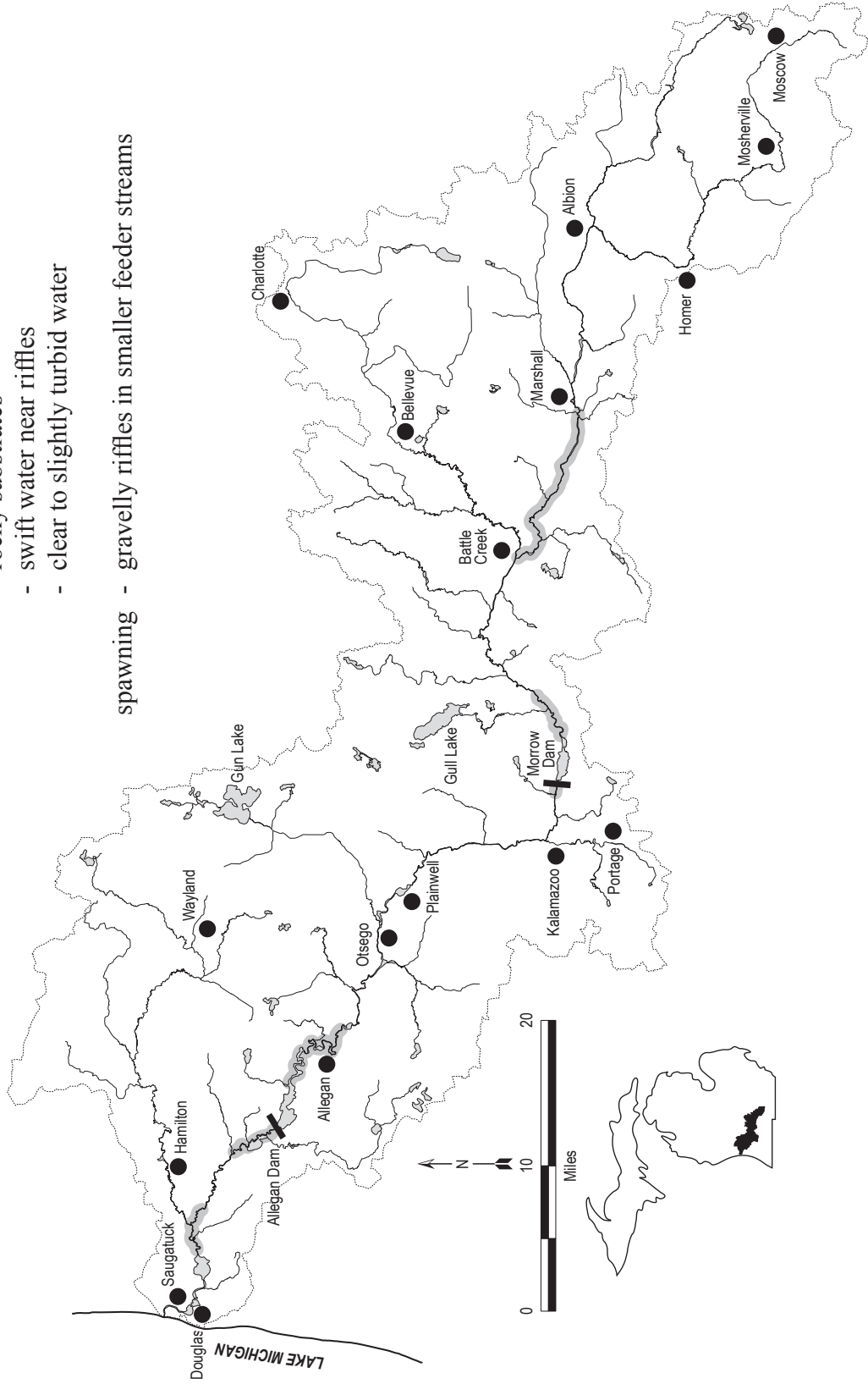


Shorthead redhorse (*Moxostoma macrolepidotum*)

Habitat:

- feeding - downstream sections of large rivers, lakes, and impoundments
- rocky substrates
- swift water near riffles
- clear to slightly turbid water

