

10 go with slides of Stansbury's
copies from Greg Church

Stansbury
et al
1986

PHOTOGRAPHS

All photographs are by A. E. Spreitzer, Columbus, Ohio.

These photographs are of all of the species of unionid mollusks which have been recorded from the upper Clinch River at and above St. Paul, Virginia. The specimens illustrated are all OSUM voucher specimens from the Clinch River. Some of them were collected prior to the present study, and some were found downstream from St. Paul (CRM 255).

Cumberlandia monodonta (Say, 1829).....105
Strophitus undulatus tennesseensis Frierson, 1927.....105
Alasmidonta marginata Say, 1818.....105
Alasmidonta viridis (Rafinesque, 1820).....107
Pegias fabula (Lea, 1838).....107
Lasmigona costata (Rafinesque, 1820).....107
Lasmigona holstonia (Lea, 1838).....107
Quadrula cylindrica strigillata (Wright, 1898).....107
Quadrula sparsa (Lea, 1841).....109
Quadrula intermedia (Conrad, 1836).....109
Amblema plicata plicata (Say, 1817).....109
Cyclonaias tuberculata (Rafinesque, 1820).....109
Fusconaia maculata lesueuriana (Lea, 1840).....111
Fusconaia cuneola (Lea, 1840).....111
Fusconaia cor (Conrad, 1834).....111
Fusconaia barnesiana (Lea, 1838).....111
Lexingtonia dolabelloides (Lea, 1840).....111
Plethobasus cyphus (Rafinesque, 1820).....111
Pleurobema oviforme (Conrad, 1834).....111
Pleurobema sintoxia (Rafinesque, 1820).....111
Elliptio dilatata (Rafinesque, 1820).....113
Hemistena lata (Rafinesque, 1820).....113
Ptychobranthus fasciolaris (Rafinesque, 1820).....113
Ptychobranthus subtentum (Say, 1825).....113
Actinonaias ligamentina ligamentina (Lamarck, 1819).....115
Actinonaias pectorosa (Conrad, 1834).....115
Truncilla truncata Rafinesque, 1820.....115
Lemiox rimosus (Rafinesque, 1831).....115
Leptodea fragilis (Rafinesque, 1820).....117
Potamilus alatus (Say, 1817).....117
Medionidus conradicus (Lea, 1834).....117
Ligumia recta (Lamarck, 1819).....117
Villosa fabalis (Lea, 1831).....119
Villosa perpurpurea (Lea, 1861).....119
Villosa iris ssp.....119
Villosa vanuxemi (Lea, 1838).....121
Lampsilis ventricosa (Say, 1817).....121
Lampsilis ovata (Say, 1817).....121
Lampsilis fasciola Rafinesque, 1820.....123
Toxolasma lividus (Rafinesque, 1831).....123
Epioblasma haysiana (Lea, 1834).....123
Epioblasma capsaeformis (Lea, 1834).....125
Epioblasma florentina (Lea, 1857).....125
Epioblasma walkeri (Wilson & Clark, 1914).....125

* *Cumberlandia monodonta* (Say, 1829). OSUM 8656
Clinch River at St. Paul, Wise Co., Virginia.
D.H. Stansbery, 29 Aug. 1963. Length = 132 mm

LEFT: *Strophitus undulatus tennesseensis* Frierson, 1927. OSUM 23252.4
Clinch River at Kyles Ford, 10 mi. NE of Sneedville, Hancock Co.,
Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 74 mm

RIGHT: *Alasmidonta marginata* Say, 1818. OSUM 16753.6
Clinch River about 1/4 mi. below Kyles Ford bridge, Hancock Co.,
Tennessee.
D.H. Stansbery, et al., 12 Oct. 1965. Length = 55 mm

LEFT: *Alasmidonta viridis* (Rafinesque, 1820). OSUM 47878
Copper Creek, Mile 2.1, [about 1.6 mi. NE of Speers Ferry, 7.6
mi. WNW of Gate City, Taylor/Estillville Dist.], Scott Co.,
Virginia.
S.A. Ahlstedt, et al., 12 May 1980. Length = 27 mm

* RIGHT: *Pegias fabula* (Lea, 1838). OSUM 20656
Clinch River 0.2 mi. E of Clifffield, 8.3 mi. W of Tazewell,
Tazewell Co., Virginia.
J.M. Condit, M.B. Trautman, 12 April 1968. Length = 22 mm

