

CATFISH — Fishery Management Plan for Tidewater Catfish

What is being considered?

The department plans to incorporate the Fishery Management Plan for Tidewater Catfish (December 2021) into regulation.

Why is this change necessary?

Catfish in the Chesapeake Bay watershed are animals belonging to the Vertebrata and Actinopterygii, or ray-finned fishes. They have been further classified in the Order Siluriformes. Two families of Siluriformes occur in North America, the Ictaluridae and the Ariidae. Of these, only the Ictaluridae are common and year-round residents in Maryland waters; therefore, they are the focus of this fishery management plan. Genetic work to describe relationships among the Ictaluridae has been accomplished by Arce et al. (2016). While clinal variation in population traits existed for widespread ictalurids, extensive introductions have muddied the genetic patterns.

The Ictaluridae have been grouped by common name into catfish, bullheads, madtoms, stonecats, and blindcats. All of these species lack scales, possess an adipose fin, possess three sharp stiff spines at the forward end of dorsal and each pectoral fin, and possess eight distinct barbels with taste buds; one long barbel from each corner of the mouth, a shorter pair near the nostrils, and four under the chin. In most ictalurid catfish, the integumentary sheaths that cover the spines have cells that produce toxins, which constitute a non-lethal and mild venom that can cause redness and mild pain if it penetrates human skin. The most virulent stings from spines, similar to bee stings, are credited to madtoms (Birkhead 1972).

There are 24 species of Ictaluridae in the United States and Canada. It is the largest freshwater family of fishes entirely indigenous to North America. The tidewater of the Chesapeake Bay watershed contains four genera and eight species of catfish, two of which are considered invasive species. A regional [Invasive Catfish Management Strategy](#) to specifically address invasive catfish was adopted by the Chesapeake Bay Program in 2020. The species of Ictaluridae in the Chesapeake Bay include: white catfish (*Ameiurus catus* Linnaeus 1758), brown bullhead (*Ameiurus nebulosus* Lesueur 1819), yellow bullhead (*Ameiurus natalis* Lesueur 1819), channel catfish (*Ictalurus punctatus* Rafinesque 1818), margined madtom (*Noturus insignis* Richardson 1836), tadpole madtom (*Noturus gyrinus* Mitchill 1817), blue catfish (invasive) (*Ictalurus furcatus* Lesueur 1840), and flathead catfish (invasive) (*Pylodictis olivaris* Rafinesque 1818).

Catfish thriving in the Chesapeake Bay watershed support popular recreational and commercial fisheries. Given increasing environmental threats including invasive species, strategies to monitor and manage catfish populations are needed in Maryland's tidewater. Catfish in tidal freshwater areas of Maryland include native catfish, non-native but non-invasive catfish, and invasive catfish. A regional [Invasive Catfish Management Strategy](#) to address invasive catfish was adopted by the Chesapeake Bay Program in 2020. Actions related to mitigation and research identified in the strategy are also incorporated into this statewide management plan. The goal of the management plan is to maintain the ecological integrity of Chesapeake Bay ecosystems, ensure recreational and commercial harvests that support fishing and seafood industries, ensure sustainability of native and non-native, non-invasive catfish populations, and deplete invasive

catfish populations. Additionally, this plan provides background information on the occurrence and natural histories of catfish inhabiting tidewater in Maryland's Chesapeake Bay, describes current recreational and commercial fisheries for catfish, and identifies existing data sources and gaps for monitoring populations of catfish.

The objectives of the plan will be achieved by numerous actions prioritized by the Maryland Department of Natural Resources and other stakeholders in the fishing industry. Strategic actions to be implemented are detailed in a table and reviewed periodically to assess progress. Successful execution of this fishery management plan will be achieved by completing strategic actions that yield productive and profitable recreational and commercial catfish fisheries while keeping invasive catfish populations suppressed.

Who will this affect?

This will affect how the department manages catfish in tidal waters. It does not create additional rules for catfish.

Has this change been discussed with advisory groups?

The plan was developed in cooperation with workgroups and other state agencies. See the appendix for notes and additional meeting specifics. The plan was also scoped at the Sport Fisheries Advisory Commission and the Tidal Fisheries Advisory Commission meetings in January 2021. Commissioners did not have any comments at the time of scoping.

When will this be effective?

The department expects this change to be effective in 2022; however, the exact date cannot be determined. The department will follow our normal scoping and proposal procedures.

What is the specific regulatory action?

Amend Regulation .01 under COMAR 08.02.01 General.

Additional Information

[Fishery Management Plan for Tidewater Catfish \(December 2021\)](#)