

9/94

VNHP

**PROJECT TITLE:** Status survey of rare mussels in the Lower James River Basin tributaries.

**NEED:** Three category 2 federal candidate unionid mussel species have been reported to inhabit the James River Basin. These species are the Atlantic pigtoe (Fusconaia masoni), the yellow lampmussel (Lampsilis cariosa), and the green floater (Lasmigona subviridis). Additionally, a federally-listed endangered species, the James spiny mussel (Pleurobema collina), also occurs here. This survey will determine the status of these four rare mussels in the Chickahominy and Appomattox River Basins. These two rivers are both large tributaries of the James River; previous survey efforts for Unionidae in them have been negligible. This project will employ a continuous survey of the mainstem river reaches as its primary technique. The resulting data will be used for the identification of significant mussel beds and the establishment of long-term monitoring sites.

**ESTIMATED COST:**

\$4000

**PROJECT TITLE:** Status survey of rare mussels in the York River Basin

Two mussel species listed as category 2 candidates by the USFWS have been reported from the South Anna River and Pamunkey River of the York River Basin in Virginia. These species are the yellow lampmussel (Lampsilis cariosa) and the green floater (Lasmigona subviridis). Both species were reported on the basis of collections made at road crossings. A recent reexamination of these sites failed to produce specimens of the green floater. The yellow lampmussel was found at only two sites during the recent surveys, and was represented by a single specimen at each site. Given that valves of over 40 individuals were collected from one of these sites in the late 1970's, there appears to have been a marked decline in the population of the yellow lampmussel within the York River Basin. We propose to do a continuous float survey of the South Anna River and the Pamunkey River within the previously identified range of these two species. The Mattaponi River also will be examined for these species. The resulting data will be used for the identification of significant mussel beds and the establishment of long-term monitoring sites.

**ESTIMATED COST:**

\$3000

**PROJECT TITLE:** Alasmidonta varicosa - Northern Virginia

**NEED:** The brook floater (Alasmidonta varicosa) is a federal candidate (C2) mussel that has apparently undergone a marked decline in its range. The known Virginia populations of the Shenandoah Valley and Northern Virginia have been documented to be highly reduced, if not extirpated. In 1991, DCR-DNH documented the continued occurrence of this species in tributaries adjacent to the highly urbanized Northern Virginia area. This survey proposes to examine this area for the continuing presence of this mussel in Loudoun County and Prince William County. The resulting report will provide baseline data on the occurrence of these species in these urbanizing counties. Baseline information will be recorded for the establishment of long-term monitoring sites to document the changes in these populations as the result of factors concomitant with increased urban and suburban development in these areas.

**ESTIMATED COST:**

\$2000