

**POSITION OF THE
VIRGINIA INSTITUTE OF MARINE SCIENCE
ON THE USE OF
PATENT TONGS
IN THE UPPER RAPPAHANNOCK RIVER**

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**VIMS POSITION ON THE USE OF
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IN THE UPPER RAPPAHANNOCK RIVER**

It has been proposed by the Virginia Watermen's Association that the current Patent Tong restriction line at river mile 21 on the Rappahannock River, Virginia be moved up river an additional 3-4 miles. This change would include parts of Morattico Bar.

VIMS has several reservations concerning this proposal. The proposed extension area is at the upper end of the naturally productive range of the Rappahannock oyster. A good strike, as in 1981, occurs this far up river infrequently. The patent tong takes a 4" bite (a lick) from the bottom, which when combined with the weight (100 pounds) of the tongs breaks the shell crust of the oyster bar. The upper Rappahannock oyster bars, unlike those in the James River, are narrow steep ridges with the oysters on top. Any disruption of this feature can reduce the productivity. Oyster bars need to be "cultivated" (i.e. the shells turned). Hand tongs do this, but the patent tongs often break through the crust.

The question of the size of the necessary brood needed to restock the river is unanswered. Overharvesting and diseases during the summer of 1986 have seriously depleted the adult (market) oysters in the first 10 miles of the river. Fall survey counts suggest that 30-70% of the adult oysters were killed during the summer of 1986. The only substantial stock is in the 15-25 mile area.

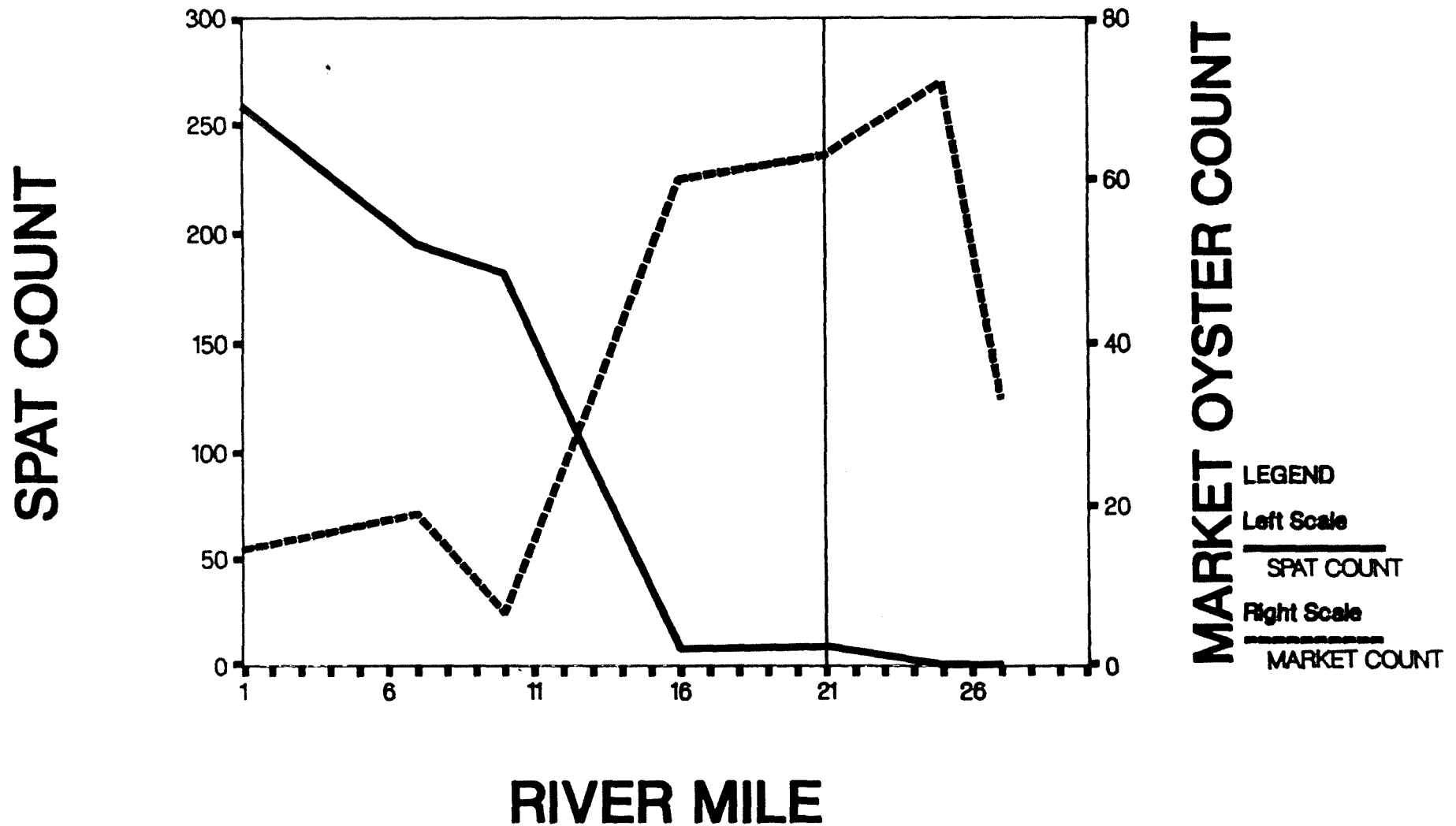
The attached figure shows the results of the VIMS fall, 1986 survey of the Rappahannock. Spat count is high (>200/Bu), and market count is low (<20/Bu) in the lower 10 miles. Above mile 15 the situation changes. Here the spat count drops to less than 50/Bu, and the market count rises to greater than 60/Bu. The vertical line at river mile 21 is the current restriction line. The highest counts of market oysters is found on Morattico Bar, a traditional shaft or hand tong area, at river mile 25. Spat count here is less than 1/Bu.

Clearly, the lower river, below mile 10 (Towles Point) should be protected, even closed. The representative to the watermen's association has indicated that, "this stretch of the river has closed itself". While VIMS is basically opposed to unrestricted use of the patent tong in the upper river, an alternate solution might be reached.

Extend the patent tong area up river during the 1987 season to, but not including Morattico Bar; and close the river below Towles Point during the 1987-1988 season.

This alternative solution will 1) provide short term relief in the form of a harvest for the patent tongers during the coming season, and 2) protect the spat in the lower river where mortality and harvest exceed replacement.

RAPPAHANNOCK RIVER OYSTER SURVEY FALL 1986



(DATA FROM VIMS FALL SURVEY, 1986)