

Glacial Cobbles from Long Island's North Shore as Lithic Material: Exotic Points? Bartered Lithics? Or was Quartz the Favored Choice for Stone Points?

Barry Keegan, experimental flintknapper

Winter hikes on the north shore have been a favorite pastime of mine for many years. Flintknapping is another, even more so. One particular day I'd picked up a large piece of bright orange stone which I'd thought to be the common hematite or paint-stone. I grabbed a round stone that felt good to knock a flake off of the palm sized stone with and struck it. To my amazement, instead of crumbling like soft sandstone, it broke with fine conchoidal fracture. It turns out that I was working a piece of chert that had been through a process of glacial transport, possible bleaching and iron staining, during the abrasive rounding of beach pebbles-process, or after, when it had become embedded and cemented within local conglomerate, then broken back out of the conglomerate by wave action. This particular stone was orange throughout with two layers of golden yellow within its center. Other similar finds were partially stained, some all of the way around, others from one side, the exposed side of what was embedded within conglomerate. The iron stained parts often are glossy or at least flake like good quality chert, though the unstained-typically gray-interior is impossible to flake and has a very grainy texture to the reddish outer layer. This is perplexing to me and kept me searching for more samples as well as answers, leading me to right here today. The sample-search has lead me to finding some rather exotic lithic material such as fortification agate, layered chalcedony and carnelian, rose and purple quartz, many chert types, and quite a variety of jasper types, colors and qualities. In my hopes of locating answers I sought out sources of these stones in western New England from as far away as Vermont's southern border, south through the Massachusetts' Berkshires, farther south in the western hills of Connecticut, and along much of the southern coast of New England from New York City, east to Cape Cod. Many of my north shore finds were well represented by more finds of similar stones in New England, as I'd expect, though some are still elusive. The most elusive being the light colored chert that took on the bright orange iron staining. I made many attempts at flaking replica points from all of these materials to see how simple or difficult it was to use, compared to the common quartz cobbles found all over Long Island. This is what I found.

I found light colored chert on the north shore, very near the iron stained orange colored chert cobble in question. I found chert due north of long Island, on Connecticut's south shore, though none of the whitish color I'd hoped. Chert became more difficult to find the farther east I searched in CT, as to be expected, as chert is rare in that state, making the cobbles I'd found all glacially transported into CT from the western edge of the state, mostly cherts common to the

Hudson River Valley in New York. I found blue, black and red normanskill chert, gray Onondaga chert, and a few other odd cobbles that I see in the area of orange County NY. The cherts in CT were not stained or bleached. I did find a gray to whitish jasper of mostly very rough texture near central south CT, and of a very different look than the white cherts of Long Island's north shore so I did not photograph it. The south shore of Staten Island has much soft jasper and iron stained chert, nearly identical to the jasper and chert pebbles found down most of the New Jersey coast and into Delaware. The salt water of the ocean and conditions on the ocean floor may have contributed to somehow bleaching the chert pebbles before they took on the conglomeration and iron staining that created my orange chert pebbles from the north shore.