TOP LEFT: *Lasmigona costata* (Rafinesque, 1820). OSUM 49765
Clinch River at Kyles Ford, below Tn.Rt. 70 bridge, [4.4 mi. ENE
of Rock Hill, 10.1 mi. ENE of Sneedville], Hancock Co., Tennessee.
Glen Fallo, 22 July 1981. Length = 97 mm

* TOP RIGHT: *Lasmigona holstonia* (Lea, 1838). OSUM 41992
North Fork Clinch River at Va.Rt. 61/U.S.Rt. 460 bridge, 1.1 mi.
S of Five Oak, 1.8 mi. NE of center of Tazewell, Jeffersonville
Dist., Tazewell Co., Virginia.
D.H. Stansbery, 21 May 1978. Length = 38 mm

BOTTOM: *Quadrula cylindrica strigillata* (Wright, 1898). OSUM 16364
Clinch River at Cleveland, Russell Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 7 Oct. 1965. Length = 82 mm

LEFT: *Quadrula sparsa* (Lea, 1841). OSUM 19372.6
Powell River near Hoop, 9 mi. NE of Tazewell, Claiborne Co.,
Tennessee.
D.H. Stansbery, 22 Sept. 1967. Length = 62 mm

* RIGHT: *Quadrula intermedia* (Conrad, 1836). OSUM 8527
Clinch River above bridge at St. Paul, Wise/Russell Co., Virginia.
C.B. Stein, 16 July 1963. Length = 66 mm

LEFT: *Amblyma plicata plicata* (Say, 1817). OSUM 28107.6
Clinch River at mouth of Possumtrot Run, 4.8 mi. ENE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 58 mm

RIGHT: *Cyclonaias tuberculata* (Rafinesque, 1820). OSUM 33484.6
Clinch River 1.1 mi. SE of Sneedville, 9.4 mi. WSW of Kyles Ford,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 16 Oct. 1972. Length = 81 mm

- TOP LEFT: *Fusconaia maculata lesueuriana* (Lea, 1840). OSUM 16705.2
Clinch River at mouth of Copper Creek, Scott Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 10 Oct. 1965. Length = 49 mm
- TOP RIGHT: *Fusconaia cuneola* (Lea, 1840). OSUM 16554.5
Clinch River above Va.Rt. 65 bridge at Dungannon,
Scott Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 9 Oct. 1965. Length = 41 mm
- BOTTOM LEFT: *Fusconaia cor* (Conrad, 1834). OSUM 25765.1
Clinch River at mouth of Copper Creek at Clinchport, 9.2 mi.
W of Gate City, Scott Co., Virginia.
D.H. Stansbery, W.J. Clench, 7 Oct. 1970. Length = 38 mm
- BOTTOM RIGHT: *Fusconaia barnesiana* (Lea, 1838). OSUM 16332.5
Clinch River at Va.Rt. 80 bridge, 3 mi. SE of Honaker,
Russell Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 6 Oct. 1965. Length = 47 mm
- TOP LEFT: *Lexingtonia dolabelloides* (Lea, 1840). OSUM 8665.2
Clinch River at St. Paul, Wise Co., Virginia.
D.H. Stansbery, 29 Aug. 1963. Length = 64 mm
- TOP RIGHT: *Plethobasus cyphus* (Rafinesque, 1820). OSUM 12114.1
Clinch River at Rt. 23 bridge at Speers Ferry, Scott
Co., Virginia.
F.J. Moore, 1 Aug. 1964. Length = 57 mm
- BOTTOM LEFT: *Pleurobema oviforme* (Conrad, 1834). OSUM 8664.17
Clinch River at St. Paul, Wise Co., Virginia.
D.H. Stansbery, 29 Aug. 1963. Length = 51 mm
- BOTTOM RIGHT: *Pleurobema sintoxia* (Rafinesque, 1820). OSUM 33487.2
Clinch River 1.1 mi. SE of Sneedville, 9.4 mi. WSW of Kyles
Ford, Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 16 Oct. 1972. Length = 57 mm

TOP: *Elliptio dilatata* (Rafinesque, 1820). OSUM 16403.1
Clinch River at St. Paul, above Va.Rt. 58A bridge, Wise Co.,
Virginia.
D.H. Stansbery, J.J. Jenkinson, 8 Oct. 1965. Length = 63 mm

BOTTOM: *Hemistena lata* (Rafinesque, 1820). OSUM 26950.1
Clinch River at Kyles Ford, 9 mi. NE of Sneedville, Hancock
Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 75 mm

