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# Freshwater Mussels of Kansas: Register of Taxa, Synonyms, and Assumed Misidentifications

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# Freshwater Mussels of Kansas:

## Register of Taxa, Synonyms, and Assumed Misidentifications

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Latest digital version: 26 January 2023 (updates to taxonomy, conservation status, and references)

The literature on the freshwater mussels (Mollusca: Margaritiferidae and Unionidae) of Kansas includes a collection of names of species and subspecies that makes it challenging for even experienced malacologists to decipher which taxa were collected. Compounding this problem is the absence of voucher specimens for some of the studies conducted in the state. It is hoped this list will aid those who are conducting research on mussels and want to assess their results relative to earlier studies. The literature cited here includes studies conducted since the 1880s on freshwater mussels in streams and other water bodies, as well as published archeological records.

The index can be used in two ways. You can search the list for the currently accepted name of a taxon to check for publications that included that name (listed under the name). Also listed are taxa that represent probable synonyms or assumed misidentifications. Entries for each of these names will provide additional references that referred to the species by these other names. You also can search the list for the name of a taxon in one of the published references. This will provide you with the scientific name that is currently recommended. Without checking voucher specimens, it is assumed that the author was referring to this species. Preferred common names are given with entries for the currently accepted scientific names.

This alphabetical list of valid taxa, synonyms, and assumed misidentifications of freshwater mussels in Kansas is drawn solely from the literature. The primary references used to provide probable synonyms were those by Burch (1975), Cope (1979), Murray and Leonard (1962), and Oesch (1995). Robert Angelo (Kansas Department of Health and Environment), William Busby (Kansas Biological Survey), Charlie Cope and Ed Miller (Kansas Department of Wildlife and Parks), Donald Distler and Daniel Bleam (Wichita State University), Dan Mulhern (US Fish and Wildlife Service), and Brian Obermeyer (The Nature Conservancy) reviewed an early version of the register, and they offered corrections and helpful suggestions. Comments by Call (1885–1887) and Isely (1925) in their publications also were useful, as were additional references noted in the list.

Currently accepted names and probable distributions of species were primarily taken from the summaries by Turgeon et al. (1988), Williams et al. (1993), Williams et al. (2017), and Graf and Cummings (2021). Currently accepted scientific and common names of native extant and extirpated species in Kansas are highlighted in bold print.

Within the list, an equals sign (=) usually indicates that the first name given is not recognized as a valid taxon and is a synonym of the second name given. In other instances, a misidentification is assumed, and the second (or third) name given likely represents the specimen collected in Kansas. Explanatory comments accompany several entries.

Species listed by the state of Kansas as endangered, threatened, or in need of conservation are noted. Additional information about species protected by the state is available from the [Kansas Department of Wildlife and Parks](#). Species listed by the US Fish and Wildlife Service as endangered or threatened are also noted. These legal designations are supplemented by the status assessments in [NatureServe](#). Species designated as endangered or threatened generally correspond to species listed as critically imperiled in NatureServe. Similarly, species listed by the state as in need of conservation usually correspond to species listed as imperiled in NatureServe. However, there are exceptions.

Of the 50 species in this list native to Kansas, 22 species are designated by the state as endangered (8), threatened (4), or in need of conservation (10), and at least 5 additional species are presumed to be extirpated. Collectively, these species comprise 54% of the native mussels in the state.

Studies continue to be published on the unionid mussels of Kansas, which prompt revisions to this list. Literature of particular note includes the summary by [Angelo et al. \(2009\)](#) of historical distributions and conservation statuses of 48 species of freshwater mussels in Kansas. Also worthy of mention is the guide to Kansas mussels beautifully illustrated by Karen Couch (1997), though it is not widely available. However, books and other resources on the identification and natural histories of mussels in several states or regions in the Mississippi River basin are listed among the general references in the literature cited at the end of the list. Some are available online at no cost.

## Margaritiferidae

### *Cumberlandia monodonta* (Say)

**Federal Status: Endangered**

**NatureServe Status: Presumed Extirpated**

Listed as *Margaritifera monodonta* (Say) in some recent references.

