Largemouth bass *Micropterus salmoides*

**Habitat:**

- **feeding**
  - non-flowing clear waters - lakes, impoundments, and pools of streams
  - abundant aquatic vegetation
  - soft muck, organic debris, gravel, sand, and hard non-flocculent clay substrates

- **spawning**
  - nest in gravelly sand to marl and soft mud substrates
  - emergent vegetation
  - quiet shallow bays; no current
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**White crappie** *Pomoxis annularis*

**Habitat:**
- **feeding** - lakes and impoundments >5 acres
  - sluggish pools of moderate to large low-gradient rivers
  - no substrate preference
  - can tolerate severe turbidity and rapid siltation

- **spawning** - various substrates usually beside rooted aquatic vegetation
  - sometimes under banks
**Black crappie** *Pomoxis nigromaculatus*

**Habitat:**

- **feeding** - larger clear non-silty low-gradient rivers; also in lakes and impoundments
- clean hard sand or muck substrate
- associated with submerged aquatic vegetation
- does not tolerate silt or turbidity well

- **spawning** - nests in gravel, sand, or mud substrate
- some vegetation must be present
- sometimes nests under banks
Greenside darter *Etheostoma blennioides*

**Habitat:**
- **feeding** - young: in quiet water
  - swift gravelly riffles or pools with current of streams and rivers
- **spawning** - filamentous algae necessary for egg deposition
Rainbow darter *Etheostoma caeruleum*

**Habitat:**
- feeding - gravelly high gradient riffles
- clear, moderate to large streams
- in shallows (average 1 foot)
- spawning - gravel or rubble riffles
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**Iowa darter Etheostoma exile**

**Habitat:**

- feeding - clear, slow moving streams and lakes
- - sandy to muddy substrates
- - intolerant of turbid water
- - lives in rooted aquatic vegetation

- spawning - in pond-like extensions of streams on organic matter or roots
- - in shallows
Fantail darter *Etheostoma flabellare*

**Habitat:**

- **feeding**
  - small, shallow (<18 inches) streams
  - some tolerance of turbidity and siltation
  - clear warm waters
  - slow to moderate current
  - gravel and boulder substrate

- **spawning**
  - gravel in slower water
  - lays eggs on underside of rocks, male guards and fans them

- **winter refuge**
  - moves downstream to larger and deeper waters
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**Least darter** *Etheostoma microperca*

**Habitat:**
- feeding - moderate to warm temperature
- clear quiet low-gradient vegetated streams (wetlands, floodplains)
- soft substrate

- spawning - spawning occurs on stems of plants
- male guards a territory in a vegetated area
Johnny darter *Etheostoma nigrum*

**Habitat:**
- **feeding** - sand and silt substrate
  - little to moderate current
  - shallow areas of streams, rivers, lakes, and impoundments
  - tolerant of many organic and inorganic pollutants and turbidity
- **spawning** - underneath rocks
  - in stream pools or protected shallows of lakes
Orangethroat darter *Etheostoma spectabile*

**Habitat:**
- **feeding** - small-moderate size creeks and spring branches
  - sand, gravel, or rock substrate in sluggish riffles or in pools with sufficient current to prevent siltation
  - prefers clear streams but tolerant to turbidity
  - low to moderate gradient
- **spawning** - gravel riffles
  - slow current