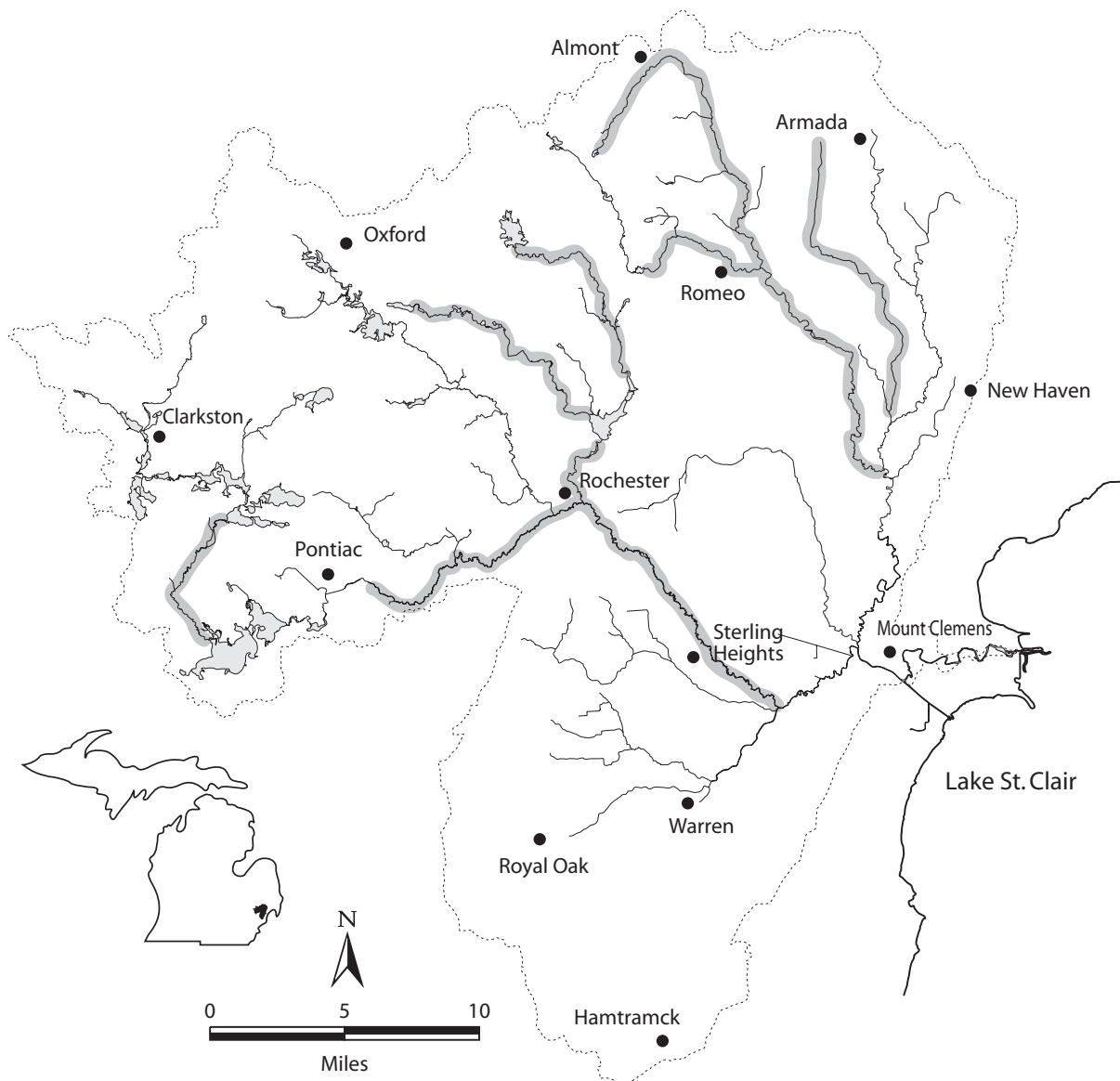


Hornyhead chub *Nocomis biguttatus*

Habitat:

