Prevent the Further Spread of Invasive Crayfishes

Sport Fisheries Advisory Commission, April 29 Meeting Presentation by Jay Kilian, MDNR Resource Assessment Service

- The release of live, unused bait into Maryland waters is a common practice among Maryland anglers especially among anglers who use live crayfish. Based on a survey of Maryland's freshwater anglers conducted in 2008:
 - o Approximately 20% of freshwater anglers use live crayfish as bait
 - o Of those anglers, 69% reported releasing unused crayfish alive into streams and lakes at the end of their fishing trips
 - o Most anglers (72%) reported that they caught their own crayfish; 26% reported that they purchased crayfish from bait shops
- The use and release of live crayfishes as bait by anglers has resulted in the introduction of five non-native crayfish in Maryland waters. Three of these Rusty Crayfish, Virile Crayfish, and Red Swamp Crawfish are considered invasive due to their adverse effects on aquatic ecosystem function and native biodiversity.
- Virile Crayfish, first introduced in the Patapsco River in the late 1950s, is now the most widespread invasive crayfish known from 11 river basins in Central and Western Maryland. The rapid spread of this species is the result of bait bucket introductions the transfer of live crayfish from one watershed to another and their release by anglers.
- The introduction of invasive crayfish is the most important threat to native crayfish diversity worldwide. In the Mid-Atlantic region, the spread of invasive crayfishes through their use as bait has been followed by declines of native crayfishes in Maryland, Pennsylvania, and West Virginia.
- Due to their ability to achieve high densities and their importance as both prey and predator, invasive crayfishes have the capacity to affect more than just native crayfish diversity. They are known to adversely affect stream insects, mussels, snails, amphibians, reptiles, fishes, and sport fisheries.
- In recognition of the threats posed by invasive crayfish introductions, several U.S. states and Canadian provinces have banned the use of live crayfishes as bait and many others have restricted their use in some way.
- In response to the discovery of Rusty Crayfish in 2008, Maryland prohibited the catch, use, or possession of crayfish in the Upper Potomac, Middle Potomac, and Lower Susquehanna River basins unless the head is removed immediately upon capture. This regulation aimed to prevent the catch and transfer of Rusty Crayfish from these basins into other Maryland waters.
- MDNR is considering expanding this regulation to include all river basins. A statewide ban on the catch, use, or possession of live crayfish would be more enforceable, easily interpreted by anglers and provide protection to all Maryland waters against the spread of invasive crayfishes.