# NEWPORT STREAM RESTORATION
# ARCHAEOLOGICAL SURVEY
# AND SITE 71.30

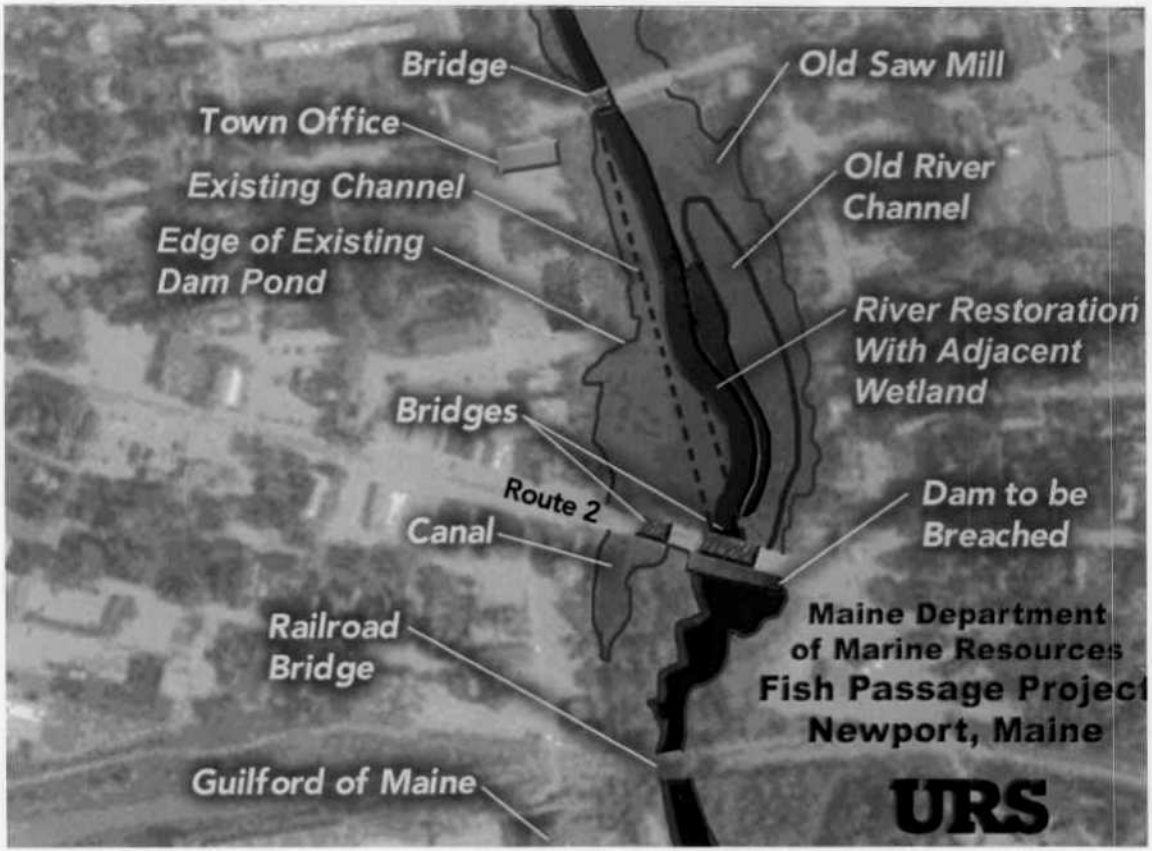


**Figure 1.** Aerial photograph of project area with Route 2 Bridge, Guilford Dam, existing river channel and proposed restored river channel. Note location of Newport Town Office.

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February, 2003
Maine Historic Preservation Commission

## PROJECT BACKGROUND

In August of 2001, the Maine Historic Preservation Commission was contact by URS Corporation (Hallowell) concerning the removal of the Guilford dam in Newport (URS 2001). The Guildford Dam was built about 1910 of poured concrete to provide power to a mill complex located near the Route 2 Bridge in Guilford. Since 1975, the gates of the Guilford dam and the North Street Dam upstream, have been opened for a period of four to eight weeks in the fall to draw down the water level in Sebasticook Lake as part of MDEP-approved water quality improvement. The dam has not generated power for several decades.

As part of fish passage restoration on the Sebasticook River, Maine Department of Marine Resources assessed the Guilford Dam, and determined that its concrete had deteriorated, and that dam removal would be preferable to construction of a fish passage facility. Dam removal was to be accomplished with minimal federal financial aid, in a project managed by the Town of Newport.

Once the Guilford Dam had been removed, water flow rates for most of the year in the portion of the Sebasticook River from the North Street Dam (which controls the outlet of Sebasticook Lake) downstream to the former Guildford Dam location would be low enough for the water to be confined to the Sebasticook River channel, rather than flowing across the formerly flowed impoundment behind Guilford Dam.