- Angelo et al. (2009)
- Mulhern et al. (2002)
- Wolf and Stark (2008)

## Unionidae

*Actinonaias carinata* (Barnes) = *Ortmanniana ligamentina* (Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. See comments under *O. ligamentina*.

- Branson (1966a, 1966c)
- Murray and Leonard (1962)
- Schuster (1979)

*Actinonaias ellipsiformis* (Conrad) = *Venustaconcha ellipsiformis* (Conrad)

- DuBois (1981)

*Actinonaias ligamentina* (Lamarck) = *Ortmanniana ligamentina* (Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. See comments under *O. ligamentina*.

- Angelo et al. (2009)
- Dorsey (2000)
- Liechti and Huggins (1977)
- Mulhern et al. (2002)
- Obermeyer et al. (1995)
- Schuster and DuBois (1979)
- Tiemann (2006)

*Actinonaias ligamentina carinata* (Barnes) = *Ortmanniana ligamentina* (Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. See comments under *O. ligamentina*.

- Cope (1985)

### *Alasmidonta marginata* Say, ELKTOE

**Kansas Status: Endangered**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Branson (1966a, 1966c)
- Cope (1979, 1985)
- Distler and Bleam (1987)
- Liechti and Huggins (1977)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)

### *Alasmidonta viridis* (Rafinesque), SLIPPERSHELL MUSSEL

**NatureServe Status: Presumed Extirpated**

- Angelo et al. (2009)
- Bleam and Distler (1996)
- Obermeyer et al. (1997b)

*Amblema costata* Rafinesque = *Amblema plicata* (Say)

- Branson (1966a, 1966c)
- Franzen and Leonard (1943)
- Leonard and Leonard (1946)
- Wedel (1959)

*Amblema peruviana* (Lamarck) = *Amblema plicata* (Say)

- Branson (1966b)

### *Amblema plicata* (Say), THREE RIDGE

**NatureServe Status: Apparently Secure**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Carr and Fancher (2021)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- DuBois (1981)
- Hoke (1996, 1997, 2004, 2005)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller (1993)
- Miller and Lynott (2006)
- Miller and Mosher (2008)
- Miller et al. (2014)
- Mosher (2007)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Welch et al. (2011)
- Wolf and Stark (2008)

#### Synonyms:

*Amblema costata* Rafinesque

*Amblema peruviana* (Lamarck)

*Crenodonta peruviana* (Lamarck)

*Quadrula perplicata* (Conrad)

*Quadrula plicata* (Say)

*Quadrula undulata* (Barnes)

*Unio plicata* Say

*Unio undulatus* Barnes

*Anodonta arkansasensis* Lea

Probably misidentified specimens of *Strophitus undulatus* (Say).  
*Obovaria arkansasensis* (Lea), SOUTHERN HICKORYNUT,  
occurs only in Arkansas and Oklahoma (Williams et al. 1993).

- Call (1885b, 1885c, 1885d, 1886, 1887)
- Popenoe (1885)

*Anodonta bealii* Lea = *Pyganodon grandis* (Say)

- Call (1885b, 1885c, 1885d, 1887)

*Anodonta danielsii* Lea = *Pyganodon grandis* (Say)

- Call (1885b, 1885c, 1885d, 1886, 1887)
- Popenoe (1885)
- Scammon (1906)

*Anodonta decora* Lea = *Pyganodon grandis* (Say)

- Call (1887)

*Anodonta dejecta* Lewis = *Anodonta californiensis* Lea,

WOEBEGONE FLOATER. Possibly *Pyganodon grandis* (Say).

