Largemouth bass Micropterus salmoides

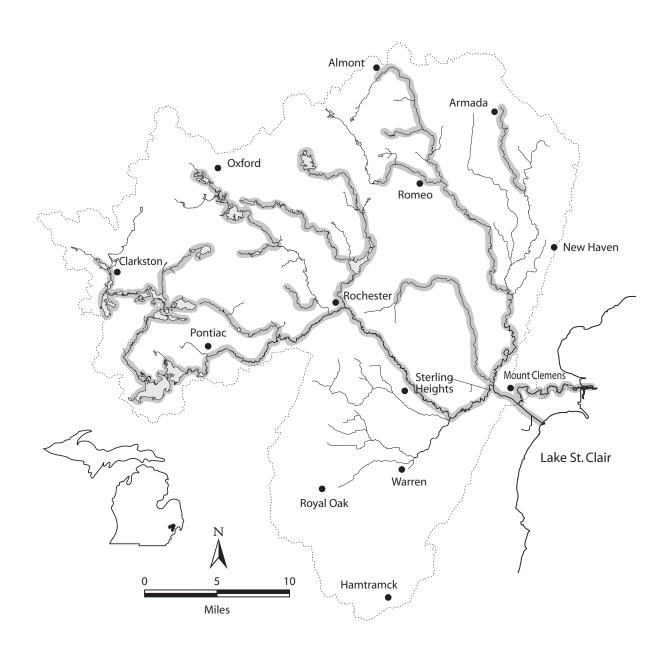
Habitat:

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



White crappie Pomoxis annularis

Habitat:

feeding - lakes and impoundments >5 acres

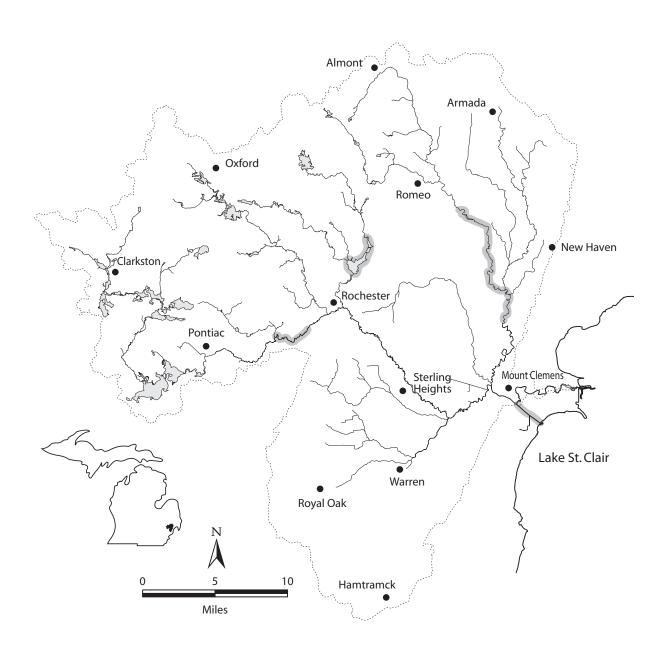
- sluggish pools of moderate to large low-gradient rivers

- 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

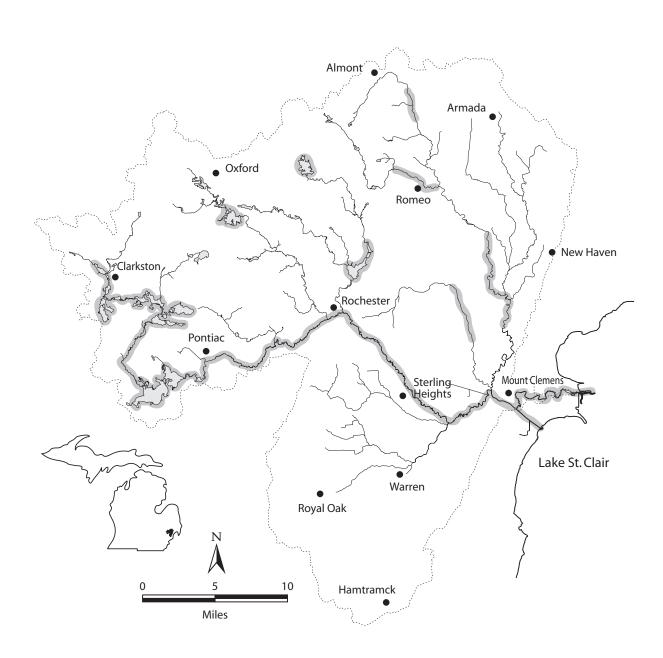
- associated with submerged aquatic vegetation

