Bureau of Fisheries Technical Brief #tbm1926

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Mud Ponds General Biological Survey (#519033 & 519034)

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Upper (UH-P-290; 8.9 acres) and Lower (UH-P-289; 7.9 acres) Mud Pond are adjacent waterbodies located in the Siamese Ponds Wilderness Area, Johnsburg, New York. The ponds are hydrologically connected via a small stream that is intermittently dammed by beavers. The ponds can be reached via an informal 3.3-mile angler path that originates from State Route 8. The path is moderate to difficult, including a ford of the East Branch Sacandaga River and multiple stream crossings of Shanty Brook.

The Siamese Ponds Wilderness Unit Management Plan, finalized in 2005, states that these ponds will be managed as Adirondack Brook Trout ponds to preserve and protect their native fishes in the presence of native-but-widely-introduced species. Historic fish survey data from 1960 indicated the presence of brook trout and creek chub in both waters. Based on the high gradient of the outlet stream, it is believed that a barrier to fish passage, which would preclude non-native fish from entering the ponds via the stream, may be present. Lower Mud Pond is the deeper of the two waterbodies and provides more suitable habitat for brook trout. The pond is stocked annually with 600 Temiscamie X Domestic hybrid strain fall fingerling brook trout. The upper pond has not been stocked with fish since 1990 when it was last stocked with fall fingerling brook trout.

One Swedish-experimental gillnet (Six - 25’ panels w/ variable mesh), one single panel minnow gillnet (30’x 5’, 0.75” mesh), and a minnow trap (0.25” mesh) were set for approximately 24 hours in each of the ponds starting around 1:00pm on June 12th, 2019. Brook trout catch rates were surprisingly low, only three trout were captured from both ponds. Creek chubs and golden shiner were also captured in both waters (Tables 1 & 2).

Water chemistry profiles indicated that both ponds have sufficient habitat to support trout. The water temperature in the upper pond was 69 degrees F at the surface; however, temperatures rapidly declined to levels more suitable for brook trout as depth increased. 5.0 mg/L or greater of dissolved oxygen was found from the surface to a depth of nineteen feet. The lower pond exhibited similar water chemistry as the upper pond; surface temperatures were close to 69 degrees F but dropped rapidly as depth increased. The lower pond had suitable dissolved oxygen concentrations from the surface down to 25 feet. Both ponds had pH values greater than 6.0 throughout the water column.

The results of this survey are puzzling and inconclusive. Lower Mud Pond is stocked annually with 600 fall fingerling brook trout, equating to nearly 76 fish stocked per acre. One would expect to capture more trout in a gill-netting effort on a water such as this. Both ponds appear to have water chemistry that is suitable for brook trout survival and growth. This sampling event is the first that has documented golden shiner in these waters. The two trout that were captured in the upper pond were determined to be wild. In order to maintain a brook trout fishery in the presence of an introduced fish community, stocking rates of Lower Mud Pond will be reduced to

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40 fish stocked per acre. A second stocking policy will be started for Upper Mud Pond at an equal stocking rate. A future netting survey that aims to determine trout size-at-age could prove valuable in adjusting stocking rates. Information gleaned from anglers may also serve as a means to confirm that stocked trout are surviving and growing to desirable sizes.

Table 1. Lower Mud Pond (UH-P-289) total catch.

Species	# Captured	Min. Length (in.)	Max Length (in.)
Brook Trout	1	12.8	12.8
Creek Chub	31	1.9	5.8
Golden Shiner	44	3.9	4.0

Table 2. Upper Mud Pond (UH-P-290) total catch.

Species	# Captured	Min. Length (in.)	Max Length (in.)
Brook Trout	2	7.9	9.9
Creek Chub	19	2.7	5.0
Golden Shiner	10	2.6	3.7