

M. JAMES SPINYMUSSEL

The James spiny mussel is a small freshwater mussel that grows to a maximum length of about 2.8 inches. The 1991 "Proceedings of a Symposium" entitled "Virginia's Endangered Species" contains a two page section on the James spiny mussel (*Pleurobema collina*) by Richard Neves of the Virginia Cooperative Fish and Wildlife Research Unit at Virginia Tech. This paper states, "*The James spiny mussel is confined to the upper James River basin in Virginia and West Virginia. It is extremely rare throughout its range. This species may be declining because of habitat degradation and reproductive isolation of subpopulations in tributaries of the upper James River ...the decline of this species probably began with settlement and industrialization ... The James spiny mussel was officially listed as federally endangered on 22 July 1988. The Virginia Natural Heritage Program lists this species as G1/S1, recognizing its extremely rare status throughout its range and in Virginia. The recommended status for this species in Virginia is endangered. Activities ...likely to affect the streams in which Pleurobema collina lives should be monitored ...*" (Emphasis added.)

In the late 1980's, a VDOT biologist found three species of mussels in Ivy Creek but did not identify them. The Technical Memorandum for Environmental Impact Statement (April 1990) titled "*Aquatic Resources in Water Quality*" stated, "... in the spring of 1990, VDOT will confirm the absence of the species in the study area through a survey conducted by R.J. Neves." This survey was never performed. However, the January 1993 FEIS stated, "*No threatened or endangered species would be affected by any of the candidate build alternatives.*" The FEIS listed only two of the five known James spiny mussel habitats in Albemarle County, located prior to 1993.

In February 1997, CATCO commissioned a certified ecologist, Philip Stevenson, to survey Ivy Creek and its tributaries crossed by the Bypass. He found dead shell evidence of the James spiny mussel. VDOT then conducted its own survey in July 1997, found shells of one dead spiny mussel, and concluded that the Bypass did not threaten the spiny mussel since there were no live James spiny mussels found in the survey area. Stevenson re-examined this same area on September 27 and October 4, 1997 and found live spiny mussels downstream of the Bypass drainage area. VDOT consultant Neves found one dead spiny mussel in 24.5 man-hours of searching, while Stevenson found seven spiny mussels (3 live and 4 dead) in eight hours. Since almost two miles of the proposed Bypass would cross and pass through the drainage area of nine Ivy Creek tributaries, and since Bypass construction sedimentation in these nine tributaries would severely impact the spiny mussel habitat, Stevenson concluded that the Bypass "*poses a significant threat of extinction to the James spiny mussel.*"

On November 10, 1997, CATCO demanded that VDOT commission a revised *Environmental Impact Statement*. On April 10, 1998, the Federal Highway Administration requested the U.S Fish and Wildlife Service (FWS) to provide an opinion on this matter. On May 26, 1998, CATCO sent to William Hester (FWS) a 152-page document which detailed the background on the James spiny mussel issue and the

environmental impacts of the proposed Bypass. In his May 27, 1998 letter to Hester, DeForest Mellon (Professor of Biology, University of Virginia) fully supported the CATCO document.

VDOT has stated that if spiny mussels exist in the path of the Bypass, it would protect them. However, CATCO believes this is impossible because VDOT has been unable to find live

specimens in Ivy Creek, and its prior attempts to protect endangered aquatic species have only occurred at bridge crossings. In contrast, this location involves a large drainage basin for over a mile of the Bypass. The basin will contain nine large earthen fills of more than 1.1 million cubic yards with embankments as high as 78 feet placed over the nine tributaries to Ivy Creek. The run-off and increased sedimentation from these massive earthworks will have a severe impact on all aquatic life and will likely destroy this spiny mussel habitat.

On June 5, 1998, the FWS issued an opinion that the Bypass “... is not likely to jeopardize the continued existence of the James Spiny mussel and is not likely to destroy or adversely modify designated critical habitat.” In his July 25, 1998 letter to William Hester of FWS, CATCO President George Larie challenged this conclusion and requested the FWS to re-evaluate its findings and decision. On August 18, 1998, Karen Mayne of FWS denied Larie’s request.

On July 27, 1998, Mayne acknowledged Larie’s May 26, 1998 letter and the 152 pages of documentation. CATCO has a signed receipt showing delivery on June 1, 1998. Since the FWS opinion was issued on June 5, 1998, Larie questioned whether the CATCO document was considered in the FWS opinion.

On September 26, 1998, Larie wrote Mayne and questioned whether the FWS opinion was truly independent since FWS met and discussed the issue with VDOT and its consultant Neves and did not consult with CATCO and its consultant Stevenson. On October 9, 1998, Mayne wrote to Larie, stating that the FWS opinion was independent and that CATCO could appeal the decision to the Regional Director of the FWS. On November 10, 1998 CATCO appealed the FWS opinion to R. Lambertson (FWS Regional Director). On December 7, 1998, J. Geiger (FWS Acting Regional Director) wrote to CATCO affirming the original FWS opinion.

Although the *FEIS* and VDOT denied the existence of the James spiny mussel in the path of the Bypass, ecologist Stevenson found a live population. Despite an FWS' official's verbal comment that Bypass construction might cause the loss of the James spiny mussel population in Ivy Creek, the FWS issued a “no significant impact” opinion that the Bypass would not significantly impact the existence of the endangered species.

SEE APPENDIX “M” FOR SUPPORTING DOCUMENTS