At some time in the early 20th century, a straight, artificial channel for the river had been cut between the Guilford Dam and Center Street Bridge, a distance of about 1000 feet. This channel had straightened an old river meander that flowed over toward the east side of the river floodplain before the construction of the Guilford Dam. The town and DMR proposed "Sebasticook River Channel Restoration" to replace the straight, artificial channel with a sinuous channel more near the original stream channel character before dam construction at the Route 2 location (see Figure 1, Cover, graphic supplied by URS Corporation).

Additional aspects of the project are construction of a "pool and chute" fishway at the North Street Dam, and removal of an older timber crib and rock dam that had been located just upstream from the Route 2 bridge (and thus upstream from and flooded by the Guilford Dam). Because of negligible Federal financial involvement in the project, the Maine Historic Preservation Commission agreed to aid the Town of Newport by doing cultural resource management assessment for these proposed aspects of the project.

### Project Location

The project is located within the "downtown" section of the Town of Newport on the Newport 7.5' USGS topographic quadrangle (Figure 2). The "site" marked on the Figure 2 map is the location of the Guilford Dam removal. Note that the USGS topographic map shows the flowed impoundment between the Guilford Dam, and the North Street Dam at the outlet of Sebasticook Lake (near the "boat ramp" on the map). Center Street Bridge crosses at a narrowing of the Guilford Dam impoundment.

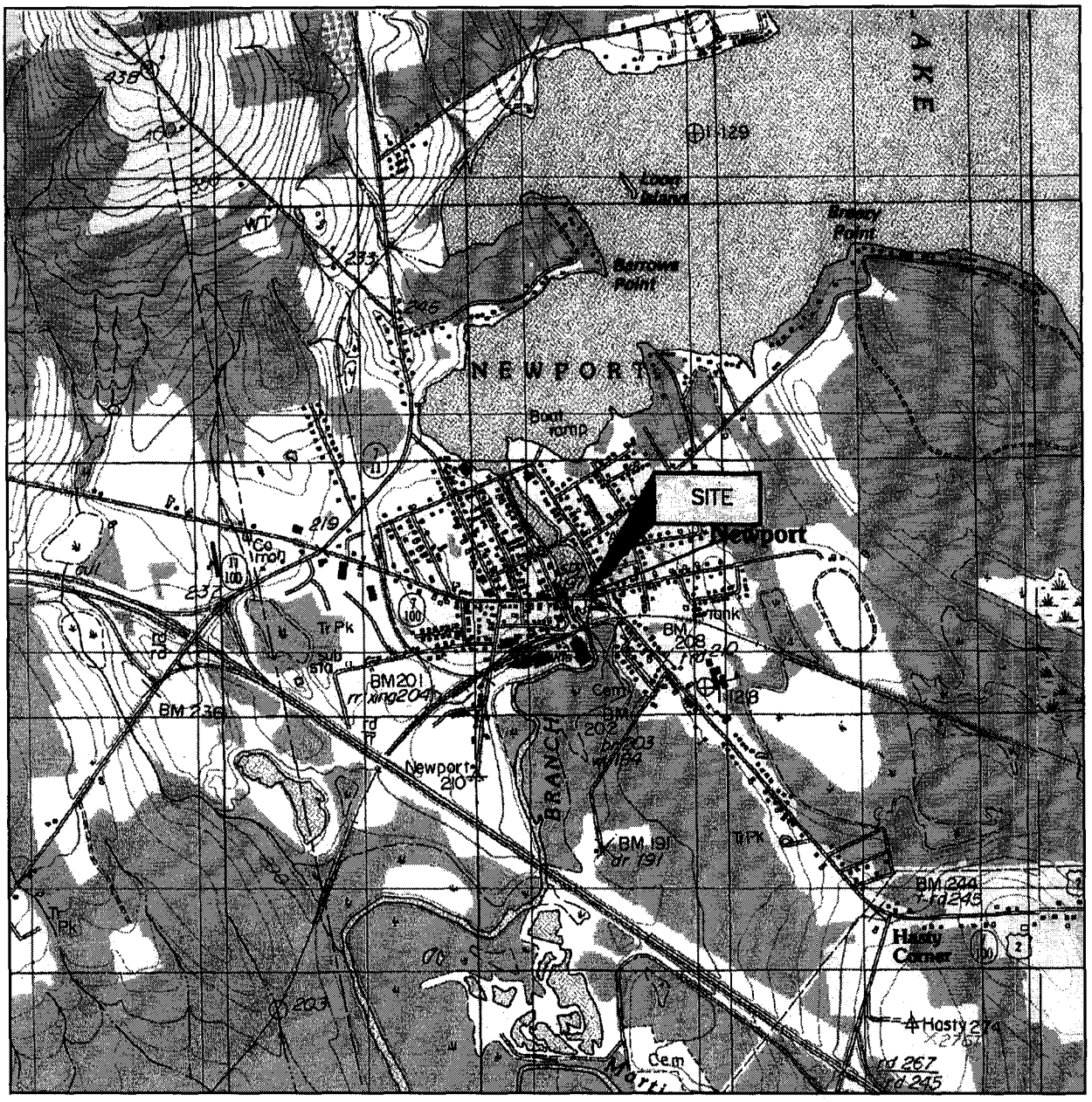


**Figure 2.** Section of USGS Newport topographic map showing the location of the Guilford Dam to be removed ("site"). Archaeological site 71.30 is located under the former impoundment, halfway between the dam ("site") and the next bridge north (Center Street Bridge).