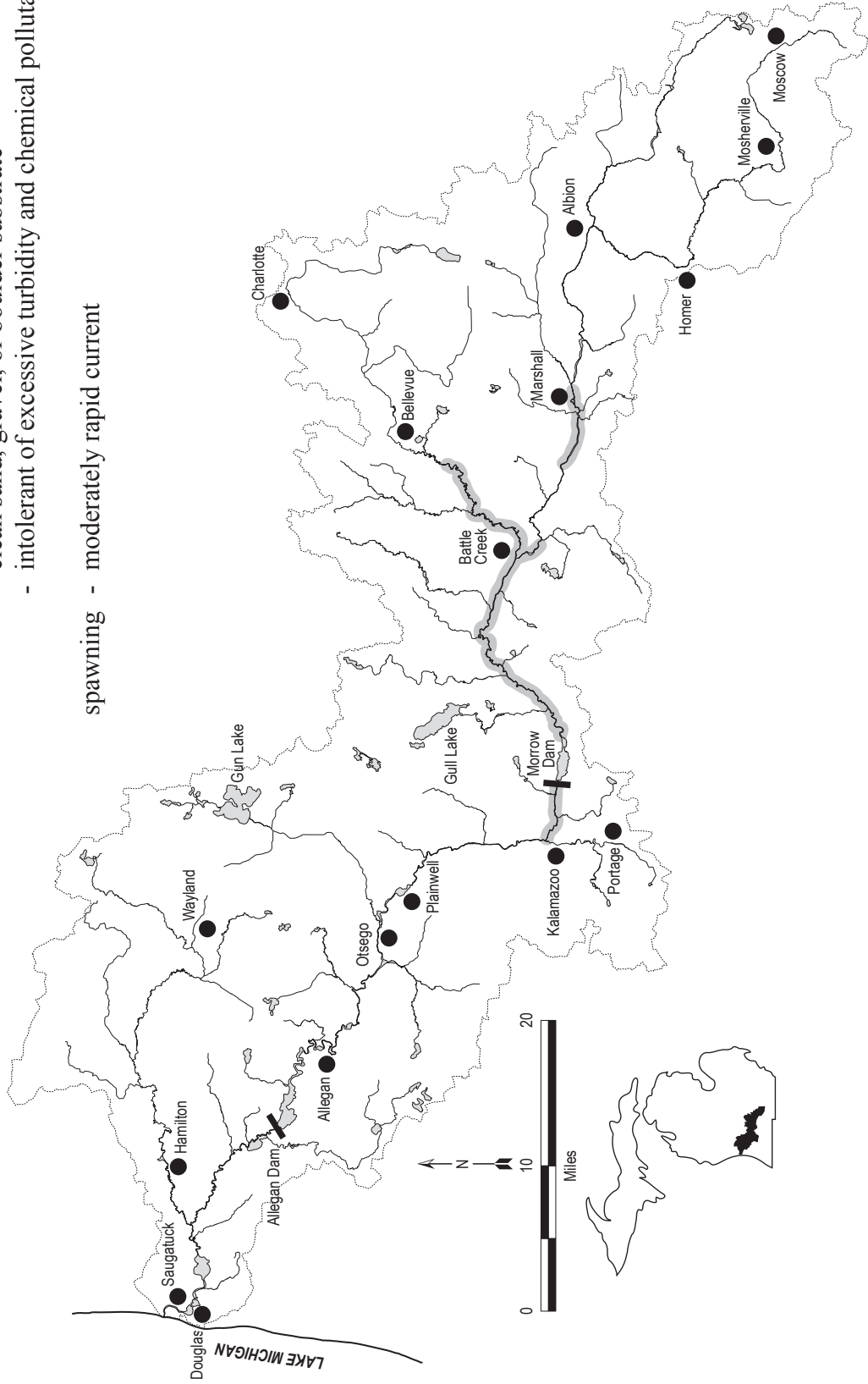
- spawning - gravelly riffles in smaller feeder streams



Greater redhorse (*Moxostoma valenciennesi*)

Habitat:

