PRELIMINARY INVESTIGATIONS ON THE USE OF CULTURED COBIA (*RACHYCENTRON CANADUM*) FOR STOCK ENHANCEMENT WITHIN CHESAPEAKE BAY, VIRGINIA

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The cobia (*Rachycentron canadum*) is one of the most conspicuous and sought after big game fish during the summer in lower Chesapeake Bay. These summer visitors support a large recreational fishery throughout their range along the southeastern coast and the Gulf of Mexico. It is also a highly prized food fish which commands premium prices in upscale restaurants, when available. With cobia being a highly sought after recreational fish and fishing pressure increasing, the question of future stock enhancement has been raised. Basic information such as the survival of cultured cobia in the wild, assimilation into the wild population and release site fidelity will be necessary before any decisions are made to pursue extensive use of cultured cobia for stock enhancement programs.

As a first step towards answering some of these questions, the Virginia Institute of Marine Science finfish culture program initiated a small-scale tag-and-release project in 2003. A small number (120) of one-year-old, T-bar tagged, cultured cobia, weighing between 908 g and 1816 g were released in July, 2003, into the York River, approximately 8 km upriver from Chesapeake Bay. Despite the small number of fish which were released, tagged cobia were caught in 2003 by both commercial and recreational fishermen. A total of 21 tagged fish were captured (17.5%). The returns in 2003 provided a preliminary indication that cultured fish will disperse over a wide area, will forage in the wild, and will associate with wild fish of the same general size. With winter approaching, it was assumed that the remaining tagged cobia left Chesapeake Bay with the wild fish to over-winter in more southerly climates. In July, 2004, a cultured cobia tagged and released in 2003 was recaptured within Chesapeake Bay. When first tagged this cobia measured 54.6 cm; upon recapture it was 86.4 cm long.

In June, 2006, 219 one-year-old cultured cobia were tagged and released into the York River. Recaptures during the summer of 2006 will be included in this report.