- Call (1887)

*Anodonta edentula* Say = *Strophitus undulatus* (Say)

- Call (1885d, 1886, 1887) [as: *A. edentulata*]

*Anodonta ferussaciana* Lea = *Anodontoides ferussacianus* (Lea)

- Call (1885b, 1885c, 1887) [as: *Anodonta ferussacianus*]

*Anodonta grandis* Say = *Pyganodon grandis* (Say)

- Branson (1966a, 1966b, 1966c)
- Call (1885b, 1885c, 1885d, 1886, 1887)
- Clark and Gillette (1911)
- Cope (1983a, 1983b, 1985)
- DuBois (1981)
- Eberle et al. (1986)
- Franzen and Leonard (1943)
- Isely (1925)
- Leonard and Leonard (1946)
- Leonard (1943)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller and Hibbard (1972)
- Murray and Leonard (1962)
- Popenoe (1885)
- Scammon (1906)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Wedel (1959)

*Anodonta imbecillis* Say = *Utterbackia imbecillis* Say

- Branson (1966c)
- Call (1885d, 1886, 1887)
- Cope (1983a, 1983b, 1985)
- DuBois (1981)
- Eberle et al. (1986)
- Hoke (1996)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Murray and Leonard (1962)
- Scammon (1906)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)

*Anodonta opaca* Lea = *Pyganodon grandis* (Say)

- Scammon (1906)

*Anodonta ovata* Lea = *Pyganodon grandis* (Say)

- Call (1885c, 1885d)

*Anodonta plana* Lea = *Pyganodon grandis* (Say)

- Call (1885b, 1885d, 1887)

*Anodonta suborbiculata* Say = *Utterbackiana suborbiculata* (Say)

- Angelo et al. (2009)
- Call (1885c, 1885d)
- Cope (1979, 1983b)
- Hoke (2009; Region V: Missouri River habitats)
- Liechti and Huggins (1977)
- Murray and Leonard (1962)
- Obermeyer et al. (1997a)
- Scammon (1906)
- Schuster (1978)
- Schuster and DuBois (1979)

***Anodontoides ferussacianus* (Lea), CYLINDRICAL PAPERSHELL**

**Kansas Status: Endangered**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Bergman et al. (2000)
- Cope (1979)
- Dorsey (2000)
- Eberle et al. (1986)
- Hoke (1996, 1997, 2004, 2005)
- Karlin et al. (2017)
- Miller and Hibbard (1972)
- Pilger and Gido (2012)
- Scammon (1906)
- Schuster and DuBois (1979)
- Sowards et al. (2016)
- Tiemann (2006)

**Synonyms:**

*Anodonta ferussaciana* Lea

***Arcidens confragosus* (Say), ROCK POCKETBOOK**

**Kansas Status: Threatened**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Cope (1979)
- Hoke (1996)
- Mulhern et al. (2002)
- Murray and Leonard (1962)
- Obermeyer et al. (1995)
- Wolf and Stark (2008)

*Carunculina parva* (Barnes) = *Toxolasma parvum* (Barnes)

- Branson (1966c)
- DuBois (1981)
- Eberle et al. (1986)
- Franzen and Leonard (1943)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller and Hibbard (1972)
- Murray and Leonard (1962)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Wedel (1959)

*Crenodonta peruviana* (Lamarck) & subspecies = *Amblema plicata* (Say)

- Branson (1966c)
- Murray and Leonard (1962)

*Cyclonaias houstonensis* (Lea), SMOOTH PIMPLEBACK

Possibly misidentified specimens of *Cyclonaias pustulosa* (Lea). *Cyclonaias houstonensis* occurs only in Texas (Williams et al. 1993). Murray and Leonard (1962) assumed the Kansas specimens were misidentified specimens of *C. pustulosa*. Recent research suggests *C. houstonensis* is not a valid species and is synonymous with *C. pustulosa* (Johnson et al. 2018).

**Synonyms:**

*Quadrula houstonensis* (Lea)  
*Unio houstonensis* Lea

*Cyclonaias nodulata* (Rafinesque), WARTYBACK

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

Some recent references list the species as *Amphinaias nodulata*. See Williams et al. (2017, page 47).

**Synonyms:**

*Quadrula nodulata* (Lea)  
*Quadrula pustulata* (Lea)  
*Unio pustulatus* Lea

*Cyclonaias pustulosa* (Lea), PIMPLEBACK

**NatureServe Status: Apparently Secure**

Some recent references list the species as *Amphinaias pustulosa*. See Williams et al. (2017, page 47).