## Cultural Resources Management Concerns

The Sebasticook Lake shoreline is the location of numerous prehistoric archaeological sites, heavily eroded, showing up as scatters of stone tools and/or flakes at low water (see Cultural Background section below). Located in an inlet stream mouth that is exposed during fall low water is the Sebasticook fish Weir site (71.19, listed on the National Register of Historic Places). We

determined that the removal of Guilford Dam and the installation of the fish passage facility at the North Street Dam would have no effect on sites around the shoreline of Sebasticook Lake, because no changes in water level management are proposed for the lake. The North Street Dam controls the water level in the lake. Therefore, all effects from the removal of Guilford Dam would occur under the former Guilford Dam pool.

A walkover survey of the impoundment bottom after it had been drained located one prehistoric site (given Maine Archaeological Survey number 71.30), a timber crib and rubble fill building platform near the east end of the North Street Bridge abutment, and the heavily damaged remains of the wooden mill dam just upstream (north) from the Route 2 Bridge. The wooden mill dam remnants were to be removed, if possible. None of the mill structures adjacent to the mill dam, as shown on the 1875 map of Newport, survive.

Photographic recording and examination of the wooden mill dam allowed a determination that it was not eligible for listing in the National Register of Historic Places. Neither is the timber crib and rubble fill building platform near the North Street Bridge eligible, because it had been inundated by the Guilford Dam impoundment, and all remains of the building(s) that had been located on the platform have disappeared.

That process left the existence of prehistoric site 71.30, and the river restoration project, for consideration. One day of archaeological testing in May, 2002, provided enough information to map the limits of site 71.30 and determine that it was eligible for listing in the National Register of Historic Places. This information was conveyed to the engineers designing the river restoration project, and the site location was avoided.

Spiess walked the entire impoundment river shoreline on August 30, 2001. The area between Center Street Bridge and North Street Dam was sterile, except for late 19th and 20th century trash. The area between Center Street Bridge and the Route 2 Bridge was much more interesting. The old river channel, visible as a marshy area on aerial photographs (Figure 1), clearly included a meander toward the east side of the floodplain. The artificial, straight channel was also clear. Spoil from excavating the channel (gravel, cobbles and broken slate bedrock clasts) covered the west shore of the artificial channel and a strip about 3 meters wide on the east side of the artificial channel. A low rise (less then 1 meter elevation) between the artificial channel and the old river meander marked an old levee or riverbank landform, now deflated and covered with cobble lag, intermittent grass and other weedy vegetation cover. We discovered several large Kineo felsite core fragments and quartz flaking debris on the surface, among the cobble and gravel lag deposits. Thus, site 71.30 was newly identified on August 30.

After discussions with the engineers planning the dam removal, Maine Department of Marine Resources, and the Town of Newport over the fall and winter of 2001/2002, MHPC made plans to return to test the site in the spring of 2002.

**Figure 4.** Looking south across site 71.30 toward the Route 2 bridge. Artificial river channel to the right. Stone cairn (see map, Figure 5) along river bank in right center of photograph.

## FIELDWORK NARRATIVE

As mentioned above, Spiess walked the dry bed of the Guilford Dam impoundment on August 30, 2001, and discovered site 71.30, a scatter of Kineo felsite cores and quartz flaking debris on the cobble lag surface. It seemed that there were soft sediments below the cobble lag, and they needed test excavation to determine the presence or absence of remnant soils and possible Native American camp firehearth and pit features.

We returned to the location on May 29, 2002, with an electronic transit, hand tools, and 1/4" mesh hardware shaker screens. We relocated the site based on the surface scatter of flakes and noticed that a rock cairn had been built about 1.5 m high near one end of the site (Figure 4). This cairn may have been a marker for the local collector. We searched the surface carefully on the east side of the artificial channel, marking artifacts with red pin flags on wire stakes. We then set up the electronic transit, took distance and bearing readings on two fixed points that were visible on air photos in our possession (Center Street bridge abutment, corner of the town garage), and proceeded to map the extent of site 71.30 based on the surface scatter of material. We located three prospective