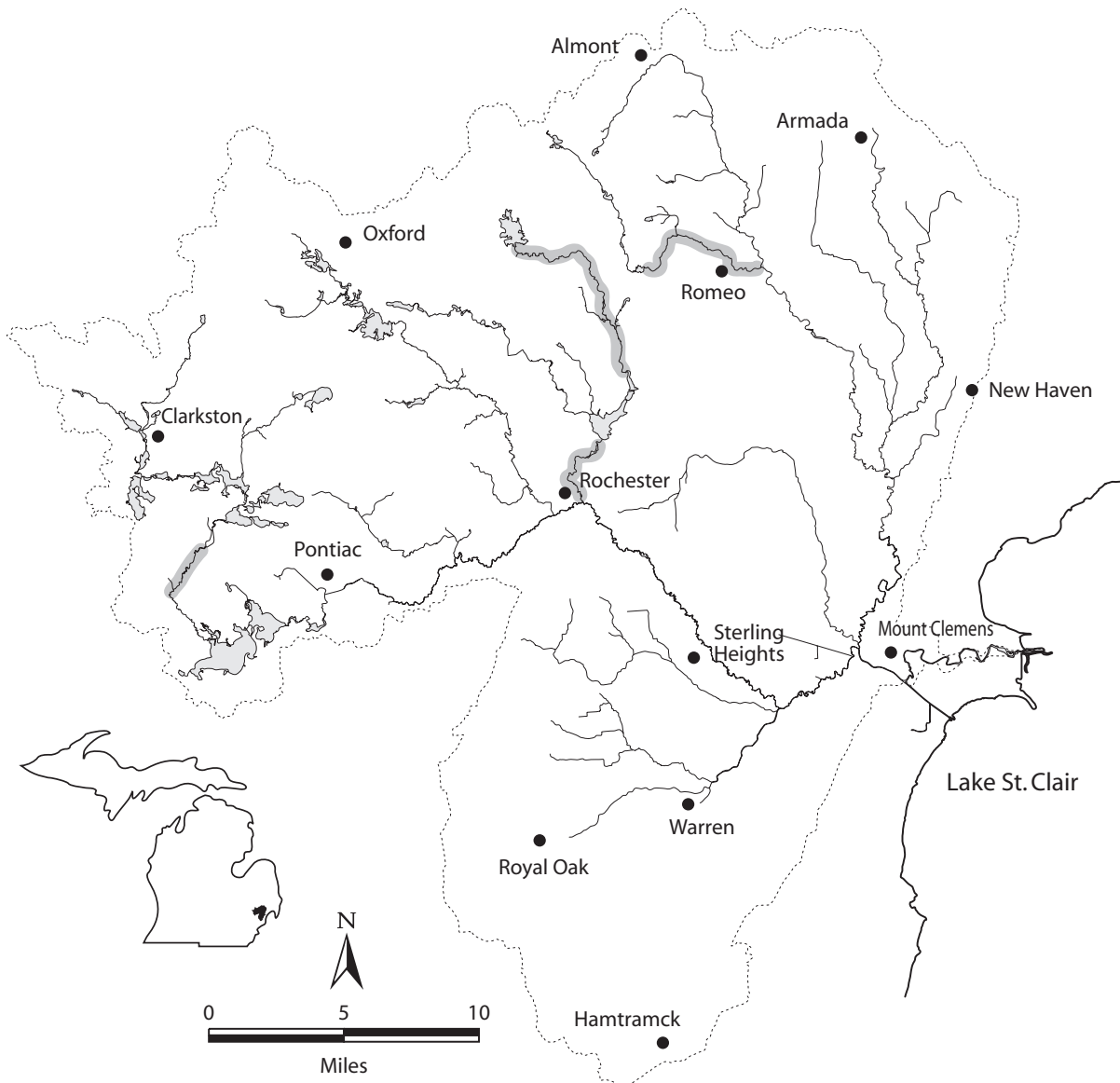
- feeding - adults: near riffles
 - young: near vegetation
 - clear water, does not tolerate turbidity
 - gravel substrate
 - low gradient streams that are tributaries to large streams
-
- spawning - large stones and pebbles present
 - often below a riffle in shallow water
 - gravel substrate



River chub *Nocomis micropogon*

Habitat:

- feeding - moderate to large streams
- moderate to high gradient
- gravel, boulder, or bedrock substrate
- little to no aquatic vegetation
- cannot tolerate turbidity or siltation