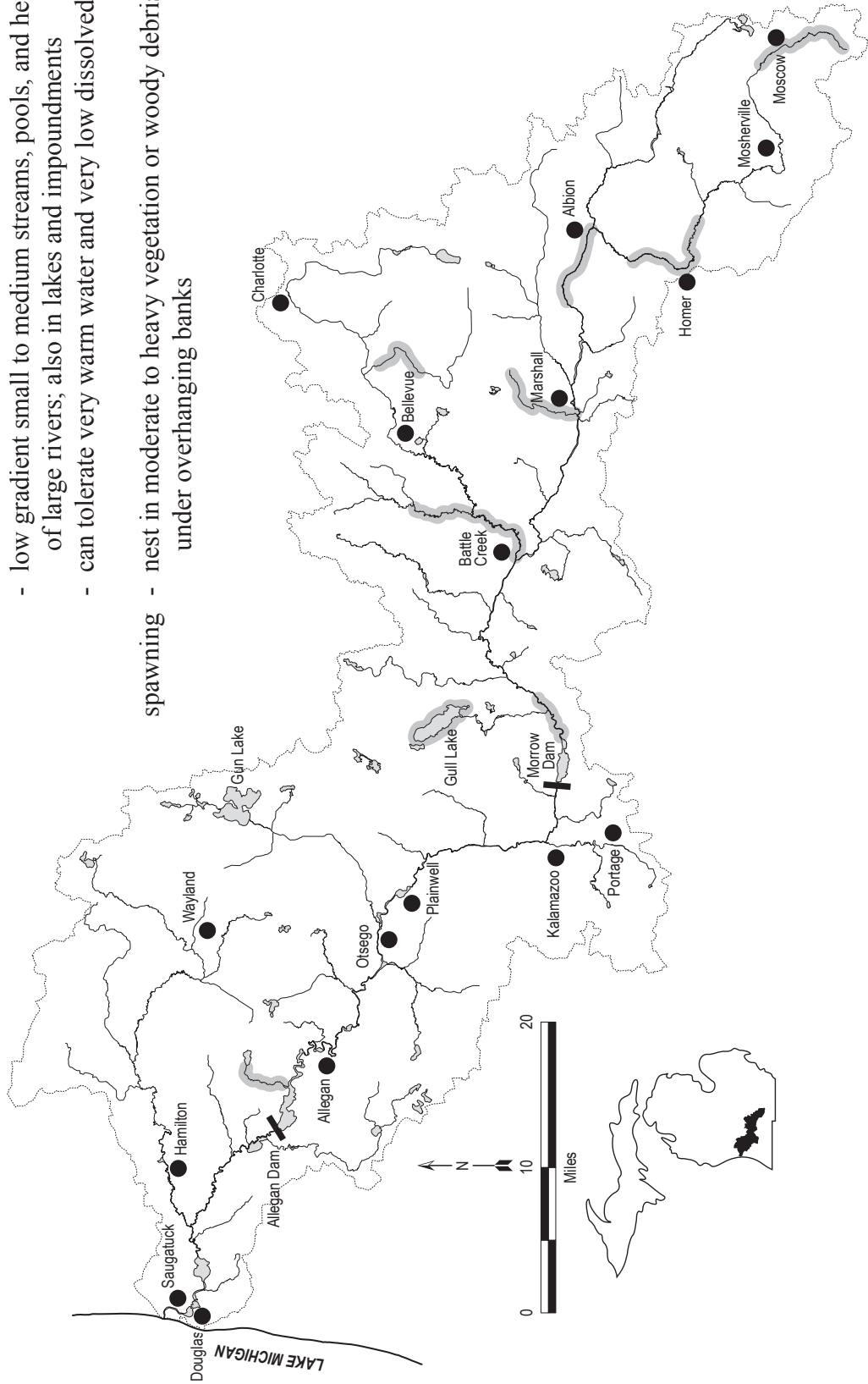
- feeding - large clear streams
 - clean sand, gravel, or boulder substrate
 - intolerant of excessive turbidity and chemical pollutants
-
- spawning - moderately rapid current



Black bullhead (*Ameiurus melas*)

Habitat:

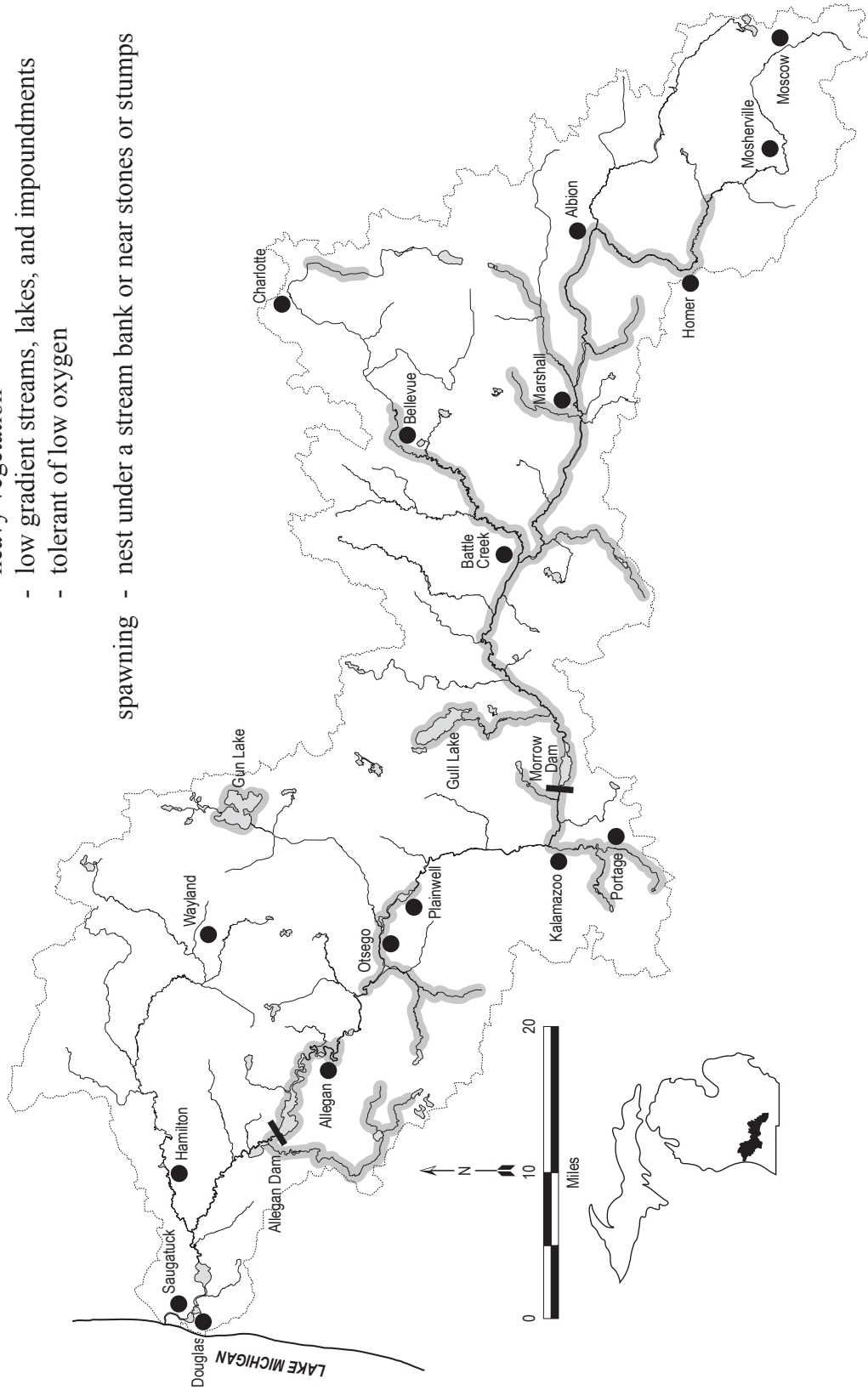
- feeding - turbid water
 - silt bottom
 - low gradient small to medium streams, pools, and headwaters of large rivers; also in lakes and impoundments
 - can tolerate very warm water and very low dissolved oxygen
-
- spawning - nest in moderate to heavy vegetation or woody debris and under overhanging banks



Yellow bullhead (*Ameiurus natalis*)

Habitat:

- feeding - clear flowing water
 - heavy vegetation
 - low gradient streams, lakes, and impoundments
 - tolerant of low oxygen
- spawning - nest under a stream bank or near stones or stumps



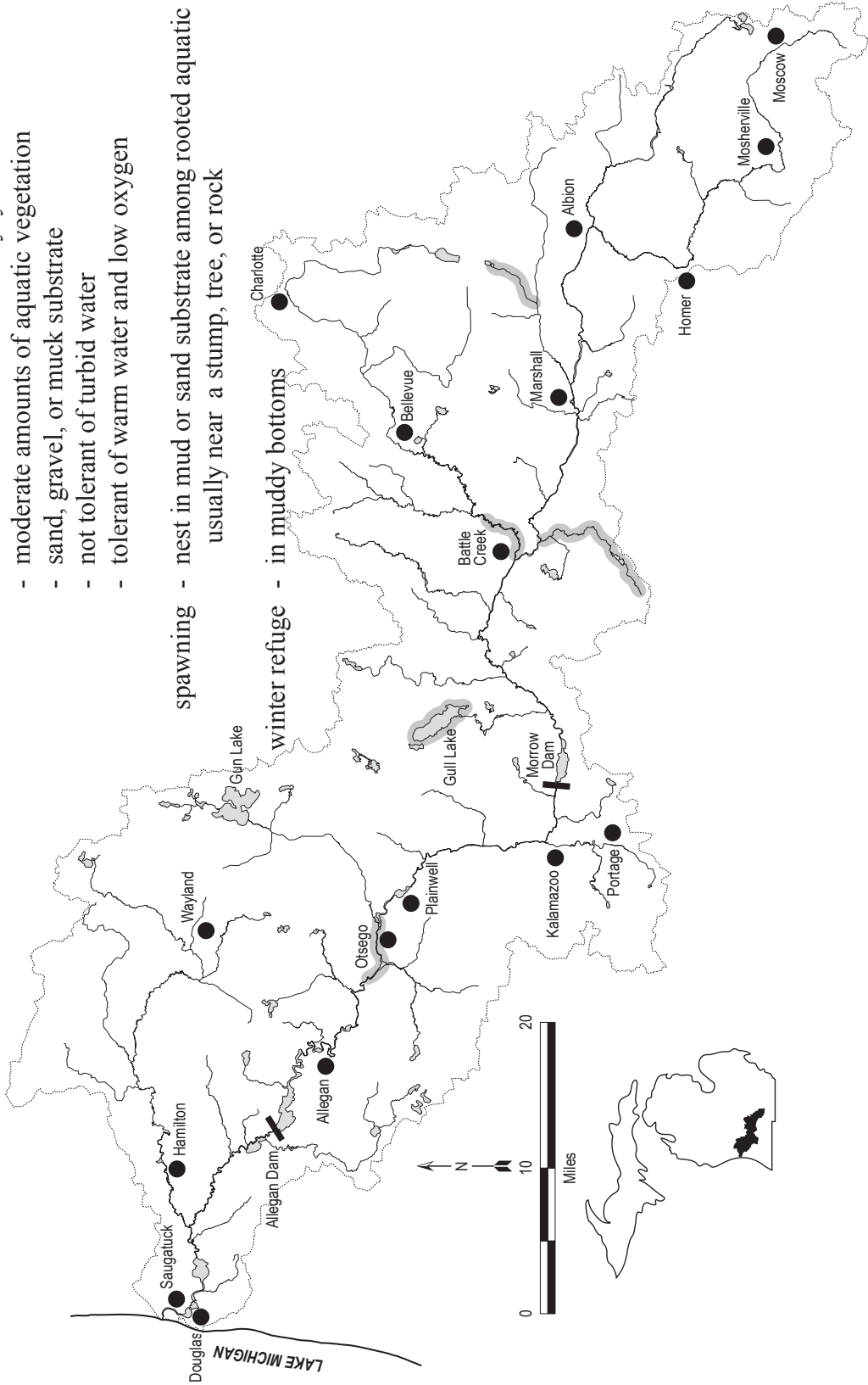
Brown bullhead (*Ameiurus nebulosus*)

