

## Field Trips in Brookline/Newton Area

There are many good field trips in most areas where you can show great real life examples of the geology ideas the students have been studying. Below is a short list of places in the Boston area where you might want to take your students. There are, of course, many other trips you might want to research. Among those are: The Blue Hills, Nahant, Middlesex Fells, Worlds' End in Nantasket, Boston Harbor Islands.

1. Around your school! Consider terrain, landforms, choice of building materials, weathering, erosion and deposition. The nice thing about observing geology at the school is kids can see how immediately accessible these ideas are.
2. Intersection of Beacon St. and Bishopsgate Road in Newton (just past Hammond Pond Parkway, going outbound). A beautiful outcrop of Cambridge mudstone showing layering and some deformation, capped with Roxbury Conglomerate.
3. Hammond Reservation/ Webster Conservation Area Ledges— about 200 yards south of Beacon Street on the right. (Park on the shoulder - being careful of poison ivy!) Enter at trail marked with a white sign; follow trail around the back of the ledges. When trail forks, go right. You'll see the exposed outcrop about 30 yards in front of you. In the summer the area can be very overgrown, so continue to watch for poison ivy! (Bring bugspray, too!)

At this site you'll see loads of Roxbury conglomerate interlayered with sandstone; the sandstone is full of feldspar and quartz. You can see cross bedding and rippling from ancient river flow.

4. Bloomingdale's parking lot in Chestnut Hill Mall
  - a. Upper parking lot, opposite the Crate and Barrel entrance. A nice outcrop showing layered argillite (a slightly metamorphosed mudstone). In the area you can see contact between the argillite and the Roxbury Conglomerate.
  - b. Glacial scarring on smoothed conglomerate criss-crossed with construction scoring (Although it may be hard to tell without close inspection that this is actually conglomerate as it's been smoothed). The rock can be found just over the guardrail, just around the corner behind the bus stop next to Bloomingdale's. It's fun to try to figure out which scars came from the glaciers and which came from the construction equipment.
  - c. Huge outcrop of Roxbury Conglomerate (Chestnut Hill Mall lower parking lot; just east of the pond). This outcrop was clearly blasted away, and shows about 50' of exposed rock. Lots of nice fracturing and different pebble size to observe.
5. Dane Park in south Brookline (Hammond Street, opposite Beaver Country Day School). This is a nice spot to see volcanic tuff and altered basalt (part of the "Brighton Volcanics"). There are volcanic "bombs" embedded in some of the deposits. There is a nice little geology trail you can follow.
6. Arnold Arboretum (Bussey Street, about 100 yards south of Walter Street, on the right heading south. Walk along the upper edge of an old quarry – now used to store piles of wood chips – and you can follow a dirt road into the quarry itself). You'll see Squantum "Tillite" – consolidated glacial till. Further back in the quarry you'll see foliation from metamorphism.