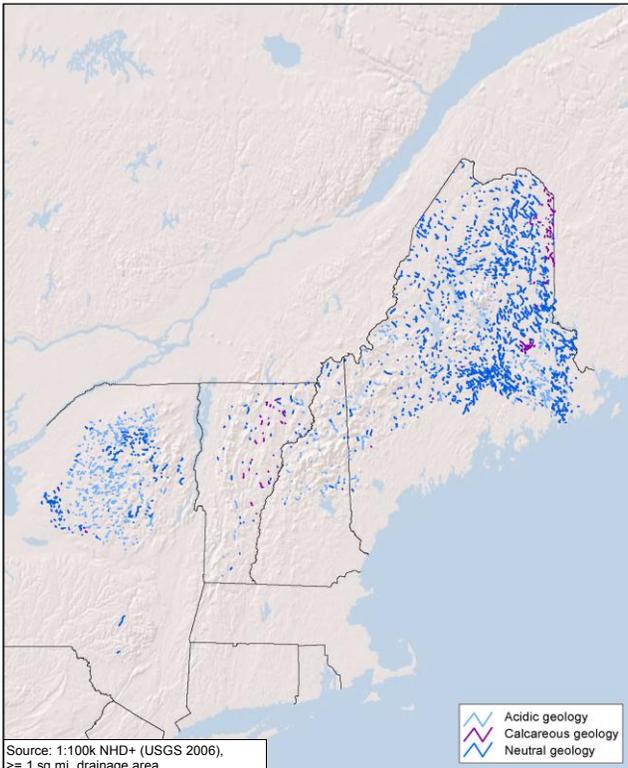


Macrogroup: Headwaters and Creeks

This map is based on a model and has had little field-checking. Contact your State Natural Heritage Ecologist or State Fish Game Agency for more information about this habitat.



Source: 1:100k NHD+ (USGS 2006), >= 1 sq.mi. drainage area



Smith Pond Brook, © Josh Royte

Description:

Cold, slow-moving, headwaters and creeks of flat, marshy settings. These small streams of northern regions or high elevations occur on flats or very gentle slopes in watersheds less than 39 sq.mi in size. The cold slow-moving waters may have high turbidity and be somewhat poorly oxygenated, although some examples may have significant groundwater inflow that maintains the cold temperature. Instream habitats are dominated by glide-pool and ripple-dune systems with runs interspersed by pool and a few short or no distinct riffles. Bed materials are predominantly sands, silt, and only isolated amounts of gravel. These low-gradient streams may have high sinuosity but are usually only slightly entrenched with adjacent floodplain and riparian wetland ecosystems. Permanent cold water temperatures in these streams means coldwater fish species, such as brook trout, likely represent over half of the fish community. Additional variation in the stream biological community is associated with acidic, calcareous, and neutral geologic settings where the pH of the water will limit the distribution of certain macroinvertebrates, plants, and other aquatic biota. The habitat can be further subdivided into 1) headwaters that drain watersheds less than 4 sq.mi, and have an average bankfull width of 16 feet or 2) Creeks that include larger streams with watersheds up to 39 sq.mi. and have an average bankfull width of 32 feet.

Similar Habitat Types:

Headwaters and creeks also occur at lower elevations and on higher slopes, but these tend to have coarser substrates and faster water. Cold low gradient streams typically flow into low gradient cold and cool rivers.

Places to Visit this Habitat:

Kunjamuk River headwaters, Siamese Ponds | NY Mad River headwaters, East Branch Fish Creek Conservation Area | NY Willoughby River headwaters, Willoughby River Streambank | VT Stratton Brook, Bigelow Preserve | ME Swift Cambridge River headwaters, Umbagog National Wildlife Refuge | ME

State Distribution: ME, NH, NY, VT

Total Habitat (mi): 4,114

% Conserved: 29.0 Unit = Acres of 100m Riparian Buffer

State	State Habitat %	Miles of Habitat	Acres GAP 1 - 2	Acres GAP 3	Total Acres Unsecured
ME	72	2971	75	365	1837
NY	21	882	270	161	233
VT	4	147	6	11	93
NH	3	114	11	11	64

Associated Fish:

Most Abundant: brook trout, eastern blacknose dace, white sucker, fallfish, burbot, creek chub, longnose dace, american brook lamprey.
Less Abundant: common shiner, slimy sculpin, threespine stickleback, smallmouth bass, longnose sucker, chain pickerel, tessellated darter, atlantic salmon, northern redbelly dace, spottail shiner, yellow perch.

Species of Concern (G1 - G4):

Fishes: none
Crayfish, Mussels, and Snails: brook floater
 See Appendix 2 for scientific names

Crosswalk to State Names:

Vermont: Blacknose dace-Creek chub, Tessellated darter-Fallfish.
New Hampshire: Lower gradient cold-water streams; Very large, shallow, low gradient cold-water rivers (wadable).
New York: Marsh headwater stream.



Slimy Sculpin, © J. Abatemarco, NJDEP