Habitat:

- feeding - larger streams and rivers, lakes and impoundments
- clear cool water with little clayey silt
- moderate amounts of aquatic vegetation
- sand, gravel, or muck substrate
- not tolerant of turbid water
- tolerant of warm water and low oxygen

spawning - nest in mud or sand substrate among rooted aquatic vegetation usually near a stump, tree, or rock

winter refuge - in muddy bottoms

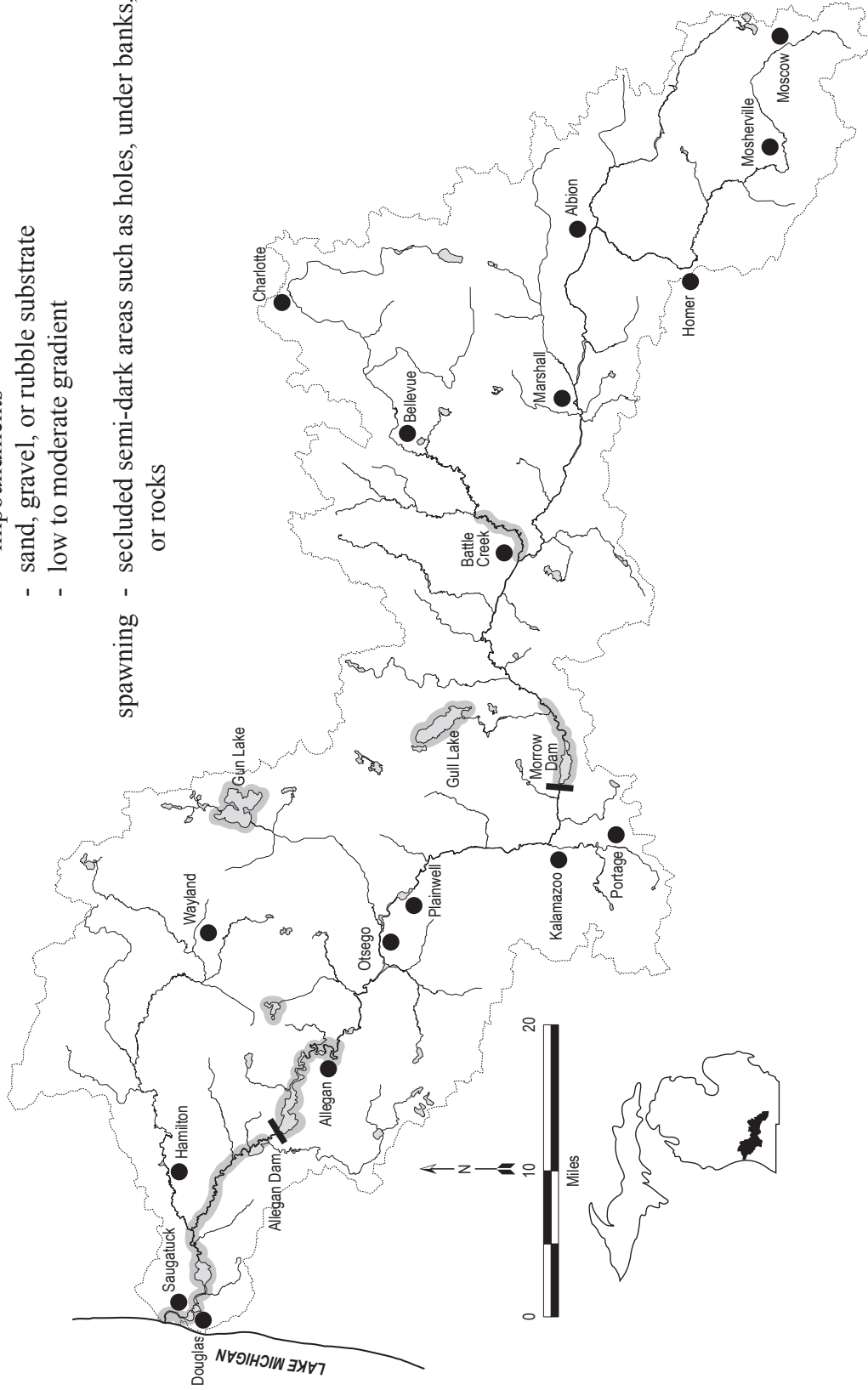


Channel catfish (*Ictalurus punctatus*)

Habitat:

- feeding - moderately-clear, deeper waters of rivers, lakes, and impoundments
- sand, gravel, or rubble substrate
- low to moderate gradient

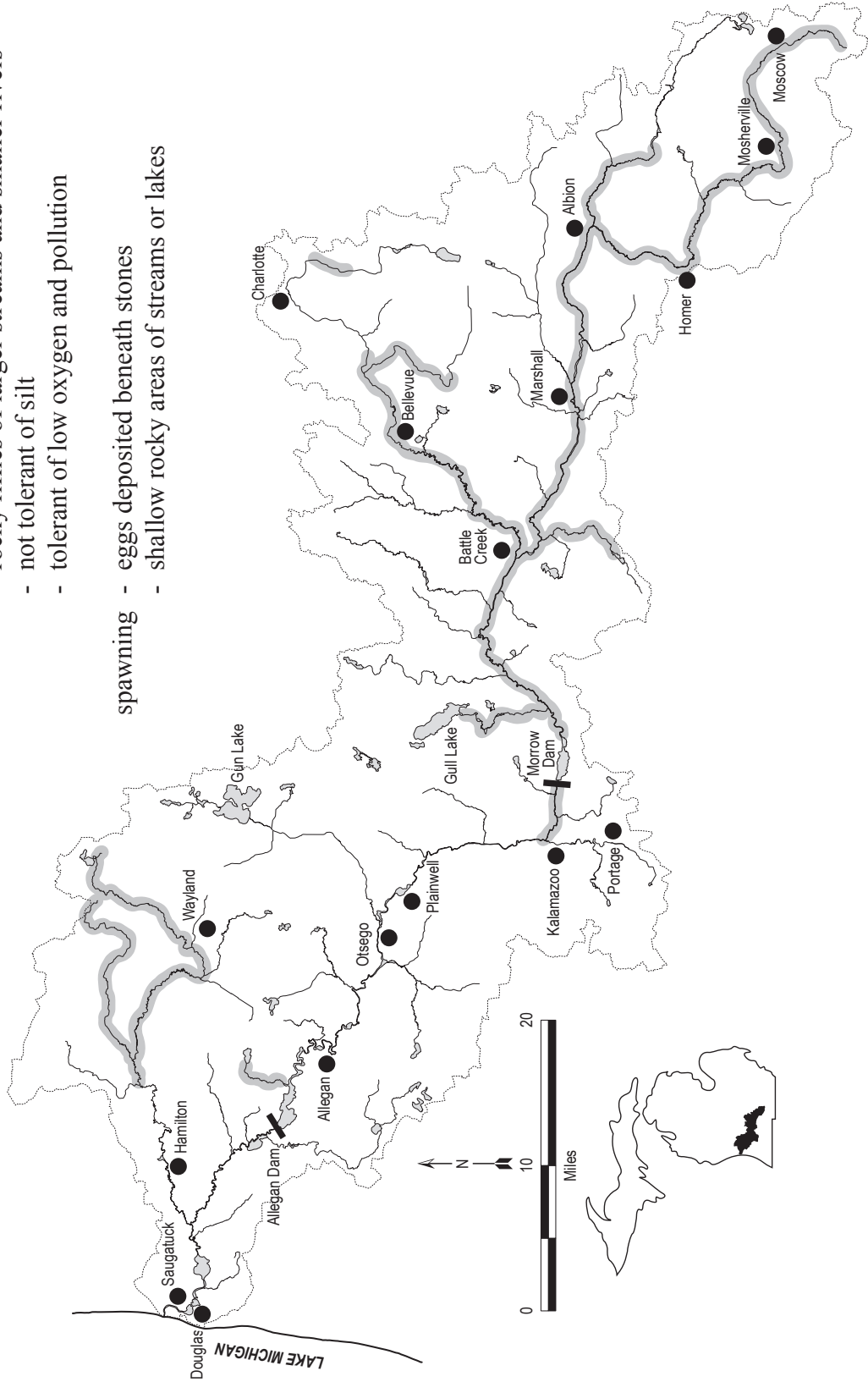
- spawning - secluded semi-dark areas such as holes, under banks, log jams, or rocks