- does not tolerate silt or turbidity well

spawning - nests in gravel, sand, or mud substrate

- some vegetation must be present

- sometimes nests under banks



Clinton River Assessment Appendix

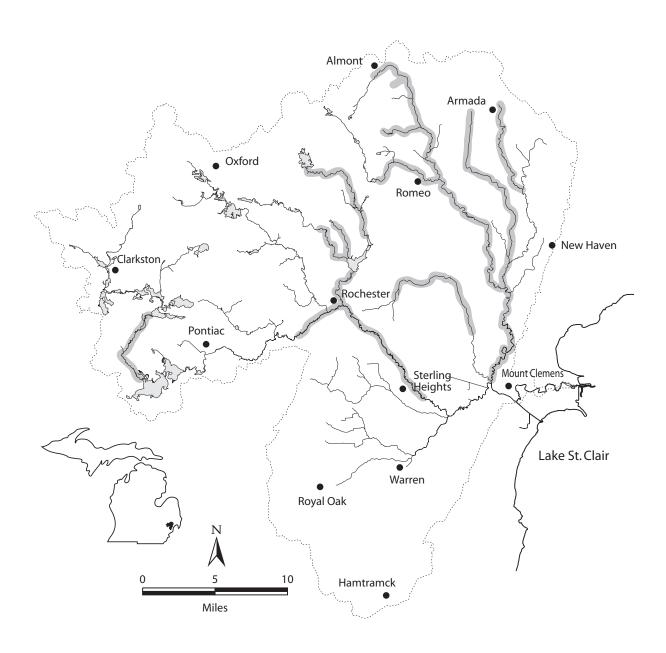
Greenside darter Etheostoma blennioides

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

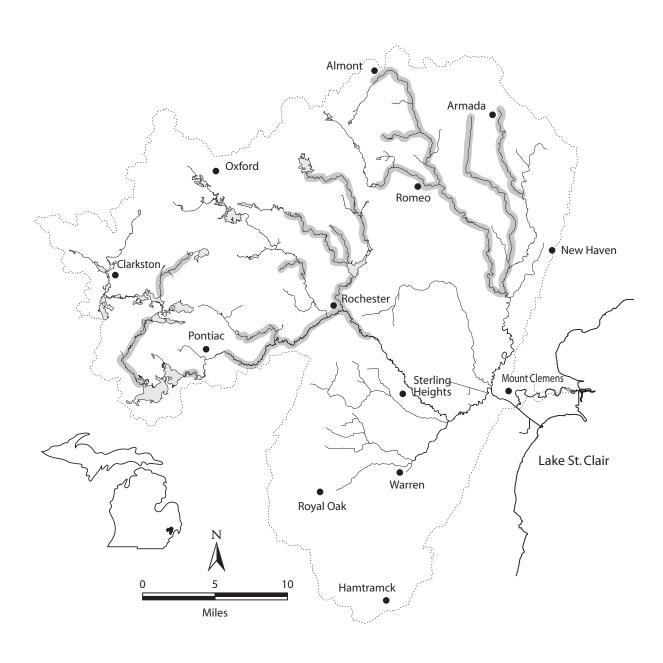
Habitat:

feeding - gravelly high gradient riffles

- clear, moderate to large streams

- in shallows (average 1 foot)

spawning - gravel or rubble riffles



Clinton River Assessment Appendix

Iowa darter Etheostoma exile

Habitat:

