

THE NAIAD FAUNA OF THE GREEN RIVER AT MUNFORDVILLE,
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(Abstract)

The Green River from its headwaters through the upper third of its length combines a number of factors favorable to abundant naiad life. These factors include: soluble carbonate bedrocks, a firm sand and gravel substrate formed from sandstones and shales, and a relatively steep gradient providing both food-producing shallows and high oxygen levels. There is a fortunate lack of significant pollution and only one major impoundment. The favorable factors appear to reach an optimal combination in the vicinity of Munfordville, Kentucky, just before the Green becomes deep and sluggish during the rest of its meandering transit to the Ohio River.

The only previous Munfordville naiad records are those of eight species collected by Clench in 1925 (Ortmann, 1926). Six large collections made here since 1960 have increased the known naiad fauna to 43 species and 4 additional forms. Four of these species and one form are the first records for the entire Green River system.

Naiad Species Recorded from the Green River
at Munfordville, Kentucky

P—Previously Recorded (Ortmann, 1926)
R—Recently Collected (Stansbery, 1961-64)
*—New Green River Record

	<i>Recorded</i>
1. <i>Cumberlandia monodonta</i> (Say, 1829).	R*
2. <i>Fusconaia flava</i> (Raf., 1820).	R
3. <i>Fusconaia subrotunda</i> (Lea, 1831).	R
4. <i>Megalonaias gigantea</i> (Bar., 1823).	R
5. <i>Amblema plicata</i> (Say, 1817).	R
6. <i>Quadrula quadrula</i> (Raf., 1820).	R
7. <i>Quadrula pustulosa</i> (Lea, 1831).	R
8. <i>Quadrula metanevra</i> (Raf., 1820).	R
9. <i>Quadrula cylindrica</i> (Say, 1817).	R
10. <i>Tritogonia verrucosa</i> (Raf., 1820).	P R
11. <i>Cyclonaias tuberculata</i> (Raf., 1820).	R
12. <i>Plethobasus cyphus</i> (Raf., 1820).	R
13. <i>Pleurobema clava</i> (Lam., 1819).	R
14. <i>Pleurobema cordatum</i> f. <i>cordatum</i> (Raf., 1820).	R
15. <i>Pleurobema cordatum</i> f. <i>coccineum</i> (Con., 1836).	R
16. <i>Pleurobema cordatum</i> f. <i>pyramidatum</i> (Lea, 1831).	R
17. <i>Pleurobema cordatum</i> f. —————	R*
18. <i>Elliptio crassidens</i> (Lam., 1819).	R
19. <i>Elliptio dilatatus</i> (Raf., 1820).	P R
20. <i>Lastena lata</i> (Raf., 1820).	R
21. <i>Lasmigona costata</i> (Raf., 1820).	R
22. <i>Alasmidonta calceolus</i> (Lea, 1828).	R

23. <i>Atasmidonta marginata</i> Say, 1818.	P R
24. <i>Strophitus undulatus</i> (Say, 1817).	P R
25. <i>Simpsoniconcha ambigua</i> (Say, 1825).	R*
26. <i>Ptychobranchnus fasciolaris</i> (Raf., 1820).	P R
28. <i>Obvaria subrotunda</i> (Raf., 1820).	R
29. <i>Obovaria retusa</i> (Lam., 1819).	R
30. <i>Actinonaias carinata</i> (Bar., 1823).	P R
31. <i>Truncilla truncata</i> Raf., 1820.	R
32. <i>Leptodea fragilis</i> (Raf., 1820).	R
33. <i>Leptodea leptodon</i> (Raf., 1820).	R*
34. <i>Proptera alata</i> (Say, 1817).	R
35. <i>Proptera laevissima</i> (Lea, 1829).	R*
36. <i>Carunculina parva</i> (Bar., 1823).	R
37. <i>Ligumia recta</i> (Lam., 1819).	R
38. <i>Villosa fabalis</i> (Lea, 1831).	R
39. <i>Villosa ortmanni</i> (Walker, 1925).	P R
40. <i>Villosa lienosa</i> (Con., 1834).	R
41. <i>Lampsilis anodontoides</i> (Lea, 1831).	R
42. <i>Lampsilis radiata siliquoidea</i> (Bar., 1823).	R
43. <i>Lampsilis ovata</i> f. <i>ovata</i> (Say, 1817).	R
44. <i>Lampsilis ovata</i> f. <i>ventricosa</i> (Bar., 1823).	R
45. <i>Lampsilis fasciola</i> Raf., 1820.	R
46. <i>Dysnomia triquetra</i> (Raf., 1820).	R
47. <i>Dysnomia torulosa</i> (Raf., 1820).	R

During extensive collecting in the Ohio River system north of the Cumberland drainage over the past decade, we have not found any other site which has yielded as great a variety of naiad species as the Green River at Munfordville. The number of species and additional forms now recorded from the entire Green system is 64, and may increase with further research. This river today probably has the finest representative Ohioan naiad fauna yet in existence and this fauna may well reach its peak at Munfordville.