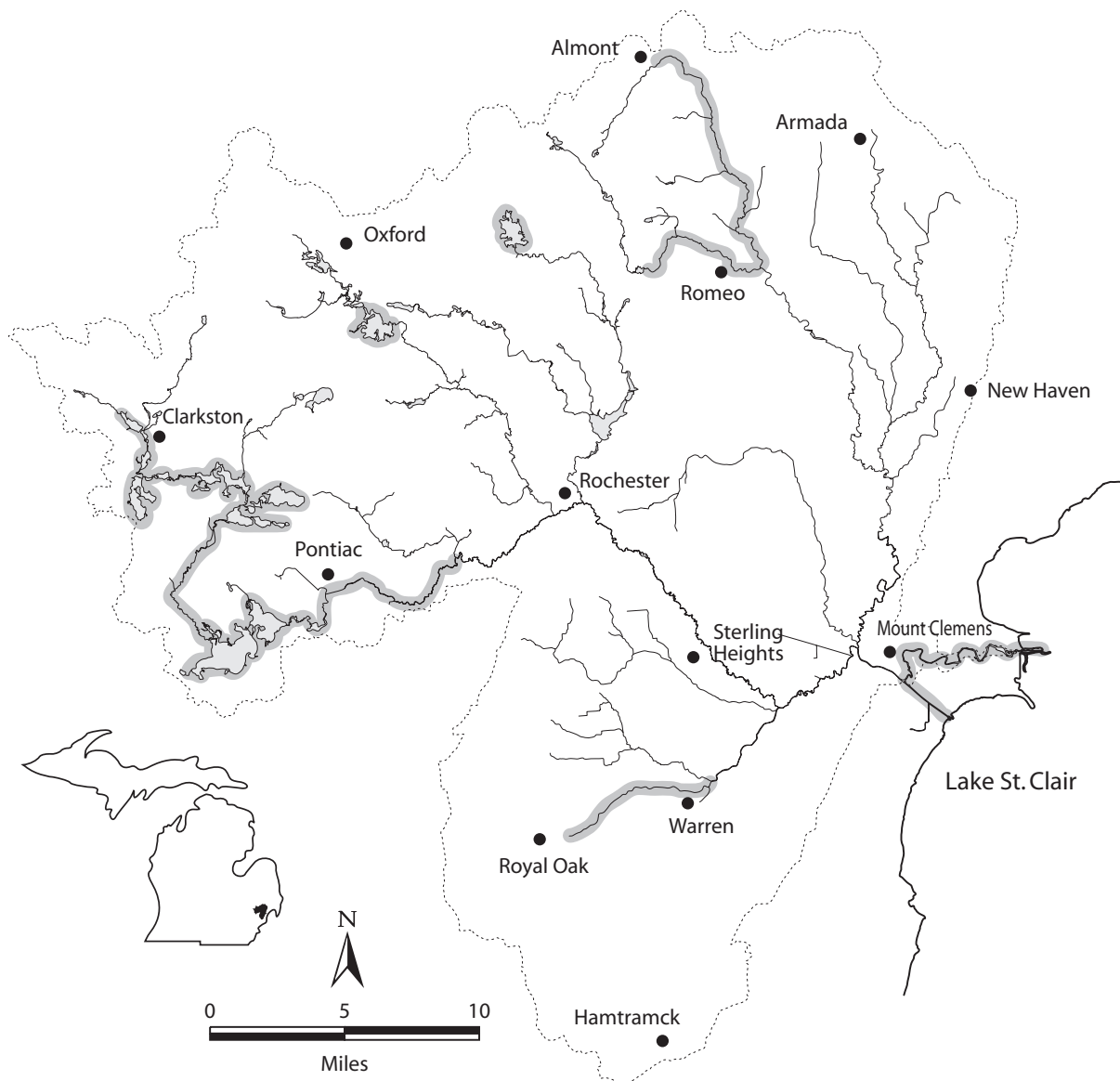


Golden shiner *Notemigonus crysoleucas*

Habitat:

- feeding - lakes and impoundments and quiet pools of low gradient streams
- clear shallow water
- heavy vegetation