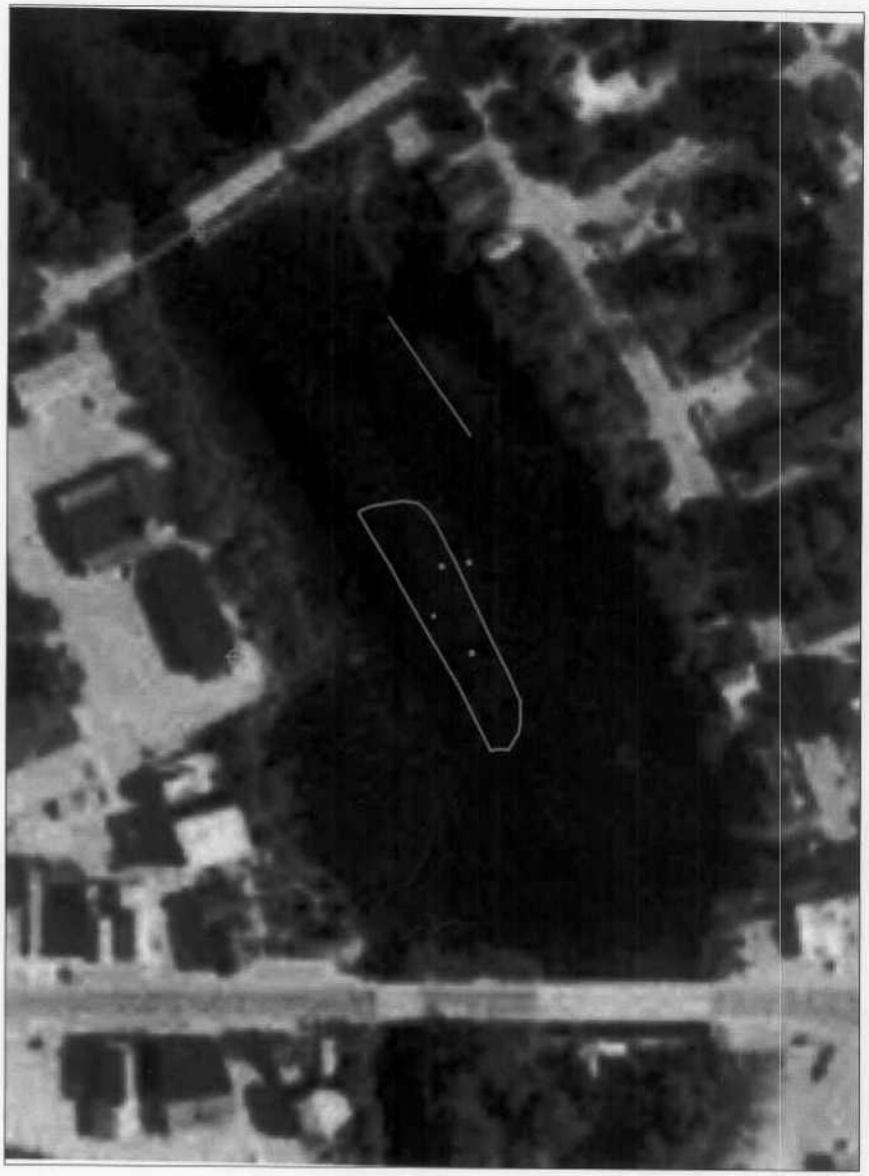

**Figure 5.** Aerial photograph showing the limits of site 71.30 (oblong polygon). North at the top. Route 2 bridge toward the bottom and Center Street bridge toward the top. Crossed circle marks are the fixed points for transit work (bridge abutment and town garage). Note the Newport Town garage complex and town office just west of the site. The artificial, straight channel is visible as a straight-sided dark band abutting the site. Three squares associated with the site are testpits. Round dot within the site is the cairn. Straight line to the north of the site, toward the east bank, is the timber cribbing for a former building foundation. TP 1 is the northern testpit within the site limits. TP 3, just east of TP 1, is outside the site limits. TP 2 is located south of the cairn.

testpits (TP 1,2, and 3), and mapped them with the transit. Subsequent excavation confirmed the surface-based limits of the site. The site limits are mapped on Figure 5.

We did not collect the widespread scatter of material left on the surface. The vast majority of this material consisted of pieces that were large enough to resist water flow, such as fire-cracked rock, Kineo rhyolite cobble core fragments, and quartz flaking debris. The broken pieces of Kineo rhyolite cobbles presumably came from the glacial till local deposits (which would have been accessible on the river bank). As mentioned, we did not collect this surface material, except within the areas designated as testpits 1 and 2.

We located Testpits 1 and 2 to include surface scatters of artifacts, and thus to test and determine whether the surface scatter was coming from deposits immediately below, or whether the material

**Figure 6.** Starting excavation of Testpit 1, looking north. K. Mathiasson in straw hat. Volunteers Buzanoski and Mullis at left.

had been transported laterally on the site. A synopsis of each testpit soils and contents, derived from our fieldnotes, follows.

