Introduction and Survey Objectives

Mill Creek is a Class I and II trout stream consisting of 22.57 miles of trout water in Shawano County. Brook trout is the dominant salmonid with low numbers of brown trout found in the lower reaches. Fishing access is limited to road crossings only. Feral brown trout fingerlings have been stocked in past years. Objectives of the trend survey are to monitor relative abundance and size structure.

Survey Information

<table>
<thead>
<tr>
<th>Site location</th>
<th>Survey Date</th>
<th>Station Length</th>
<th>Water Temperature (F)</th>
<th>GPS (Start/Finish)</th>
<th>Gear</th>
<th>Dippers</th>
</tr>
</thead>
<tbody>
<tr>
<td>WINKLE RD TREND</td>
<td>07/26/2016</td>
<td>1200 ft.</td>
<td>66</td>
<td>44.8115, -88.8216</td>
<td>Towed Barge Shocker</td>
<td>3</td>
</tr>
</tbody>
</table>

Metric Descriptions

- **Catch per effort (CPUE)** is an indirect method of measuring fish population relative abundance. For all trout surveys we typically quantify CPUE by the number and size of trout captured per mile of stream. CPUE indexes are compared to statewide streams by percentile (PCTL). For example, if a CPUE is in the 90th percentile, it is higher than 90% of the other CPUEs in the state. CPUE percentiles can also be used to categorize trout abundance by 33rd (low density), 66th (moderate), 90th (high), and 95th (very high) benchmarks.

- **Length frequency distribution** describes size structure and is the number of trout captured and grouped by one inch size intervals.
Summary

- The 2016 survey indicated book trout density has continued to remain at moderate levels with CPEs ranking at the statewide 85th percentile for all sizes of trout.
- Brook trout $>5$” has decreased 14% from the last survey but ranks 90th when compared to statewide data.
- Brook trout $>8$” has increased 119% from the last survey and continues to rank in the 90th percentile when compared to statewide data.
- Brook trout young of year relative abundance increased 163% from 2015 and is near the 10 year average.
- Stream levels have continued to remain at very low levels and may account for some of the decline in larger trout.