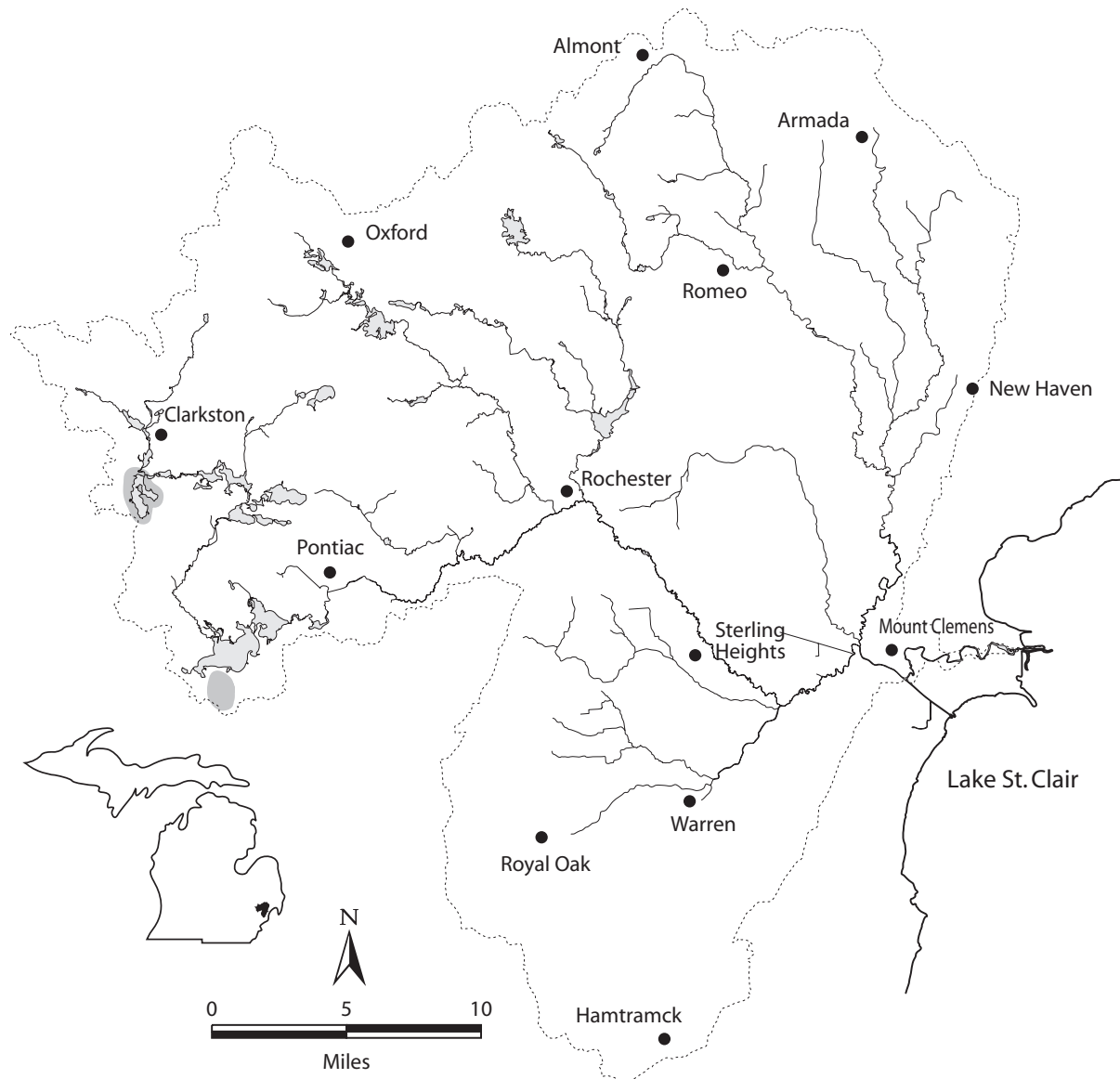
- spawning - vegetation



Pugnose shiner *Notropis anogenus*

Habitat:

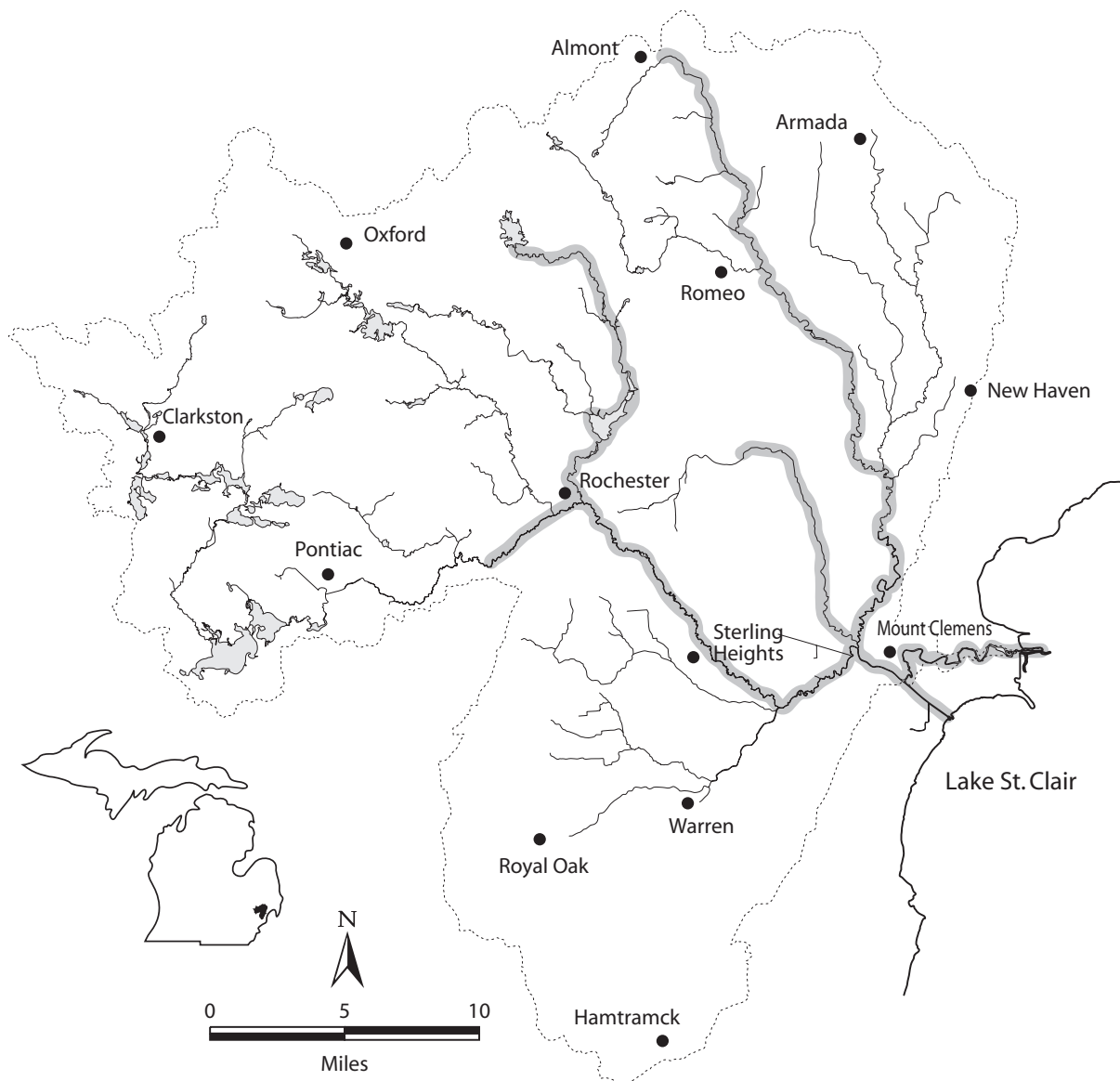
- feeding - very clear water of lakes, impoundments, and low-gradient streams
- aquatic vegetation
- clean sand, marl, or organic debris substrate
- extremely intolerant of turbidity