**Synonyms:**

*Quadrula houstonensis* (Lea)  
*Quadrula pustulosa prasina* (Conrad)  
*Unio dorfeuillianus* Lea  
*Unio houstonensis* Lea  
*Unio petrinus* Gould  
*Unio pustulosus* Lea  
*Unio schoolcraftii* Lea  
*Unio sphaericus* Lea

*Cyclonaias tuberculata* (Rafinesque), PURPLE WARTYBACK

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Mulhern et al. (2002)
- Wolf and Stark (2008)

Note: Murray and Leonard (1962) and Oesch (1995) listed *Unio tuberculata* Barnes as a synonym of *Tritogonia verrucosa* Rafinesque.

*Cyprogenia aberti* (Conrad), WESTERN FANSHELL

**Kansas Status: Endangered**

**Federal Status: Threatened** ([Proposed on 3 March 2022](#))

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Branson (1966b)
- Combes and Edds (2005)
- Cope (1979, 1983a, 1985)
- Liechti and Huggins (1977)
- Miller (1992)
- Miller (1993)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Scammon (1906) [as: *C. aberti*]
- Schuster (1979)
- Serb (2006)
- Serb and Barnhart (2008)
- Wolf and Stark (2008)

**Synonyms:**

*Unio aberti* Conrad  
*Unio popenoi* Call

*Dysnomia triquetra* (Rafinesque) = *Epioblasma triquetra* (Rafinesque)

- Murray and Leonard (1962)

*Ellipsaria lineolata* (Rafinesque), BUTTERFLY

**Kansas Status: Threatened**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Bleam et al. (1998)
- Cope (1979)
- Miller (1992)
- Miller (1993)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Mulhern et al. (2002)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Wolf and Stark (2008)

**Synonyms:**

*Plagiola lineolata* (Rafinesque)  
*Plagiola securis* (Lea)  
*Unio securis* Lea

*Elliptio dilatata* (Rafinesque) = *Eurynia dilatata* (Rafinesque)

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Branson (1966a, 1966b, 1966c) [as: *Elliptio dilatatus*]
- Combes and Edds (2005)
- Cope (1983a, 1985)
- DuBois (1981)
- Liechti and Huggins (1977) [as: *Elliptio dilatatus*]
- Murray and Leonard (1962) [as: *Elliptio dilatatus*]
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Schuster (1979) [as: *Elliptio dilatatus*]
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Wedel (1959) [as: *Elliptio dilatatus*]
- Wolf and Stark (2008)

***Epioblasma triquetra* (Rafinesque), SNUFFBOX**

**Kansas Status: In Need of Conservation**

**Federal Status: Endangered**

**NatureServe Status: Presumed Extirpated**

- Angelo et al. (2009)
- Tiemann (2006)

**Synonyms:**

*Dysnomia triquetra* (Rafinesque)

*Plagiola triquetra* (Rafinesque)

*Truncilla triquetra* Rafinesque

***Eurynia dilatata* (Rafinesque), SPIKE**

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

**Synonyms:**

*Elliptio dilatata* (Rafinesque)

*Unio gibbosus* Barnes

***Fusconaia flava* (Rafinesque), WABASH PIGTOE**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Branson (1966a, 1966b, 1966c)
- Carr and Fancher (2021)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Franzen and Leonard (1943)
- Hoke (1996, 1997, 2004, 2005)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Hibbard (1972)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Quadrula rubiginosa* (Lea)

*Quadrula trigona* (Lea)

*Unio negatus* Lea

*Unio rubiginosa* Lea

*Unio trigonus* Lea

***Fusconaia ozarkensis* (Call), OZARK PIGTOE**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Cope (1985)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b) [as *Fusconaia* spp., representing the *F. flava* (Rafinesque) and *F. ozarkensis* (Call) complex.]

