Bluegill Sunfish (*Lepomis macrochirus*)

### General Information
Bluegill sunfish are an important panfish as well as being an important forage species. They are commonly found throughout the state in a variety of habitat conditions. They do well in small pond environments and are less prone to stunting than the pumpkinseed sunfish.

<table>
<thead>
<tr>
<th>Native Range</th>
<th>Lake Champlain &amp; southern Ontario region through Great Lakes to Minnesota and south to northeastern Mexico, the Gulf states &amp; the Carolinas. Introduced widely outside of its native range. (Stuber and Gebhart 1982)</th>
</tr>
</thead>
</table>

### Habitat Description
**Lake:** fertile lakes, ponds & reservoirs with extensive littoral areas (20 - 60% of surface area), require deeper water for overwintering, low to moderate turbidities, prefer 20% - 60% cover within the littoral area with no more than 30% in the form of aquatic vegetation. Too much aquatic vegetation can interfere with feeding or cause stunting by reducing predation, can tolerate pH values as low as 4.0 (Stuber and Gebhart 1982)

**River:** large, low velocity streams (prefer < 10 cm/sec but will tolerate up to 45 cm/sec), > 60% of surface area in pools, gradient < 0.5 m/km), can tolerate salinities up to 3.6 ppt. (Stuber and Gebhart 1982)

### Optimum Habitat Requirements

<table>
<thead>
<tr>
<th>Dissolved Oxygen</th>
<th>&gt; 5 mg/l</th>
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</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>27°C</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 8.5</td>
</tr>
<tr>
<td>Turbidity</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Current</td>
<td>&lt; 10 cm/sec</td>
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</tbody>
</table>

### Diet

- **Fry:** zooplankton, insects
- **Juveniles:** zooplankton, aq. & terr. insects
- **Adults:** zooplankton, aq. & terr. insects
- **Notes:** opportunistic feeders, alter diet according to food availability

### Growth (mm)

<table>
<thead>
<tr>
<th>Age</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51</td>
<td>92</td>
<td>124</td>
<td>148</td>
<td>174</td>
<td>201</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Growth data taken from a summary of lake inventories performed 1990 - 1995.

### Reproduction

- **Time of Year:** April to June
- **Age Males Mature:** I - II
- **Temperature Range:** 17°C to 31°C
- **Age Females Mature:** I - II
- **Water Depth:** 1 - 3 m
- **Nest:** built by male
- **Substrate:** gravel, sand
- **Egg Type:**
- **Time of Day:**
- **Parental Care:** male
- **Critical pH:** Days to Hatching 1.5 - 5
- **Vegetation:** important
- **Stable Water Level:** critical

**Notes:** repeat spawners. Reproduction information taken from Stuber and Gebhart 1982; Scott and Crossman 1973)