Emerald shiner *Notropis atherinoides*

Habitat:

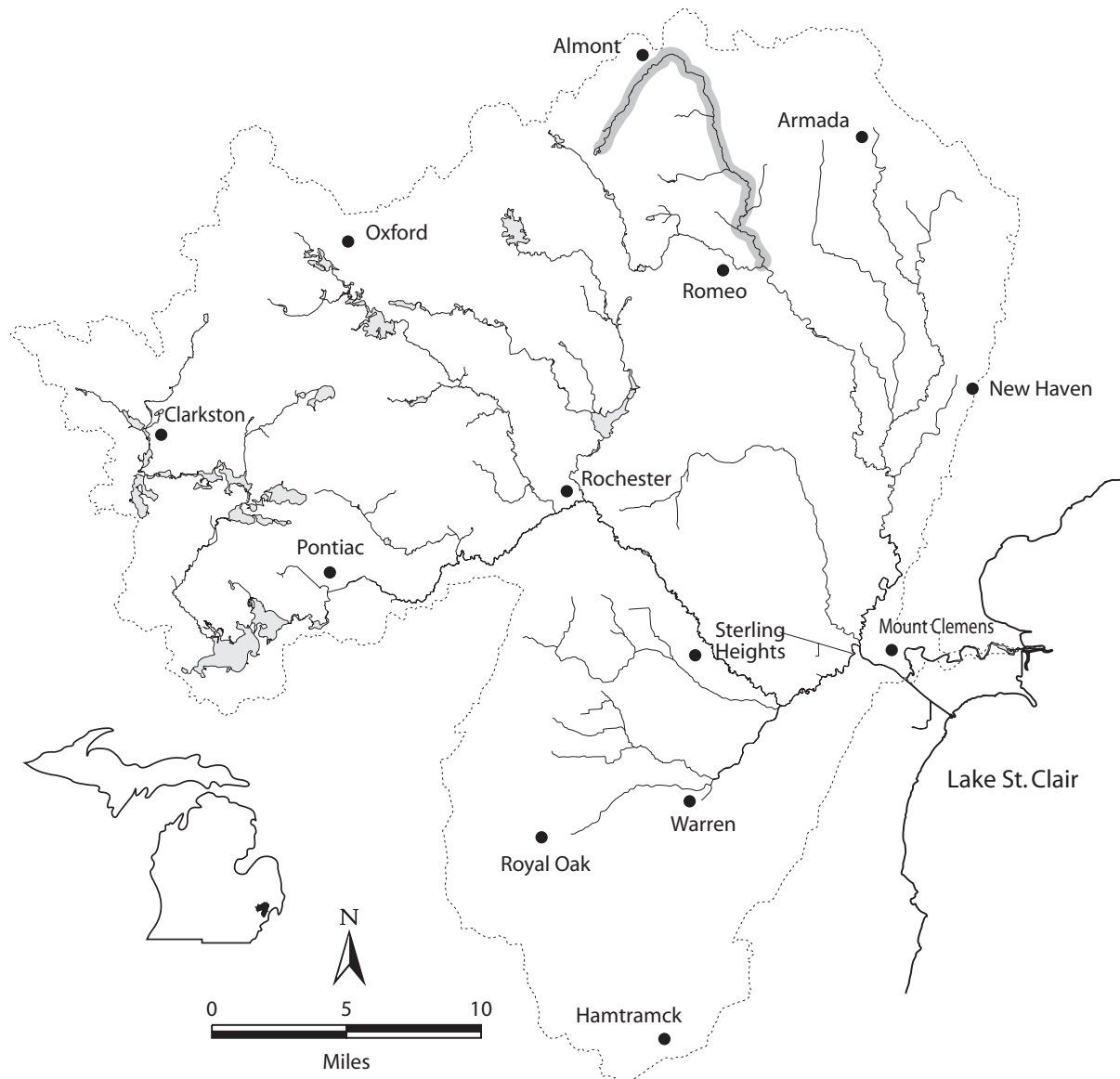
- feeding - open-large stream channels and lake
 - low to moderate gradient
 - range of turbidities and bottom types
 - midwater or surface preferred, substrate of little importance
 - avoids rooted vegetation
- spawning - sand or firm mud substrate or gravel shoals