*Lampsilis alatus* (Say) = *Potamilus alatus* (Say)

- Scammon (1906) [as: *L. alata*]

*Lampsilis anodontoides* (Lea) = *Lampsilis teres* (Rafinesque)

- Branson (1966a, 1966c)
- Clark and Gillette (1911)
- Franzen and Leonard (1943)
- Isely (1925)
- Leonard and Leonard (1946)
- Miller and Hibbard (1972)
- Murray and Leonard (1962)
- Scammon (1906)
- Wedel (1959)

*Lampsilis anodontoides fallaciosa* Smith = *Lampsilis teres* (Rafinesque)

- Branson (1966c)
- Murray and Leonard (1962)

***Lampsilis cardium* (Rafinesque), PLAIN POCKETBOOK**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Carr and Fancher (2021)
- Combes and Edds (2005)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- Hoke (2004, 2005)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis ovata* Say

*Lampsilis ovata ventricosa* (Barnes)

*Lampsilis ventricosa* (Barnes)

*Lampsilis ventricosa occidens* (Lea)

*Lampsilis ventricosa satura* (Lea)

*Unio occidens* Lea

*Unio satur* Lea

*Unio ventricosus* Barnes

*Lampsilis ellipsiformis* (Conrad) = *Venustaconcha ellipsiformis* (Conrad)

- Scammon (1906)

*Lampsilis fallaciosa* (Smith) = *Lampsilis teres* (Rafinesque)

- Scammon (1906)
- Wedel (1959)

*Lampsilis gracilis* (Barnes) = *Leptodea fragilis* (Rafinesque)

- Isely (1925)
- Scammon (1906)

*Lampsilis bigginsi* (Lea), HIGGINS EYE

Might be *Lampsilis abrupta* (Say), Pink Mucket (Oesch 1995:218–219), but neither of these species has been documented in Kansas (Williams et al. 1993). See McMurray et al. (2012:34, 37). The identity of specimens reported from Kansas is unknown.

- Scammon (1906) [as: *L. bigginsi*]

*Lampsilis laevisima* (Lea) = *Potamilus obiensis* (Rafinesque)

- Scammon (1906)

*Lampsilis leptodon* (Rafinesque) = *Leptodea leptodon* (Rafinesque)

- Scammon (1906)

*Lampsilis ligamentina* (Lamarck) = *Ortmanniana ligamentina*

(Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. See comments under *O. ligamentina*.

- Isely (1925)
- Scammon (1906)

*Lampsilis ligamentina gibba* Simpson = *Ortmanniana ligamentina*

(Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. See comments under *O. ligamentina*.

- Scammon (1906)

*Lampsilis luteolus* Simpson = *Lampsilis siliquoidea* (Barnes)

- Branson (1966a, 1966b, 1966c)
- Isely (1925) [as: *L. luteola* (Lamarck)]
- Scammon (1906) [as: *L. luteola* (Lamarck)]

*Lampsilis ovata* (Say), POCKETBOOK

Possibly misidentified specimens of *Lampsilis cardium* (Rafinesque). *Lampsilis ovata* occurs in the northeastern USA, but not in Kansas (Williams et al. 1993).

- Branson (1966a, 1966c)
- Metcalf (1980, 1983)

*Lampsilis ovata ventricosa* (Barnes)

Possibly misidentified specimens of *Lampsilis cardium* (Rafinesque).

- DuBois (1981)
- Liechti and Huggins (1977)
- Murray and Leonard (1962)
- Schuster (1979)
- Schuster and DuBois (1979)

*Lampsilis parva* (Barnes) = *Toxolasma parvum* (Barnes)

- Isely (1925)
- Scammon (1906)

*Lampsilis powelli* (Lea), ARKANSAS FATMUCKET

Possibly misidentified specimens of *Ortmanniana ligamentina* (Lamarck) or *Lampsilis rafinesqueana* Frierson. *Lampsilis powelli* occurs only in Arkansas (Williams et al. 1993). See comments under *O. ligamentina*.

- Cope (1985)
- Scammon (1906)

**Synonyms:**

*Unio powellii* Lea

*Lampsilis purpuratus* (Lamarck) = *Potamilus purpuratus* (Lamarck)

- Isely (1925) [as: *L. purpurata*]
- Scammon (1906) [as: *L. purpurata*]

*Lampsilis radiata* (Gmelin), EASTERN LAMPMUSSEL

Misidentified *Lampsilis siliquoidea* (Barnes).