feeding - clear, slow moving streams and lakes

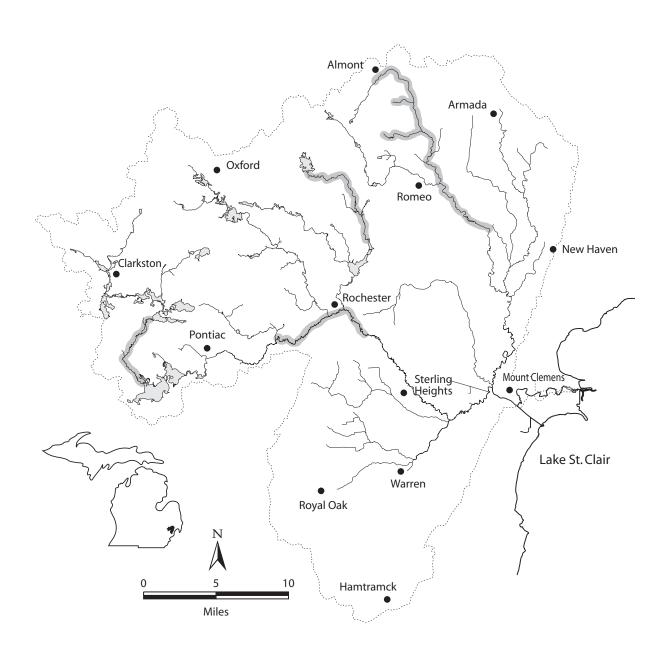
- sandy to muddy substrates

- 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

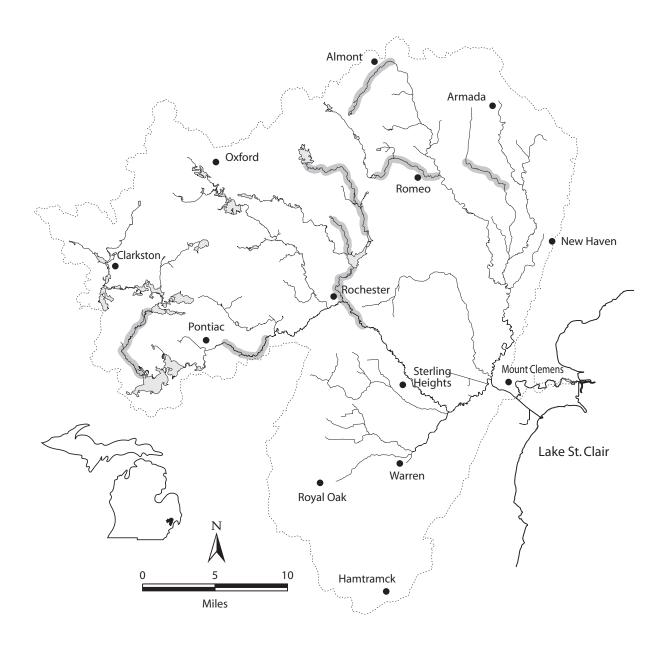
- slow to moderate current

- 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



Clinton River Assessment Appendix

Least darter Etheostoma microperca

Habitat:

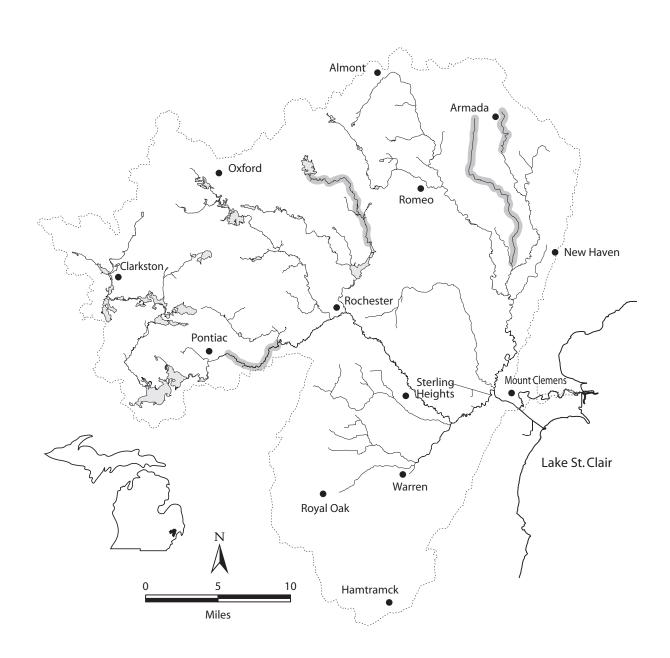
feeding - moderate to warm temperature

- 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

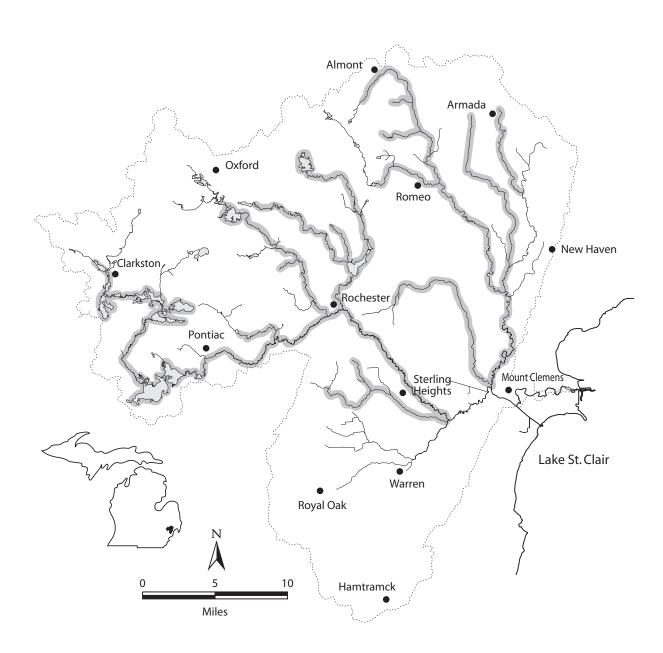
- little to moderate current

- 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