Bigmouth shiner *Notropis dorsalis*

Habitat:

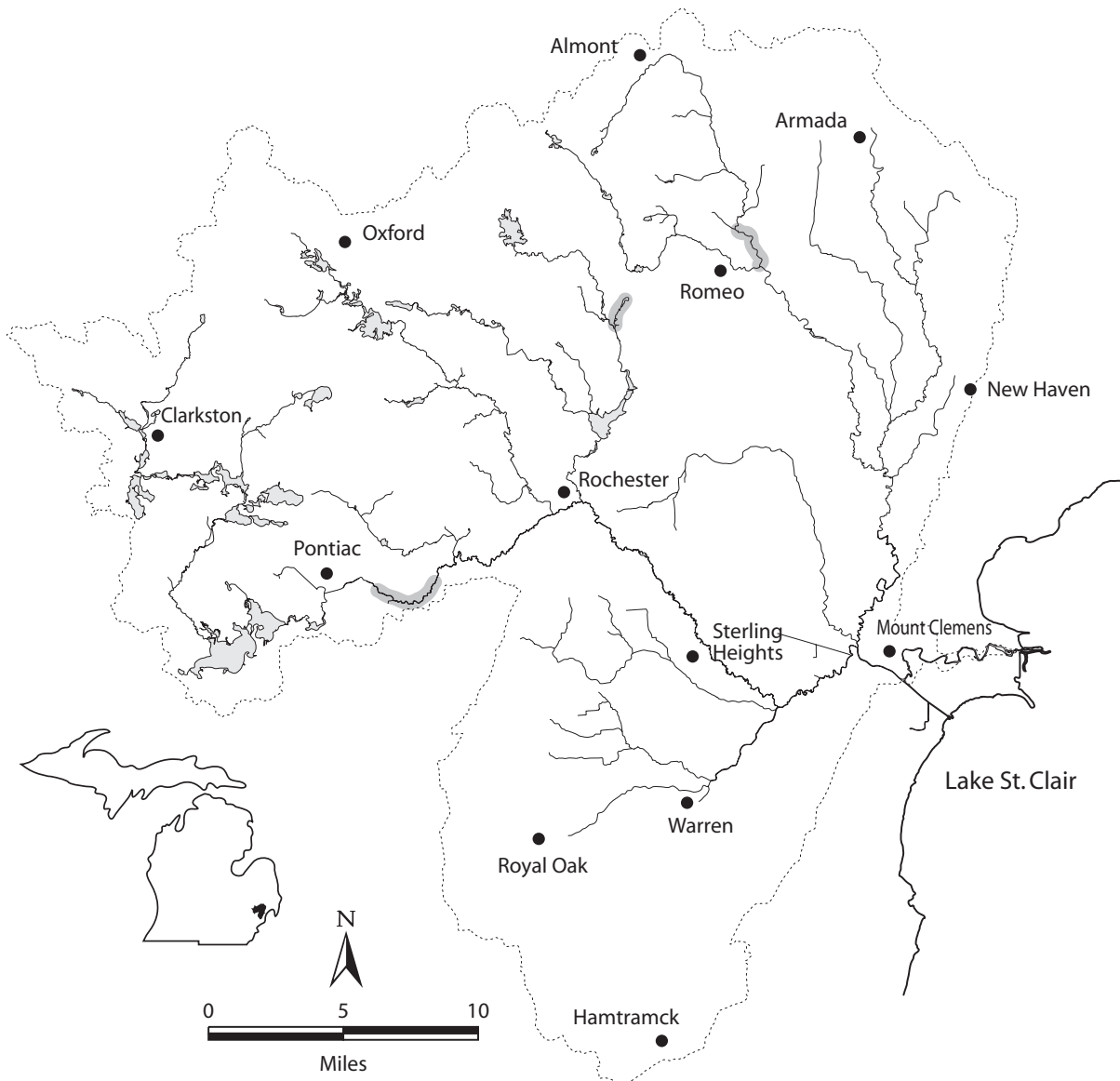
- feeding - small clear streams
- good flows
- sand or gravel substrate
- open water, free from vegetation