Stonecat (*Noturus flavus*)

Habitat:

- feeding
 - consistent low to moderate gradient flowing water
 - rocky riffles of larger streams and smaller rivers
 - not tolerant of silt
 - tolerant of low oxygen and pollution
- spawning
 - eggs deposited beneath stones
 - shallow rocky areas of streams or lakes

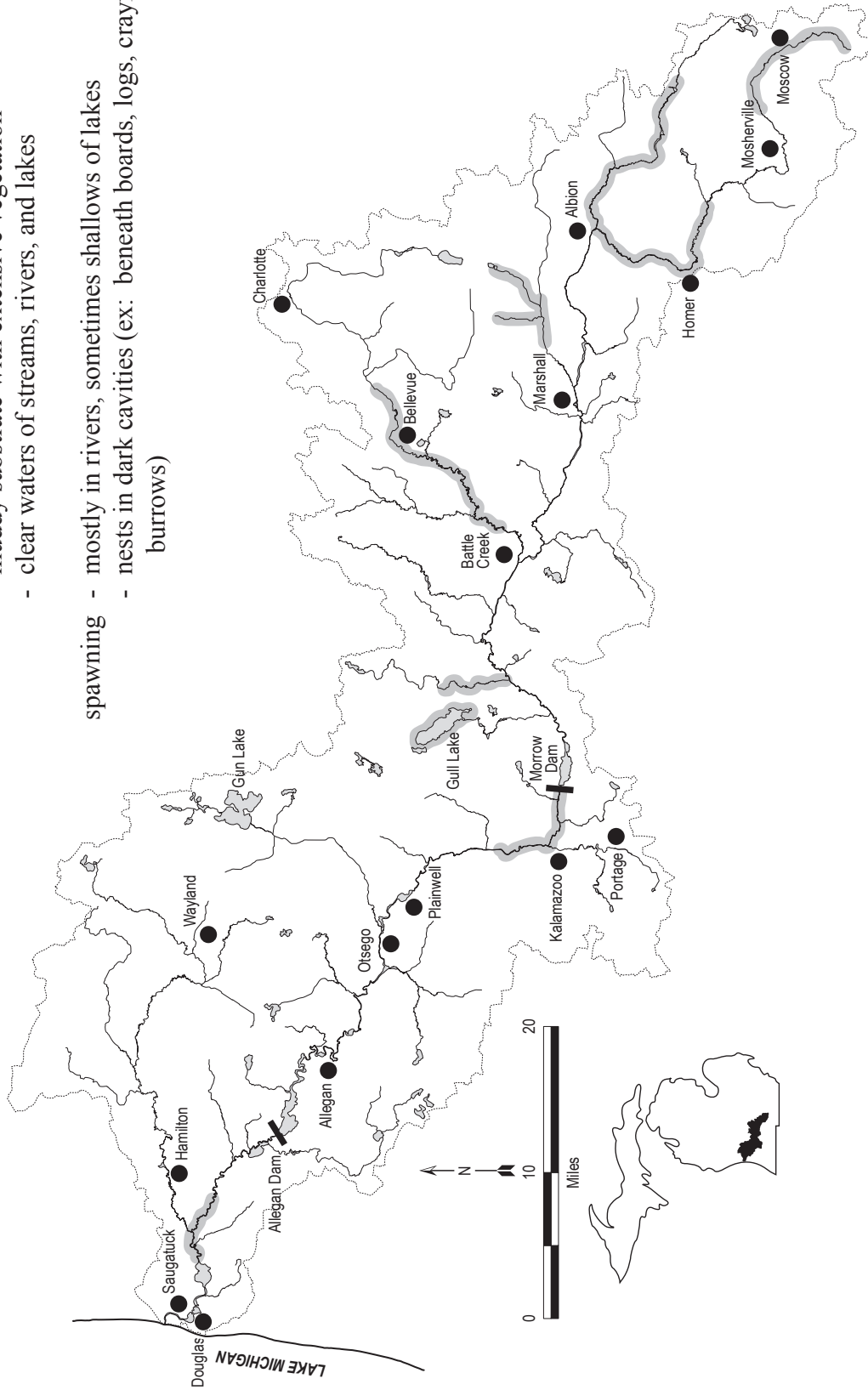


Tadpole madtom (*Noturus gyrinus*)

Habitat:

- feeding - vegetative cover in low-moderate current waters
- muddy substrate with extensive vegetation
- clear waters of streams, rivers, and lakes

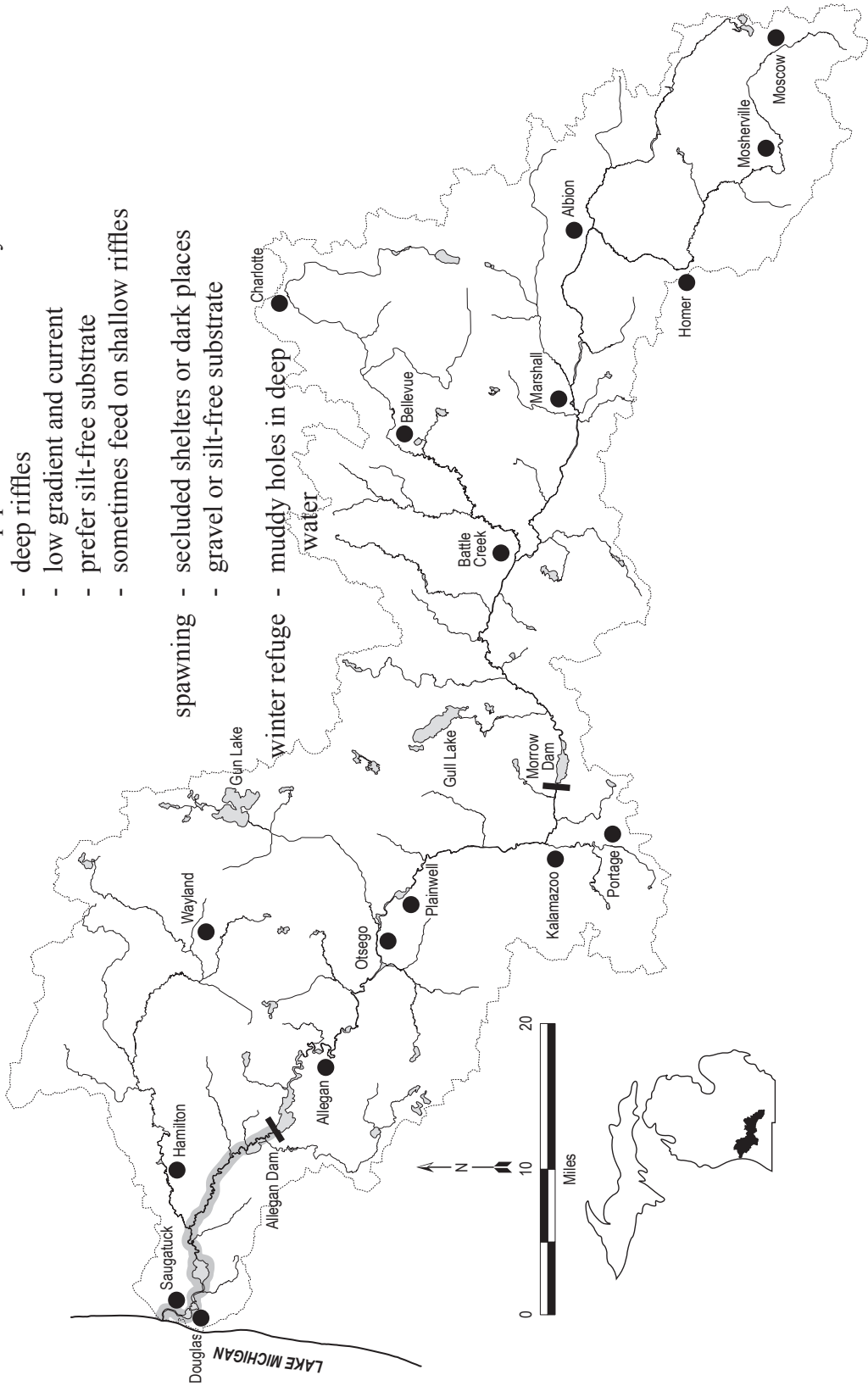
- spawning - mostly in rivers, sometimes shallows of lakes
- nests in dark cavities (ex: beneath boards, logs, crayfish burrows)



Flathead catfish (*Pylodictis olivaris*)

Habitat:

- feeding - (young) shallow riffles in fast current
 - deep pools with a lot of woody cover
 - deep riffles
 - low gradient and current
 - prefer silt-free substrate
 - sometimes feed on shallow riffles
-
- spawning - secluded shelters or dark places
 - gravel or silt-free substrate



Grass pickerel (*Esox americanus vermiculatus*)

Habitat:

- feeding - juveniles: along shore
 - adults: in deeper portions of streams, rivers, lakes, and impoundments
 - clear water, little current, dense vegetation
 - tolerates low oxygen concentrations

spawning - broadcast spawner over submerged vegetation

