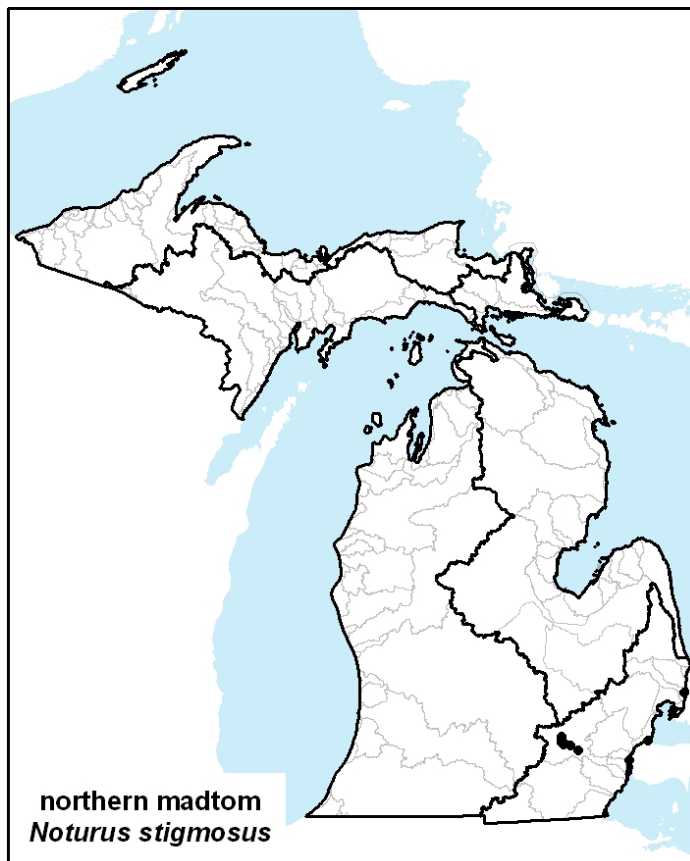


# FISH



## northern madtom

(*Noturus stigmosus*)

**DISTRIBUTION & ABUNDANCE:** State listed as endangered. This species is very rare. Abundance is unknown.

**ASSOCIATED LANDSCAPE FEATURES:** medium rivers; large rivers; gradient: fast; rock substrates

**ASSOCIATED THREATS:** altered sediment loads; invasive plants & animals; pesticides & herbicides; urban, municipal, and industrial pollution

**COMMENTS:** Michigan is the northern edge of range for this species. This species has isolated populations and a very patchy distribution across its range. Little is known about the life history of this species. May compete with round gobies (*Neogobius melanostomus*) for spawning sites. Goodchild (1993) suggests this species has widely fluctuating populations, hence effective sampling methods and efforts are needed. Population status needs to be determined.