Blackchin shiner *Notropis heterodon*

Habitat:

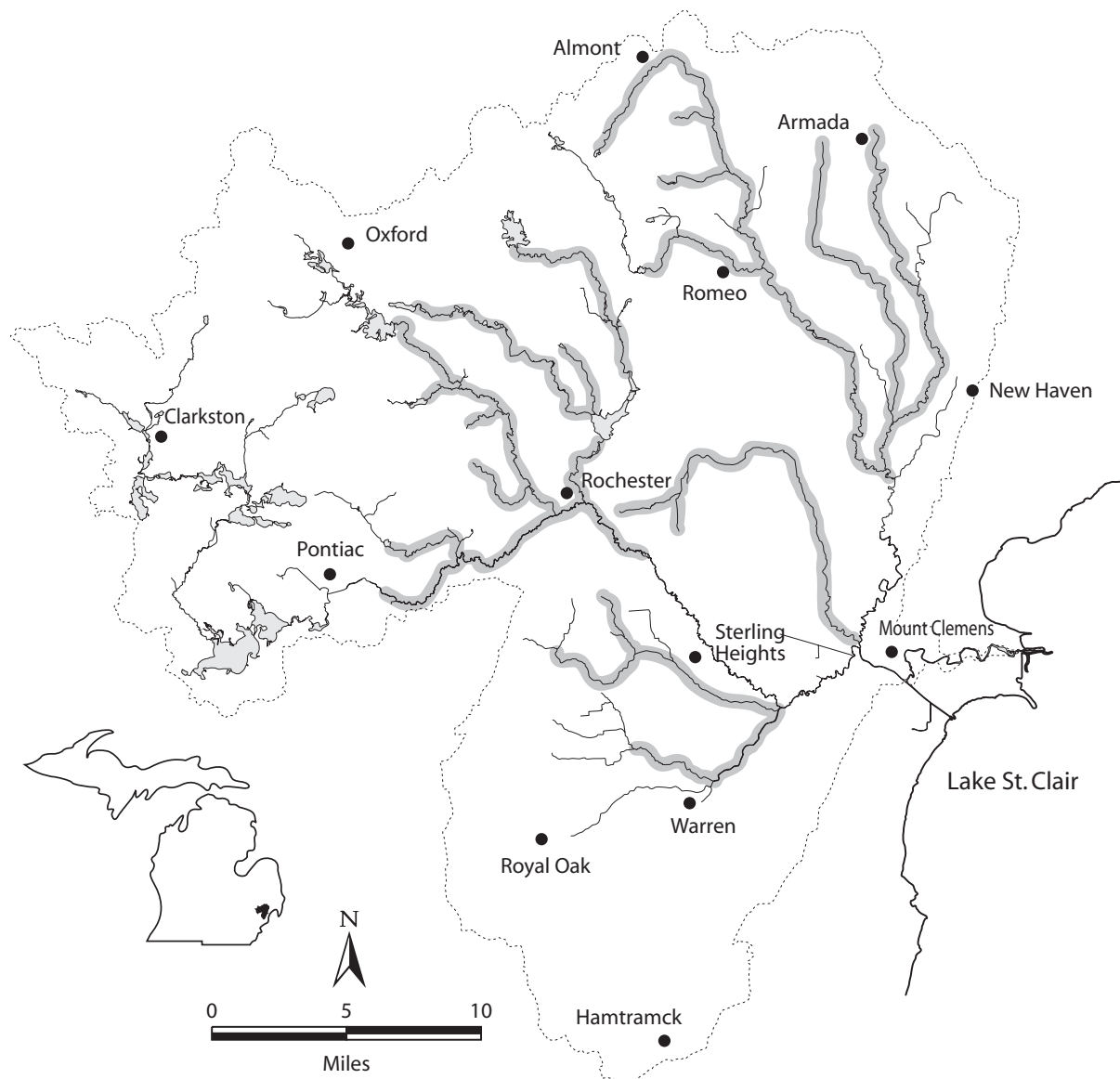
- feeding - lakes, impoundments, and quiet pools in streams and rivers
- clear water
- clean sand, gravel, or organic debris substrate
- dense beds of submerged aquatic vegetation
- cannot tolerate turbidity, silt, or loss of aquatic vegetation



Blacknose shiner *Notropis heterolepis*

Habitat:

- feeding - clear lakes, impoundments, and pools of small, clear, low-gradient streams
 - aquatic vegetation
 - clean sand, gravel, marl, muck, peat, or organic debris substrate
 - cannot tolerate much turbidity, much siltation, or loss of aquatic vegetation
- spawning - sandy substrate

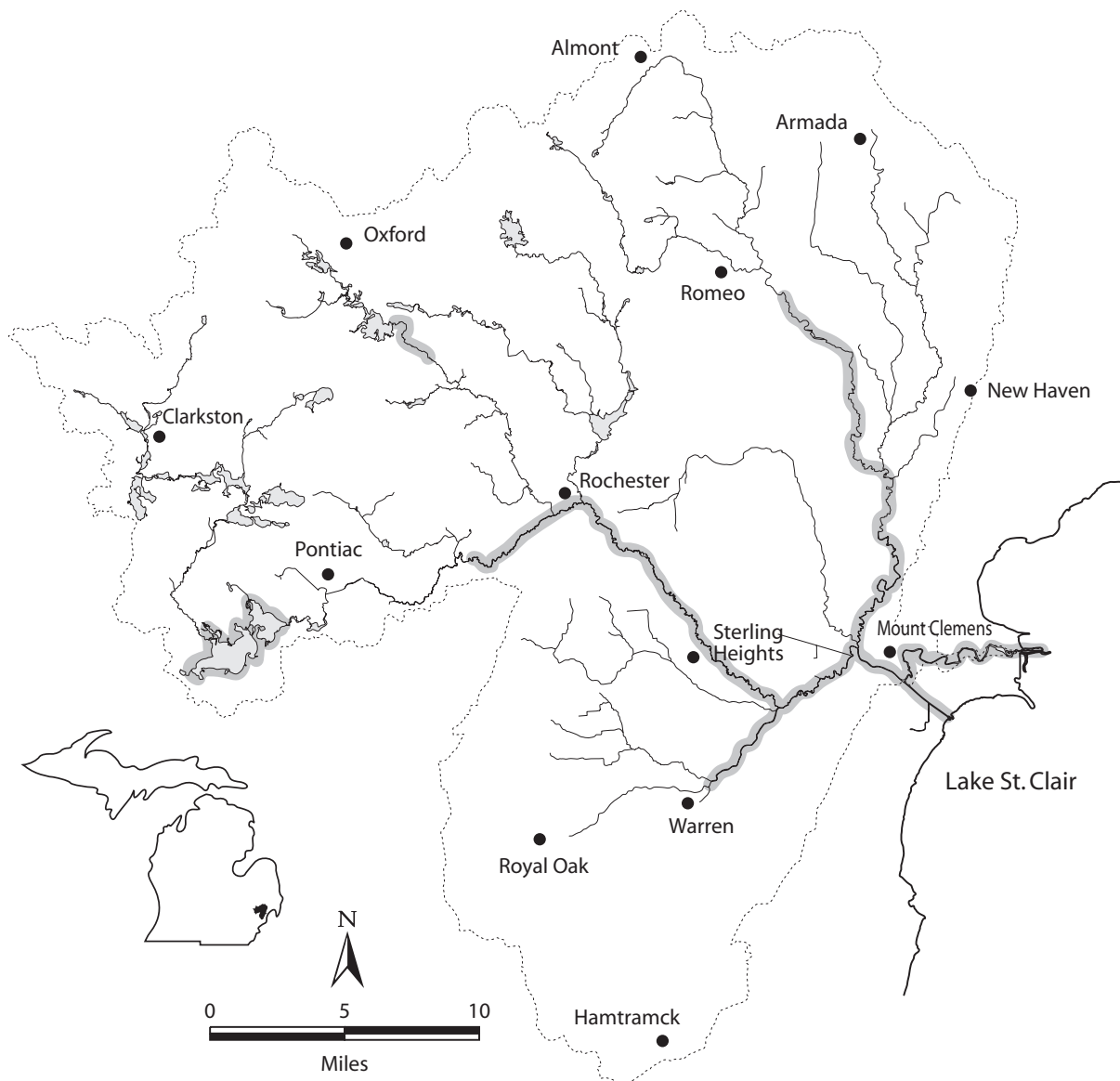


Spottail shiner *Notropis hudsonius*

Habitat:

- feeding - large rivers, lakes, and impoundments
- firm sand and gravel substrate
- low current
- sparse to moderate vegetation
- avoids turbidity

- spawning - over sandy shoals or gravelly riffles
- near the mouths of small streams



Rosyface shiner *Notropis rubellus*

Habitat:

- feeding - moderate sized streams
- moderate to high gradient
- gravel or sand substrate; intolerant of silt substrate
- clear water; intolerant of turbidity

- spawning - on nests of hornyhead chub, chestnut lamprey, and redhorses
- sandy-gravel, gravel or bedrock substrate
- shallow high gradient water