TOP: *Ptychobranhus fasciolaris* (Rafinesque, 1820). OSUM 44138.3
Clinch River at Kyles Ford, 10.1 mi. ENE of Sneedville,
10.7 - 11.4 mi. N of Rogersville, Hancock Co., Tennessee.
D.H. Stansbery, et al., 17 Aug. 1968. Length = 64 mm

BOTTOM: *Ptychobranhus subtentum* (Say, 1825). OSUM 28119.24
Clinch River at mouth of Possumtrot Run, 4.8 mi. ENE of
Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 81 mm

LEFT: *Actinonaias ligamentina ligamentina* (Lamarck, 1819). OSUM 24192.6
Clinch River at Kyles Ford, 10 mi. NE of Sneedville, Hancock
Co., Tennessee.
H.D. Athearn, D.R. Athearn, 8 Oct. 1951. Length = 84 mm

RIGHT: *Actinonaias pectorosa* (Conrad, 1834). OSUM 16648.2
Clinch River at Clinchport, Scott Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 9 Oct. 1965. Length = 71 mm

LEFT: *Truncilla truncata* Rafinesque, 1820. OSUM 24549.38
Clinch River at Webb Island, 2.2 mi. below Kyles Ford bridge,
9 mi. ENE of Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, 20 Sept. 1967. Length = 48 mm

TOP RIGHT: *Lemiox rimosus* (Rafinesque, 1831). OSUM 23279.37, male
Clinch River at Kyles Ford, 10 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 39 mm

BOTTOM RIGHT: *Lemiox rimosus* (Rafinesque, 1831). OSUM 23279.31, female
Clinch River at Kyles Ford, 10 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 39 mm

LEFT: *Leptodea fragilis* (Rafinesque, 1820). OSUM 11224.1
Clinch River about 2 mi. below Speers Ferry, Scott Co., Virginia.
D.H. Stansbery, 29 Aug. 1963. Length = 53 mm

RIGHT: *Potamilus alatus* (Say, 1817). OSUM 10867.2
Clinch River below town of Clinchport, Scott Co., Virginia.
D.H. Stansbery, 28 Aug. 1963. Length = 120 mm

TOP: *Medionidus conradicus* (Lea, 1834). OSUM 44071.9
Clinch River, R.Mi. 182.6 - 183.6, from mouth of Possumtrot Run
to upstream end of Brooks Island, 4.5 - 5.3 mi. E of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, et al., 17 Aug. 1968. Length = 48 mm

BOTTOM: *Ligumia recta* (Lamarck, 1819). OSUM 20574.10
Clinch River between mouth of Possumtrot Run and Brooks Island,
5 mi. ENE of Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, R.A. Tubb, 24 Oct. 1967. Length = 94 mm

* LEFT: *Villosa fabalis* (Lea, 1831). OSUM 16567
Clinch River above Va.Rt. 65 bridge at Dungannon,
Scott Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 9 Oct. 1965. Length = 27 mm

* RIGHT: *Villosa perpurpurea* (Lea, 1861). OSUM 8674
Clinch River at St. Paul, Wise Co., Virginia.
D.H. Stansbery, 29 Aug. 1963. Length = 45 mm

TOP LEFT: *Villosa iris* ssp. OSUM 15776.10, male
Clinch River above Va.Rt. 639 bridge, 6 mi. E of Cedar
Bluff, Tazewell Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 5 Oct. 1965. Length = 41 mm

TOP RIGHT: *Villosa iris* ssp. OSUM 16568.16, male
Clinch River above Va.Rt. 65 bridge, at Dungannon,
Scott Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 9 Oct. 1965. Length = 53 mm

BOTTOM LEFT: *Villosa iris* ssp. OSUM 15776.11, female
Clinch River above Va.Rt. 639 bridge, 6 mi. E of Cedar
Bluff, Tazewell Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 5 Oct. 1965. Length = 43 mm

BOTTOM RIGHT: *Villosa iris* ssp. OSUM 16568.15, female
Clinch River above Va.Rt. 65 bridge, at Dungannon,
Scott Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 9 Oct. 1965. Length = 52 mm

LEFT: *Villosa vanuxemi* (Lea, 1838). OSUM 28131.15, male
Clinch River at mouth of Possumtrot Run, 4.8 mi. ENE
of Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 67 mm

