billion-Year Walk in Oakland satisfied all of the above criteria but only by partnering with the City of Oakland. Had we not partnered with the city, they would have charged us hundreds of dollars for a permit and the Oakland Police Department would have charged us another fee – assuming they approved the event. Fortunately, the Rotary Nature Center proved to be an excellent start/finish facility and is governed by the city's Parks and Recreation Department. With help from the Center's staff, the fees were waived and our applications sped through the bureaucracies.

NCSE also partnered with the University of California Museum of Paleontology. By partnering with the city and with a well-known college, everything else we did became easier. "Oh, you aren't familiar with NCSE. Well, this Walk is also sponsored by the City of Oakland and the University of California."

Signs

Now that you have a date, a path for walkers, licenses to use it, partners to add prestige and grease wheels, hopefully you have funds for the signs and signposts. You can print the signs we've posted on our website; they've been pretty thoroughly vetted for accuracy in 2013 but be aware that our knowledge of the past keeps changing as we make more discoveries and develop better technologies.

Buy or have some nice person/company donate 50 legal size 3 mil laminating pouches. We found a [source](#) on the Internet for about \$20. Try to borrow the use of someone's thermal laminator. (The 3M Scotch model TL-901 sells for about \$35.) Print and laminate the signs. They might be a bit too flexible in a strong breeze. Consider some stiff backing

If you can pin all 41 signs to trees, you are finished preparing the signs, otherwise you will need to purchase ten feet of one-inch PVC pipe for each tree-less sign. You may need more since your path may require several signs telling walkers which turns to take along the route. Also, we mounted a cardboard dinosaur on a PVC signpost. For each signpost you will also need to purchase a [5-way connector](#).

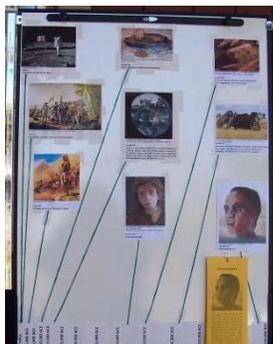
Borrow a chop saw. Curiously, although I had not even heard of such a device, several people in our office offered to loan theirs. Cut each ten-foot section of PVC pipe into one five-foot piece and four 15-inch pieces. The pieces will be slightly shorter than stated above since each cut will remove 4mm or more – not a problem.

We pre-drilled two holes in the five-foot pieces at 32cm centers using a 1/8-inch drill bit and attached the signs with 1/2-inch #10 sheet metal screws. We designed the signs such that you can put a screw just below the first line – the line with the date – and a second screw 32cm below in the footnote area. This served us well but there's gotta be a better way. Send us your solution.



Oh, and after attaching all of the signs to the sign posts, we did not have enough space to store the posts that way – so we unattached them until it was time for the Billion-Year Walk. With all that screwing around, be sure to use electric screwdrivers!

We determined where to place the signs by printing out Google maps, rolling a little rubber wheel on the map, and using a calculator – time-consuming but not so very difficult. You can then go back online and determine the GPS coordinates (we used to call them latitude and longitude) for each sign location; that will be very helpful to the crews who are placing the signs on the morning of the Walk.



The final sign at the end is a sign board. We taped the pictures to an easel and used yarn to locate each on a timeline. (Tidbit: for a 5-kilometer walk, the distance from "Columbus sets foot on North America" to "Neil Armstrong sets foot on the Moon" is 2.6mm.) We taped a bent-up paper clip to the easel to hold the "Mitochondrial Eve" handouts.

Signs #37 – 41 assume that the participants are OK with human evolution. If you wish, there are alternative signs. The goal is to render Deep Time a bit more accessible, not to fuel conflict.

Docent Uniforms

You want walkers to be able to recognize docents at a distance. This can be as simple as a length of colorful cloth tied around the upper arm or as pricey as colorful t-shirts with the Billion-Year Walk logo. Because we had to plan for the possibility of rain, we opted for safety vests with the Billion-Year logo since docents could wear them over a raincoat. They cost about \$7 each for two dozen. We collected them at the end of the day and stored them for next year. We also gave each docent a nametag to stick on the vest.



Pencils & Clicker Counters

If you plan to give each group of walkers a Billion-Year Trivia quiz, you need to have sharpened pencils for them to take. Hand tally counters are cheap and a good way to document the number of walkers.

Almost But Not Quite Not Unnecessary

Dinosaurs

What's a trip to the past without dinosaurs? We bought a cardboard cut-out dinosaur and everybody agreed we should get more. Available: [T-Rex](#), [Giganotosaurus](#), [Diplodocus](#), [Stegosaurus](#), [Raptor](#), and [Triceratops](#). They are 1.2 to 1.8 meters tall and some are two-meters wide. We mounted our giganotosaur on a PVC signpost but with 18-inch base pieces for extra stability. If you anticipate a strong breeze, plan to put weights on the base pieces or stake them to the ground. Further, we cut out the white spaces between legs and such and painted the exposed portion of the signpost flat black so that it barely shows in photographs. We also bought a \$12 package of 96 little dinosaurs to give to the over-three kids. The fact we had 15 left over told us there were 81 such kids who started the walk.

Compasses

When you can buy [compass rings](#) for 50¢ that really work, you will be making kids happy. Besides, they can navigate for their families.

Coffee, Hot Chocolate, Tea, Cookies

Borrow or buy a 30 or 42-cup coffee urn and use it as a hot water dispenser. You will need to top it off frequently so that no one need wait for water to re-heat. Don't forget paper hot cups, sugar packets, Mini-Moos, stirrers, and napkins. Get in touch with [Clif™ Bar](#) folk more than three months before your event; they might donate some. Also solicit donations of coffee, tea, etc.

Nature List

Consider offering walkers a picture list of birds, animals, and plants they might encounter on the Walk. This *is* a science walk.

Enticing and Enlisting Docents

Besides wonderful volunteers, it would be awesome to have docents – people who can actually answer questions that walkers might have about the geology, biology, and climatology of the last billion years. Check with high schools and colleges in your area. Teachers and professors are perfect. Check with any organization that might have an email list thick with geeks. Remember, the best docents are comfortable answering, “Hmmm. I don’t know. You should try Googling that.”

We insisted that volunteers/docents meet the day before the Walk. This is an opportunity to coach them in procedures, warn them not to debate YECs (Young-Earth Creationists), and to select (vie for) the time slots and responsibilities they most want. (see the Staffing Spreadsheet) Each assignment box had a little piece of paper with the same info stuck there with rubber cement. The volunteers removed the slip and wrote their names in the box. Don’t forget to ply them with cookies.

More Fanciful Possibilities

We received a goodly number of suggestions from walkers and docents. Here are some:

Passports

This was suggested as a way to keep the younger set ‘on task.’ Make up a little Billion-Year Passport booklet with places for various visa stamps. Attach stampers to some of the signposts by string. Kids who get all of the stamps in their passports get ... well, something.

Kid Signs

Signs with much easier vocabulary and concepts can be attached on the signposts below the regular adult signs .

Little-Kid’s Walk Through Time

Create a second walk that is 100 to 300 meters in length for kids up to age six. It does not need to span a billion years. Include toys and chaperoned activities.

Time Portal

Since walkers need to be transported back a billion years at the beginning of the walk, create a time portal for them to walk through that sends them back in time. It could be as simple as a decorated door or curtain. It could be a room with flashing lights and ethereal sounds. It cannot be too scary since parents will bring through young kids and baby strollers. (If you decide people should walk from the present into the past, the time portal will be necessary to return them to the present.)

It all fits!