- Nickel et al. (2019)

*Lampsilis radiata luteola* (Lamarck) = *Lampsilis siliquoidea* (Barnes)

- Cope (1985)
- Hoke (1996, 1997)
- Liechti and Huggins (1977)

*Lampsilis radiata siliquoidea* (Barnes) = *Lampsilis siliquoidea* (Barnes)

- Metcalf (1980, 1983)
- Murray and Leonard (1962)
- Schuster (1979)
- Schuster and DuBois (1979)

*Lampsilis rafinesqueana* Frierson, NEOSHO MUCKET

**Kansas Status: Endangered**

**Federal Status: Endangered**

**NatureServe Status: Critically Imperiled**

See discussion by Cope (1979:15–19).

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bleam et al. (1998)
- Combes and Edds (2005)
- Cope (1979, 1983a, 1985)
- Distler and Bleam (1995)
- Jones et al. (2006)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller (1993)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Wolf and Stark (2008)

**Synonyms:**

*Actinonaias carinata* (Barnes)  
*Actinonaias ligamentina* (Lamarck)  
*Actinonaias ligamentina carinata* (Barnes)  
*Lampsilis ligamentina* (Lamarck)  
*Lampsilis ligamentina gibba* Simpson  
*Lampsilis powelli* (Lea)  
*Unio ligamentina* Lamarck  
*Unio powellii* Lea

*Lampsilis rectus* (Lamarck) = *Ligumia recta* (Lamarck)

- Isely (1925) [as: *L. recta*]
- Scammon (1906) [as: *L. recta*]

*Lampsilis satura* (Lea), SANDBANK POCKETBOOK

*Lampsilis satura* occurs in Arkansas, Oklahoma, and elsewhere, but not in Kansas (Williams et al. 1993). It has been reported from Kansas by the synonyms below, but these specimens are *Lampsilis cardium* (Rafinesque).

**Synonyms:**

*Lampsilis ventricosa satura* (Lea)  
*Unio satur* Lea

*Lampsilis sietmani* Keogh & Simons, CANARY KINGSHELL

**NatureServe Status: Critically Imperiled**

*Lampsilis sietmani* was described as a new species previously included within *L. teres*. Keogh and Simons (2019) identified *L. sietmani* in a sample from Lyon Creek, a tributary of the lower Smoky Hill River. The extent to which *L. sietmani* and *L. teres* occurred in Kansas and the current status of each in the state are in need of study.

- Keogh and Simons (2019)

*Lampsilis siliquoidea* (Barnes), FATMUCKET

**Kansas Status: In Need of Conservation**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam and Distler (1996)
- Branson (1966a)
- Combes and Edds (2005)
- Franzen and Leonard (1943)
- Hoke (2004, 2005)
- Leonard and Leonard (1946)
- Miller and Hibbard (1972)
- Miller et al. (2014)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Tiemann (2006)
- Wedel (1959)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis luteolus* Simpson  
*Lampsilis radiata* (Gmelin)  
*Lampsilis radiata luteola* (Lamarck)  
*Lampsilis radiata siliquoidea* (Barnes)  
*Unio luteola* Lamarck

*Lampsilis subrostratus* (Say) = *Sagittunio subrostratus* (Say)

- Isely (1925) [as: *L. subrostrata*]
- Scammon (1906) [as: *L. subrostrata*]



***Lampsilis teres* (Rafinesque), YELLOW SANDSHELL**

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

See the note under *Lampsilis sietmani* Keogh and Simons.