*TP* 1. Sandy surface, no vegetation, with a scatter of FCR and rhyolite on the surface. This testpit was located on the highest portion of the surface between the old river channel and new channel. Excavated by Kåre Mathiasson, it produced a great deal of debitage, a couple of points, a piece of ceramic (possibly CP3 age) and a feature remnant (compressed A and B soils) with charcoal and calcined bone. This is a 1 x 1 m square. Testpit 1 was excavated in 50 x 50 cm quadrangles (quarters) and 5 cm levels. The upper 5 cm (0-5 cm) level was redeposited medium-brown sandy material, containing artifacts. Alternatively, this material could have been deflated in situ, losing its silt and clay particle content, leaving the sandy material behind. At very close to 5 cm depth (± 0.5 cm) the soil changed to a more compacted silty sand that was dark brown to black in color. We identified this dark, compacted soil at 5 - 10 cm depth as a remnant or compacted A soil horizon. The 5 cm surface was troweled carefully, and a probable hearth (FCR, darker soil, calcined bone concentration), designated Feature 1, was identified in the southeast quadrant. At 10 cm depth,

Feature 1 was a dark red stain in the southeast quadrant, apparently oxidized subsoil. At 10 to 20 cm depth in the other quadrants, the soil was an olive brown silt. No artifacts were recovered from the 10 to 20 cm olive brown silt subsoil.

Thirty fist-sized fire-cracked rocks were removed from the square in the 0 to 10 cm depth levels. They were not lining a feature or otherwise making a pattern (other than a concentration), but must originally have been associated with the Feature 1 firehearth, perhaps as a near-surface hearth. Two gallon bags of feature fill were troweled together and saved, from the bone-rich 5 to 10 cm level in the southeast quadrant. Flotation processing of that feature fill in the laboratory yielded more than 150 calcined bone fragments weighing 15 grams, 36 flakes of various materials, and 12 pieces of quartz shatter.

**Figure 7.** Testpit 2 excavation underway, looking north. Note the cobble and gravel surface lag deposits, which include fire cracked rock.

*TP2.* Located among boulders about 10 m from waters edge. Intense FCR and coarse sand on the surface. 50 x 50 cm testpit. Among grass clumps. FCR and a few flakes in 0-15 cm sandy recent flood deposit, over a 2 cm thick (15-17 cm b s) discontinuous dark brown compressed former forest A horizon. Over tan to light brown silty clay C horizon that appears to be sterile. This stratigraphy is compress and/or deflated, as Kaare noted in testpit 1. Spiess excavated. (All soil screened through 1/4" mesh.) A sample of FCR saved. Excavation stopped at 25 cm.

*TP* 3. About 8 m east of TP 1, located on the down slope into the former river channel. Surface soils are damp, among grass clumps. 10m further east is standing water in the old river channel. This started as a 1 x 1 m square but after first 10 cm we switched to a 50 x 50 cm. Excavated by Spiess. Screened through 1/4 mesh, and hard screening because of grass roots and waterlogged soil. Sterile except glass and brick in the top 10 cm. 0-10 cm grey-brown sandy loam, recent flood deposit, over 20 cm thick (10-30 cm) dark brown, "greasy" silty clay (sterile), over 10+ cm thick (30-40 cm, limit of excavation at 40 cm) light gray-brown silty clay. Are all of these flood deposits behind the downstream dams in the old river channel.

## RESULTS - TESTPITS 2 AND 3

Thus, TP 3 confirmed that the former river levee surface dropped off sharply to the east, and the lack of surface material corresponded with a covering of silts probably deposited in the Guilford Dam impoundment (or a predecessor impoundment behind the wooden crib dam). Testpit 2 was sterile underneath a thin gravel lag. Artifacts were contained in the gravel lag, and therefore must have been redeposited. The artifacts recovered from this lag deposit comprised: four fire-cracked rock fragments (190 grams), 8 Kineo rhyolite flakes (14 grams), 2 pieces of shattered quartz (6 grams), and the base of a stemmed point.

The stemmed point (Figure 9 center, below) is made of Kineo rhyolite or a related rhyolite. (The rhyolite exhibits slight flow-banding, but we have seen similar patterns in rhyolites around Moosehead and Brassua Lakes, which is also the origin of Kineo rhyolite.) The point has been broken and the distal portion lost. The proximal portion of the point consists of a long (17 mm) stem with straight sides (13 mm wide), with a finished (retouched to an edge) base. This style of point dates to the early Ceramic period along the coast of Maine (perhaps 2800 to 2200 years ago).

## RESULTS - TESTPIT 1

The vast majority of the artifact material we recovered, and all of the calcined bone sample, comes from Testpit 1 (refer to the Artifact Catalogue in the Appendix for details). A summary is presented below in Tables 1 through 3.

