

**Freshwater Bivalves in Elk River, West Virginia with Emphasis on
Federally Endangered Species**

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Abstract

* During 1991 and 1992 an extensive survey was conducted of the unionid bivalve population in the Elk River. The purpose was to determine the status of two federal candidate species, *Pleurobema clava* and *Epioblasma torulosa rangiana*, and the federally endangered *Lampsilis abrupta*. Twenty-one stations were surveyed in the Elk River below Sutton Lake, and three stations above. Methods used were water scopes, snorkeling, scuba, and bank/midden searches. The Elk River maintains a very diverse and abundant bivalve population throughout most of its length below Sutton Dam (24 species). A limited population exists above Sutton Lake (6 species). Live individuals of *P. clava* were found at six of the 21 stations surveyed below the dam, and reproduction was evident. No specimens of *E. t. rangiana* were collected. Recently however, two live individuals of *E. t. rangiana* were located at one site in the lower river. Limited numbers of *L. abrupta* were found inhabiting the lower reaches of the river although no evidence of reproduction has been seen.

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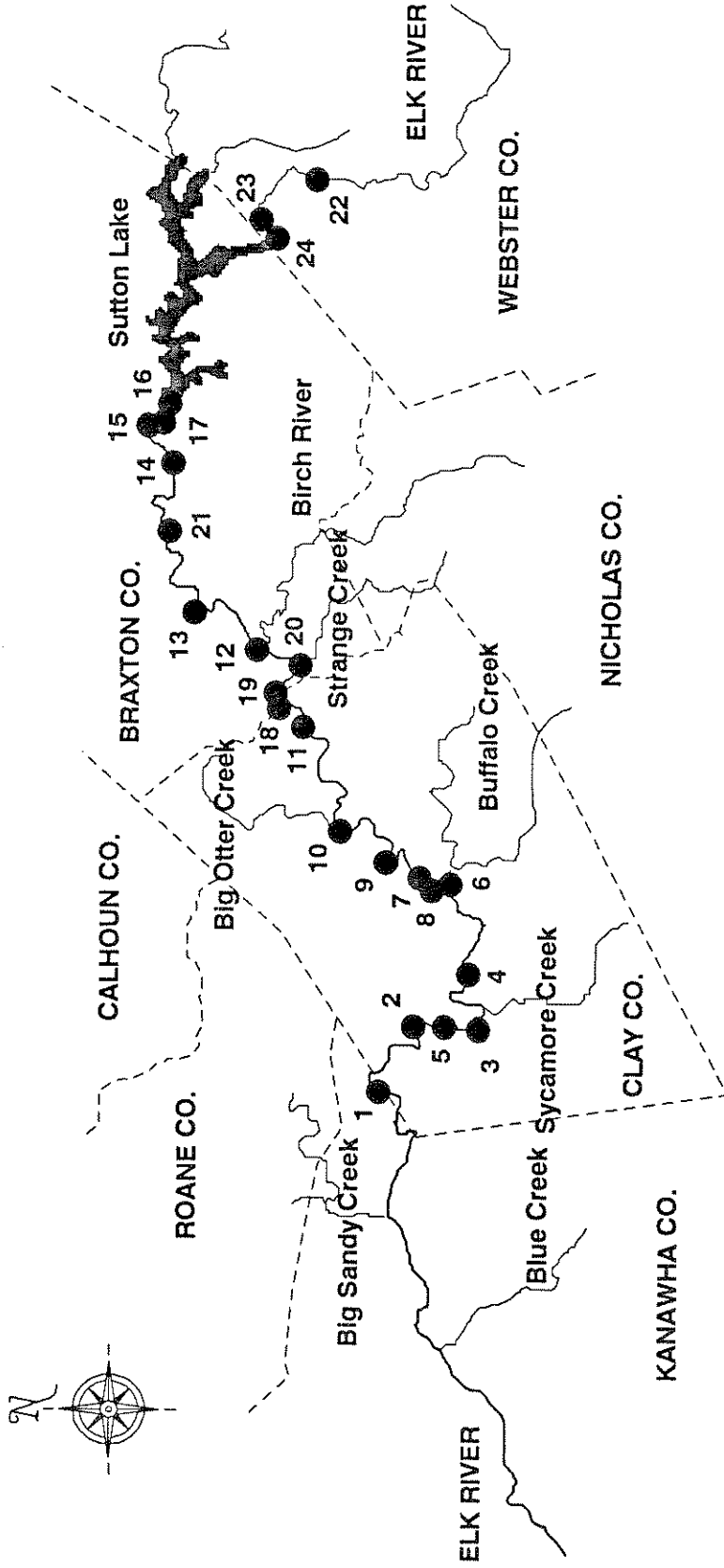


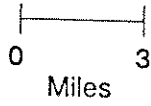
Figure 1. Location of freshwater unionid survey stations on the Elk River, West Virginia, 1991-1992.

Table 2. Species composition of unionid bivalves collected from the Elk River from August 1991 through May 1992 (Stations listed in ascending stream order).

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
<i>Alasmidonta marginata</i>																							
<i>Pyganodon grandis</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Strophitus undulatus</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Lasmigona c. costata</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Quadrula pustulosa</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Amblema plicata</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Fusconia subrotunda</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>F. flava</i>	*	*	D	*	*	*	*	*	*	*	*	*	D	*	*	*	*	*	*	*	*	*	*
<i>Cyclonaias tuberculata</i>	*																						
<i>Pleurobema clava</i>			D	D	*	*	*	*	*	*	*	D	*	*	*	*	*	*	*	*	*	*	*
<i>Elliptio crassidens</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>E. dilatata</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Ptychobranchus fasciolaris</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Actinonaias ligamentina</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Obovaria subrotunda</i>	*	*	*	*	*	D	*	D	D	D	D	D	*	*	*	*	*	*	*	*	*	*	*
<i>Potamilus alatus</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Ligumia recta</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Villosa fabalis</i>																							
<i>V. iris</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Lampsilis siliquoida</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>L. abrupta</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>L. cardium</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>L. fasciola</i>	*	*	D	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>L. ovata</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Epioblasma triquetra</i>	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D

D = empty shells only

Patterson Creek Watershed



N