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Carr and Fancher (2021)
- Combes and Edds (2005)
- Cope (1983a)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Hoke (1996, 1997, 2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis anodontoides* (Lea)

*Lampsilis anodontoides fallaciosa* Smith

*Lampsilis fallaciosa* (Smith)

*Lampsilis teres anodontoides* (Lea)

*Unio anodontoides* (Lea)

*Lampsilis teres anodontoides* (Lea) = *Lampsilis teres* (Rafinesque)

- Cope (1983b, 1985)
- Hoke (1997)

*Lampsilis ventricosa* (Barnes) = *Lampsilis cardium* (Rafinesque)

- Branson (1966b)
- Cope (1983a, 1985)
- Hoke (1996, 1997)
- Isely (1925)
- Leonard and Leonard (1946)
- Miller (1992)
- Scammon (1906)

*Lampsilis ventricosa occidens* (Lea) = *Lampsilis cardium* (Rafinesque)

- Kivett (1953)
- Wedel (1959)

*Lampsilis ventricosa satura* (Lea) = probably misidentified specimens of *Lampsilis cardium* (Rafinesque).

- Scammon (1906)

***Lasmigona complanata* (Barnes), WHITE HEELSPLITTER**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Branson (1966b, 1966c)
- Combes and Edds (2005)
- Cope (1983a, 1983b, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Franzen and Leonard (1943)
- Hoke (1996, 1997, 2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Karlin et al. (2017)
- Kivett (1953)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Nickel et al. (2019)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Margaritana complanata* Barnes

*Symphynota complanata* (Barnes)

***Lasmigona compressa* (Lea), CREEK HEELSPLITTER**

- Angelo et al. (2009)
- Hoke (1996)

***Lasmigona costata* (Rafinesque), FLUTEDSHELL**

**Kansas Status: Threatened**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Branson (1966a, 1966c)
- Combes and Edds (2005)
- Cope (1979, 1985)
- Liechti and Huggins (1977)
- Metcalf (1980)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)

**Synonyms:**

*Margaritana rugosa* (Barnes)  
*Symphynota costata* (Rafinesque)

***Leptodea fragilis* (Rafinesque), FRAGILE PAPERSHELL**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Branson (1966b, 1966c)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Franzen and Leonard (1943)
- Hoke (1997, 2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Karlin et al. (2017)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Hibbard (1972)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Sowards et al. (2016)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis gracilis* (Barnes)  
*Unio gracilis* Barnes

*Leptodea laevisima* (Lea) = *Potamilus obiensis* (Rafinesque)

- Branson (1966c)
- Miller and Hibbard (1972)
- Murray and Leonard (1962)

***Leptodea leptodon* (Rafinesque), SCALESHELL**

This species occurs in the eastern USA, including Missouri, Arkansas, and Oklahoma. It has not been confirmed from Kansas (Williams et al. 1993). It has been reported from Kansas by the synonyms given below, but the identities of these specimens are unknown.

**Synonyms:**

*Lampsilis leptodon* (Rafinesque)  
*Unio tenuissimus* Lea

***Ligumia recta* (Lamarck), BLACK SANDSHELL**

**NatureServe Status: Critically Imperiled**

- Angelo and Cringan (2003)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Branson (1966a)
- Combes and Edds (2005)
- Cope (1979, 1985)
- DuBois (1981)
- Hoke (2004, 2005)
- Liechti and Huggins (1977)
- Metcalf (1980)
- Miller et al. (2014)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis rectus* (Lamarck)

*Ligumia recta latissima* (Rafinesque)

*Unio recta* Lamarck

*Ligumia recta latissima* (Rafinesque) = *Ligumia recta* (Lamarck)

- Branson (1966c)
- Murray and Leonard (1962)

*Ligumia subrostrata* (Say) = *Sagittunio subrostratus* (Say)

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam and Distler (1996)
- Branson (1966a, 1966b, 1966c)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Distler and Bleam (1995)
- DuBois (1981)
- Eberle et al. (1986)
- Franzen and Leonard (1943)
- Hoke (1996, 1997, 2004, 2005)
- Karlin et al. (2017)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller and Hibbard (1972)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Sowards et al. (2016)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

*Margaritana complanata* Barnes = *Lasmigona complanata* (Barnes)

- Call (1885b, 1885c, 1885d, 1886, 1887)
- Popenoe (1885)

*Margaritana rugosa* (Barnes) = *Lasmigona costata* (Rafinesque)