**Table 1.** Testpit 1 artifacts and flakes by provenience (depth, Feature 1). Counts followed by weight in grams.

| | Tools | Kineo rhy. flakes | Chert flakes | Quartz flakes | Quartz shatter | Other |
|---|---|---|---|---|---|---|
| **0 - 5 cm** | 8 | 39; 48 gr | 1; 1 gr | 5; 5 gr | 32; 106 gr | 2; 2 gr* |
| **5 - 10 cm** | 5 | 18; 12 gr | 2; 1 gr | 17; 8 gr | 175; 790 gr | 7; 8 gr |
| **5 - 10 cm Fea 1** | 0 | 28; 1 gr | 1; 1 gr | 5; 3 gr | 12; 119 gr | 2; 0.5 gr |

* one purple flow-banded rhyolite flake, similar to material from Eagle Lake, Allagash River

**Table 2.** Tools from the 0 – 5 cm level in Testpit 1.
#17 retouched flake
#53 endscraper
#54 endscraper fragment
#61 endscraper
#63 retouched flake
#70 ceramic sherd
#71 quartz point

**Table 3.** Tools from the 5 – 10 cm level in Testpit 1.
#31 endscraper, Kineo rhyolite
#44 point tip
#49 Kineo rhyolite core reduction flake
#72 Kineo rhyolite biface knife
#73 endscraper fragment

**Figure 8.** Endscrapers, all from Testpit 1. Upper left #73, upper center #53, right #31, lower left #54, lower center #61. Nickel for scale.

*Debitage*

The vast majority of the debitage (flakes) from Testpit 1 are quartz shatter fragments, evidently from the reduction of quartz cobbles to obtain "good" white or crystalline quartz material. The quartz flakes that could be identified as such (striking platform) included both fine white quartz and crystal quartz, but the flakes were generally small. Kineo rhyolite (and Kineo-like rhyolite) is the second most common material. Most of these flakes are relatively small (reduction) flakes, with the exception of #49, a 55 gram core reduction fragment. Chert flakes are rare, and include some red chert that is probably Munsungun chert. The "other" category includes some unidentifiable volcanic rocks, including one that is a purple flow-banded rhyolite very similar to the material found on sites 153.19 and 153.20 near Eagle Lake in the Allagash.

*Endscrapers*

The most common stone tools are "thumbnail" endscrapers (Figure 8). Two, one of quartz and one of Kineo felsite, are large and complete, evidently hafted. Two are quite small and made by retouching small Kineo flakes. One quartz specimen (#73) is a broken working edge fragment from a near-crystalline quartz scraper. Dimensions are presented in Table 4 (top of next page). We note that the working edges on both quartz endscrapers are of acute angle, and neither of these specimens resembles the "high-backed" quartz endscraper characteristic of the Archaic. In fact, all these end scrapers fit within the range of specimens we have seen from Ceramic period sites.

**Table 4.** Endscraper dimensions and notes. Measurements in mm and grams.

| Cat # | Length | Width | Weight | Material | Notes, wear |
|---|---|---|---|---|---|
| 73 | broken | >17.3 | 0.6 | quartz | slight crushing, low angle edge |
| 54 | 37.5 | 20.1 | 7 | quartz | slight crushing, low angle edge |
| 31 | 35.5 | 23.1 | 8 | Kineo rhy | step flaking, 60-70° edge |
| 53 | 16.5 | 16.7 | 0.9 | Kineo rhy | few flakes, 60-70° edge |
| 61 | 13.4 | 13.9 | 0.9 | Kineo rhy | undercut step flaking, steep edge |

*Points (Bifaces)*

Three bifaces (points) were recovered from Testpit 1 (Figures 9 and 10, next page). #44 is a distal tip of a sharp point made on a fine grained volcanic or chert. The material includes silica-filled cracks and has a purple-tan color. At the break it is thin (5 mm) for its width (16.3 mm). Along with the fine, sharp edges we assume this indicates that the point is Ceramic period in age. (Archaic points tend to be thicker.) (Figure ) We can not identify the material, so can not comment on its provenance.

#71 is a contracting stemmed point, made of white quartz (Figure 10). Pieces of quartz such as this must have been the goal of all the quartz cobble breakage. The edges of this point are regularly flakes, and it is relatively thin (6.3 mm) for its width (18.0) at the shoulders. The stem retains a small (1 mm square) area of striking platform, but that small area is off center, and the rest of the stem has been partially trimmed bifacially. In outline this point could be a Late Archaic small-stemmed point or a poorly-made Ceramic period point. Small-stemmed points tend to have the base of the stem occupied by a larger striking platform remnant. (A similar issue of identification occurred on the Anne Hilton site, with similar points [ Will and Cole-Will 1989]. We lean toward a Ceramic period identification based on the relative thinness of the point (1:3 ratio).