RIGHT: *Villosa vanuxemi* (Lea, 1838). OSUM 28131.14, female
Clinch River at mouth of Possumtrot Run, 4.8 mi. ENE
of Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, et al., 18 Oct. 1969. Length = 58 mm

TOP LEFT: *Lampsilis ventricosa* (Barnes, 1823). OSUM 26963.8, male
Clinch River at Kyles Ford, 9 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 84 mm

TOP RIGHT: *Lampsilis ventricosa* (Barnes, 1823). OSUM 26963.5, female
Clinch River at Kyles Ford, 9 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 76 mm

BOTTOM LEFT: *Lampsilis ovata* (Say, 1817). OSUM 44076.3, male
Clinch River, R.Mi. 182.6 - 183.6, from mouth of Possumtrot
Run to upstream end of Brooks Island, 4.5 - 5.3 mi. E of
Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, et al., 17 Aug. 1968. Length = 97 mm

BOTTOM RIGHT: *Lampsilis ovata* (Say, 1817). OSUM 44076.2, female
Clinch River, R.Mi. 182.6 - 183.6, from mouth of Possumtrot
Run to upstream end of Brooks Island, 4.5 - 5.3 mi. E of
Sneedville, Hancock Co., Tennessee.
D.H. Stansbery, et al., 17 Aug. 1968. Length = 95 mm

TOP LEFT: *Lampsilis fasciola* Rafinesque, 1820. OSUM 26965.7, male
Clinch River at Kyles Ford, 9 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 58 mm

TOP RIGHT: *Lampsilis fasciola* Rafinesque, 1820. OSUM 26965.5, female
Clinch River at Kyles Ford, 9 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 50 mm

BOTTOM: *Toxolasma lividus* (Rafinesque, 1831). OSUM 8542
Clinch River above bridge at St. Paul, R. Mi. 255.0,
Wise/Russell Co., Virginia.
C.B. Stein, 16 July 1963. Length = 27 mm

TOP LEFT: *Epioblasma haysiana* (Lea, 1834). OSUM 37869.2, male
"Clinch River, Tenn." Collector unknown, [18--].
Ex the Santa Barbara Museum. Length = 30 mm

TOP RIGHT: *Epioblasma haysiana* (Lea, 1834). OSUM 37869.1, female
"Clinch River, Tenn." Collector unknown, [18--].
Ex the Santa Barbara Museum. Length = 28 mm

BOTTOM LEFT: *Epioblasma haysiana* (Lea, 1834). OSUM 16382, male
Clinch River at Cleveland, Russell Co., Virginia.
D.H. Stansbery, J.J. Jenkinson, 7 Oct. 1965. Length = 38 mm

BOTTOM RIGHT: *Epioblasma haysiana* (Lea, 1834). OSUM 8679.2, female
Clinch River at St. Paul, Wise Co., Virginia.
D.H. Stansbery, 29 Aug. 1963. Length = 33 mm

LEFT: *Epioblasma capsaeformis* (Lea, 1834). OSUM 26968.11, male
Clinch River at Kyles Ford, 9 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 53 mm

RIGHT: *Epioblasma capsaeformis* (Lea, 1834). OSUM 26968.24, female
Clinch River at Kyles Ford, 9 mi. NE of Sneedville,
Hancock Co., Tennessee.
D.H. Stansbery, W.J. Clench, 1 Oct. 1971. Length = 49 mm

TOP LEFT: *Epioblasma florentina* (Lea, 1857). OSUM 10377.1, male
"Clinch Riv. Tenn." Collector unknown, [18--]. Length = 25 mm

TOP RIGHT: *Epioblasma florentina* (Lea, 1857). OSUM 10377.2, female
"Clinch Riv. Tenn." Collector unknown, [18--]. Length = 30 mm

* BOTTOM LEFT: *Epioblasma walkeri* (Wilson & Clark, 1914). OSUM 42321.2, male
Clinch River at Cedar Bluff, [at Va.Rt. 460 bridge, 1.4 mi.
N of Claypool Hill], Tazewell Co., Virginia.
C.R. Ciola, K.L. Ciola, 1 July 1978. Length = 45 mm

* BOTTOM RIGHT: *Epioblasma walkeri* (Wilson & Clark, 1914). OSUM 43294.2, female
Clinch River at Cedar Bluff, [at Va.Rt. 460 bridge, 1.4 mi.
N of Claypool Hill], Tazewell Co., Virginia.
C.R. Ciola, K.L. Ciola, 1 July 1978. Length = 42 mm