

USA Marine Scientists Induce Spawning of Cobia

On June 15, the Virginia Institute of Marine Science (VIMS) cobia (*Rachycentron canadum*) were induced to spawn in a water system. According to VIMS aquaculture specialist Mike Oesterling, this is the initial step in the development of a

Dr. Bill DuPaul, head of the Virginia Sea Grant Marine Advisory Program, explained: "Cobia are considered prime candidates for aquaculture development because of their fast growth rate as juveniles and an expanding demand for them in the seafood market place".

Said Oesterling: "Cobia are highly-prized both as a food fish and a recreational trophy fish. We've been investigating a cobia culture for four years now. But this is our first attempt at spawning."

Previous work was conducted on wild-harvested juvenile cobia that were obtained from commercial fishermen. Those studies set the stage for the spawning by providing information on handling and holding cobia in captivity.

Using funding from a National Sea Grant aquaculture initiative grant, personnel from the VIMS finfish aquaculture program for the capture of broodstock fish by recreational cobia fishermen. They then transferred the fish to holding facilities at the Gloucester Point campus of VIMS, part of the College of William and Mary.

Once at VIMS, the fish were administered a hormonal implant to stimulate the release of eggs and sperm, and were placed in a 7500 gallon (34,087-litre) recirculating water system equipped with filtration units and egg collection devices. Within 24 hours of hormonal implants, the six female cobia - several weighing close to 50lb (22.68kg) - and three male cobia began spawning.

"We began collecting fertilized eggs around 8:30 am on June 15, and on June 16 at 4:00 pm, the fish were still producing eggs," said Oesterling. "Literally, the fish have produced millions of eggs. The eggs were then taken to our larval culture facility for further on-growth."

The overall goal of the cobia culture project is to produce juvenile fish and investigate the requirements for commercial production. Additionally, vital life history information will be obtained during the larval and early juvenile stages of the cobia. As a result, they will be the subject of different growth studies aimed at providing valuable information for the continued culture of cobia.

For further details:

Mike Oesterling
VIMS
PO Box 1346
Gloucester Point
VA 23062-1346, USA
Fax: +1804 684 7161
E-mail: mike@vims.edu