#72 is a asymmetric leaf-shaped biface, bifacially flaked from a small flake of Kineo rhyolite. The tip is missing. This piece is thin for its width (4.5 mm/16.8 mm). The basal 13 mm have a slightly different treatment than the rest of the point: lightly ground on one side and a remnant flake striking platform forming the other side. Our impression is that this is a miniature version of a Ceramic period hafted biface knife (see Spiess and Hedden 1983:71). Again, the identification is not certain.

*Ceramic Fragment*

#70 is a relatively large ceramic pot sherd (Figure 11), measuring about 2.5 cm square, and 8.3 mm thick. The temper in the clay is crushed quartz (up to 1.5 mm) and sand particles. Neither the interior nor the exterior surface is decorated. Ceramics exhibiting these attributes could originate in Ceramic Periods 3, 4, or 5 (Petersen and Sanger 1991), roughly 1650 to 650 years ago (or 300 to 1300 A.D.) This piece may be from a lower portion of the vessel, and the vessel could have been decorated with dentate-stamp or cord-wrapped stick impressed decoration around the rim and upper body.

**Figure 9.** Three points from site 71.30. #72 at right. #44 point tip at left. Point #38 from Testpit 2, center.


**Figure 10.** White quartz point #71.

*Feature Fill Processing*

The calcined bone sample from Testpit 1 derives from the Feature 1 fill soil processed in the laboratory. We collected two one-gallon bags of feature fill soil (approximately 1.5 gallons volume). This soil was processed by water flotation in the laboratory, and all heavy fragments were caught on 1 mm window screen mesh. Usually there is some "light" charcoal that floats and is also caught on window screen mesh, but in this case all the feature fill contents were "heavy."

After flotation had washed away all soil particles < 1 mm in size and the heavy fraction had been dried, we had a small plastic baggie filled with small gravel and other material, including calcined bone, charcoal, micro-flakes of chipped stone,

**Figure 11.** Ceramic fragment (#70) from Testpit 1.

charcoal, micro-flakes of chipped stone, and very small crumbs of Native American ceramics. This material was processed by screening on 1/4" and 1/8" mesh. The larger fraction, and half of the material between 1/8" (3.2 mm) and 1 mm in size was hand sorted into component parts (Table 5). Thus, a total count of the contents of the feature fill can be obtained by adding the 223 bones in the larger fraction row to twice the amount of material in the lower row. Approximately 3500 bones, totaling 28 grams or so, were contained in this feature.

**Table 5.** Material recovered from flotation of approximately 1.5 gallons of Feature 1 fill. Counts, with weight in grams.

| Mesh size | **Bone, calcined** | **Charcoal** | **Ceramic sherds** | **Micro-flakes** | **Remainder (small gravel)** |
|---|---|---|---|---|---|
| 1/4" & 1/8" mesh | 223; 13.3 gr | | | | |
| 1 mm mesh (½ of volume) | 1630; 7.5 gr (all fish) | 0.2 grams, not counted | 10; 0.1 gr | 60; 0.5 gr | 65 grams sorted |
| Unsorted material retained on 1 mm mesh: 72 grams, mostly gravel, but including bone, ceramic, microflakes. | | | | | |

*Calcined Bone*

Fifteen other bone fragments, weighing about 2.9 grams, were recovered from 1/4" mesh screening of the 5 - 10 cm soil level in Testpit 1 while we were in the field (catalogue # 34 and 62). This material is in addition to the bone from the Feature 1 fill. Lot #34 contains a beaver ilium (pelvis) fragment and a beaver ulna shaft fragment. The rest of the bone in these two samples is unidentifiable medium or large mammal bone, in small fragments. The entire sample of 15 bones could, in fact, be composed of beaver bone.

**Figure 12.** A sample of fish vertebrae from the Feature 1 fill sample. Mostly alewife.

The calcined bone sample from Feature 1 fill is presented in detail below in Table 6. It contains five identified species: beaver, eel, alewife, striped bass, and sucker. In addition, there is one large mammal long bone fragment, identified by the thickness of its cortex, that must have come from a bear or deer-sized animal. Fish bone is much more common than mammal bone (by count), but measured by weight the fish and

mammal bone is approximately equal. (This phenomenon occurs because the fish bone is so small.) However, the equal weight of bone approximately reflects the weight of protein contributed to the diet: equal amounts of beaver and small fish.

With the exception of the one large mammal longbone fragment, all identified mammal bone from the feature is beaver. All the epiphyses (long bone ends) of the beaver sample are fused, showing that the beaver bone is all from adult animals. Since there are no duplications of bone elements within the beaver bone samples combined from the Feature 1 fill and the 1/4" mesh screened soil from around Feature 1, it is possible that the entire beaver bone sample comes from one adult animal. Several of the bone are beaver skull fragments, including the alveolar margin of incisor and post-incisor teeth. And many of the other bones are limb elements. It is possible that most or all of the skeletal remains of one beaver were discarded into the fire. Beaver is, by the way, the most common species found in calcined bone samples of Ceramic period age in interior Maine.

