

A Fish Species Survey of Bear Brook Pond,  
The Bowl, Duck Pond, and Sargent Mountain Pond.

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### Materials and Methods:

Each survey was conducted using a 100 ft. graded mesh experimental gill net, (mesh sizes: 3/8", 3/4", and 1 1/4"), and four galvanized wire minnow traps. The gillnet was set perpendicular to the shoreline with the smallest mesh size at the shore. Net placement was chosen to sample the most representative littoral habitat of each body of water. The net and minnow traps were set during the afternoon and retrieved the following morning. Each body of water was sampled for a minimum of fourteen hours. If possible, each minnow trap was placed in a different littoral habitat to increase sampling efficiency. The sampling was conducted from July 24 through July 28.

### Results:

#### Bear Brook Pond:

The predominant fish species was pumpkinseed sunfish (*Lepomis gibbosus*). Hundreds of individuals were captured, the majority of which were 4-8 cm. total length, with a few larger individuals in the 12-15 cm. size range as well. The second most abundant species was golden shiner (*Notemigonus crysoleucas*). This species comprised approximately one-quarter of the individuals caught, and the majority were 7-10 cm. total length, with only a few individuals greater than 10 cm.. A small population of banded killifish (*Fundulus diaphanus*) was also present. This species was caught in much smaller numbers than either of the two aforementioned species. A fourth species, northern redbelly dace (*Phoxinus eos*), consisted of only a few individuals.

The Bowl:

Two fish species, golden shiner (*Notemigonus crysoleucas*) and banded killifish (*Fundulus diaphanus*), were captured in this pond. Golden shiner was the most abundant in both the gillnet and the minnow traps. Banded killifish were also found to be abundant, but to a lesser degree.

Duck Pond:

This very small, dystrophic pond contained only one fish species, golden shiner (*Notemigonus crysoleucas*). Only large individuals in the 12-16 cm. size range were caught with the gillnet. No individuals were caught in the minnow traps, presumably due to the size selectivity of these traps. Approximately 25 individuals were caught in the overnight net set.

Sargent Mountain Pond:

No fishes were caught in this small, acidic pond. It is highly unlikely that there are any fish species present in this pond. The small size of the pond allowed the net to nearly bisect the pond. Although no fishes were caught or observed, various amphibian and aquatic insect species were present.

**Table 1. Fish Species List**

**Bear Brook Pond:**

Pumpkinseed Sunfish (*Lepomis gibbosus*)  
Golden shiner (*Notemigonus crysoleucas*)  
Banded killifish (*Fundulus diaphanus*)  
Northern Redbelly Dace (*Phoxinus eos*)

**The Bowl:**

Golden shiner (*Notemigonus crysoleucas*)  
Banded killifish (*Fundulus diaphanus*)

**Duck Pond:**

Golden shiner (*Notemigonus crysoleucas*)

**Sargent Mountain Pond:**

None