The fish bone was identified by comparison with specimens in the Historic Preservation Commission lab (MHPC collection, or John Mosher collection). One vertebra matched a white sucker. Five bones matched striped bass (two dorsal spine bases, a vomer [skull bone], two vertebra fragments), and clearly were differentiable from white perch (a related fish). The dorsal spine bases are approximately 2/3 the linear width of the comparative specimen at MHPC, which weighted 1.73 kg in the flesh. We estimate that the striped bass represented by these bones weighted approximately 0.8 kg. A total of 194 other fish vertebrae were identified in the Feature 1 sample, and 20 of these are alewife. The alewife vertebrae are 3.5 mm in diameter, matching modern alewife runs in Maine in body size. The other 174 are eel. Eel vertebrae are 1.8 mm in diameter. Much of the small, unidentifiable fish bone, too, appears to be eel-sized fish fragments.

**Table 6.** Calcined bone from Feature 1. Counts followed by weight.

| | |
|---|---|
| mammal unidentified | 145; 4.9 gr |
| mammal-medium sized | 9; 2.1 gr |
| mammal-large, longbone | 1; 0.4 |
| beaver | 21; 5.4 gr |
| phalanges, metacarpal | (10, 1.5 gr) |
| skull fragments | (7; 3.1 gr) |
| rib fragment | (1; 0.1) |
| ulna shaft fragment | (1; 0.1) |
| femur prox. fragment | (1; 0.4 gr) |
| left scaphoid (foot) | (1; 0.2 gr) |
| striped bass, dorsal spines | (2; 0.1) |
| Striped bass, vomer (skull) | 1; 0.1 |
| Striped bass, vertebra frg. | 2; 0.5 |
| Sucker, vertebra frag | 1; 0.1 |
| Alewife, vertebrae | 22; 0.2 gr |
| eel vertebrae | 174; 0.5 gr |
| small fish, unidentified | 1470; 7.0 grams |

## DISCUSSION

Our testing at site 71.30 found evidence of Ceramic period occupation, although we can not rule out occupation of the site during other time periods in the absence of a surface collection of diagnostic artifacts. Feature fill from a Ceramic period fire hearth, including many small crumbs of ceramics and microflakes, survived just under the gravel/cobble lag surface, after having been deflated by a century or more of intermittent inundation behind Guilford dam and its predecessors.

The Ceramic period occupants of the site made stone tools primarily of local quartz and Kineo rhyolite, obtained from cobbles deposited locally in glacial drift. Some other stones from further away (chert, striped rhyolite) were used by these folk, who must have moved seasonally at least within the Kennebec River drainage basin.

We excavated a total of 1.25 square meters within the defined borders of site 71.30, and encountered one firehearth feature in one quadrant (0.25 square meters). Although the sample size is small, it seems likely that other prehistoric features survive under the gravel and cobble lag on the site. Site 71.30 meets National Register eligibility criteria for the Ceramic period.

The calcined bone sample from Feature 1 and surrounding areas provides an increase in our knowledge of use of the Newport area by Ceramic period people. We have, heretofore, only known that they operated a fish weir at the inlet of Sebasticook River on the other side of the lake. Here, just below the lake outlet, we have evidence of hunting or trapping beaver, and harvesting four fish species that move within the watershed on a seasonal basis. Eel and alewife were expected confirmation of the species that might also have been taken at the fish weir. Sucker are present in the drainage, and move locally. They are most accessible in shallow water in schools in the spring.

The identification of striped bass is a surprise. The individual(s) recovered was small. Small (juvenile) striped bass move upstream in the Kennebec and Androscoggin drainage until stopped by an impassible falls during the late spring and summer. Sturgeon, a species that is not capable of passing moderate falls, is found in a circa 3000 year old occupation at the mouth of the Sebasticook River, so the falls at Augusta were not a barrier to any species that used the lower Kennebec. It is a surprise to find that the species was capable of passing the falls at Fort Halifax, Winslow, and other falls on the Sebasticook River. In summary, testing at site 71.30 demonstrated just how much information might be obtained from small sites that are seemingly not well preserved.

## ACKNOWLEDGMENTS

Kåre Mathiasson joined Spiess in the fieldwork on site 71.30 in May 2002. Two Nokomis Regional High School Juniors who were interested in possible science careers, Mr. David Buzanoski and Mr. Jody Mullis, joined us during the morning and ably assisted with transit work and screening. Both young men were cheerful and hard workers, and enabled us to complete work in one long day that would otherwise have taken two days. We thank them for their help. We thank Mr. Jim Ricker, Newport Town Manager, for arranging the opportunity for Mr. Buzanoski and Mr. Mullis. We thank Jim Ricker, Fred Hickey, and Jack Wilson for their long term interest in preserving the Sebasticook Fishweir archaeological site, and in help with this project.

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