- Call (1886, 1887)
- Popenoe (1885)

*Megaloniaias gigantea* (Barnes) = *Megaloniaias nervosa* (Rafinesque)

- Liechti and Huggins (1977)
- Murray and Leonard (1962)
- Schuster (1979)
- Schuster and DuBois (1979)

***Megaloniaias nervosa* (Rafinesque), WASHBOARD**

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

- Angelo et al. (2009)
- Bleam et al. (1998)
- Cope (1983a)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Sherraden-Chance and Edds (2004)
- Vanleeuwen and Arruda (2001)
- Wolf and Stark (2008)

**Synonyms:**

*Megaloniaias gigantea* (Barnes)  
*Quadrula beros* (Say)  
*Unio multiplicatus* Lea

***Obliquaria reflexa* Rafinesque, THREEHORN WARTYBACK**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bleam et al. (1998)
- Combes and Edds (2005)
- Cope (1983a)
- Dean et al. (2002)
- Isely (1925)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Scammon (1906)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Wedel (1959)
- Wolf and Stark (2008)

**Synonyms:**

*Unio cornutus* Barnes

*Obovaria arkansasensis* (Lea), SOUTHERN HICKORYNUT

This species occurs only in Arkansas and Oklahoma (Williams et al. 1993). Reported Kansas specimens are *Strophitus rugosus* (Swainson).

**Synonyms:**

*Anodonta arkansasensis* Lea

*Obovaria ellipsis* (Lea) = *Obovaria olivaria* (Rafinesque)

- Scammon (1906)

***Obovaria olivaria* (Rafinesque), HICKORYNUT**

**NatureServe Status: Presumed Extirpated**

- Angelo et al. (2009)
- Bergman et al. (2000)
- Cope (1979)
- Distler and Bleam (1995)
- Hoke (1997, 2004, 2005)
- Kivett (1953)
- Murray and Leonard (1962)
- Wedel (1959)

**Synonyms:**

*Obovaria ellipsis* (Lea)  
*Unio ellipsis* Lea  
*Unio pealii* Lea

***Ortmanniana ligamentina* (Lamarck), MUCKET**

**Kansas Status: Endangered**

**NatureServe Status: Critically Imperiled**

Might be misidentified specimens of *Lampsilis rafinesqueana* Frierson. Specimens from the Missouri River basin probably are *O. ligamentina*. Specimens from the Neosho/Spring River (Arkansas River) basin could be either species (see Mulhern et al. 2002). The name *Ortmanniana ligamentina* has recently replaced *Actinonaias ligamentina* (Graf and Cummings 2021).

**Synonyms:**

*Actinonaias carinata* (Barnes)  
*Actinonaias ligamentina* (Lamarck)  
*Actinonaias ligamentina carinata* (Barnes)  
*Lampsilis ligamentina* (Lamarck)  
*Lampsilis ligamentina gibba* Simpson  
*Lampsilis powellii* (Lea)  
*Lampsilis rafinesqueana* Frierson  
*Unio ligamentina* Lamarck  
*Unio powellii* Lea

*Plagiola donaciformis* (Lea) = *Truncilla donaciformis* (Lea)

- Baker (1909)
- Isely (1925)
- Scammon (1906)

*Plagiola elegans* (Lea) = *Truncilla truncata* (Rafinesque)

- Isely (1925)
- Scammon (1906)

*Plagiola lineolata* (Rafinesque) = *Ellipsaria lineolata* (Rafinesque)

- Cope (1983a)
- Murray and Leonard (1962)

*Plagiola securis* (Lea) = *Ellipsaria lineolata* (Rafinesque)

- Isely (1925)
- Scammon (1906)

*Plagiola triquetra* (Rafinesque) = *Epioblasma triquetra* (Rafinesque)

- Cope (1979)

*Plethobasus cicatricosus* (Say), WHITE WARTYBACK

This species occurs in the Ohio River basin, not in Kansas (Williams et al. 1993). It has been reported from Kansas by the synonym below, but the identity of these specimens is unknown.

**Synonyms:**

*Pleurobema cicatricosum* (Say)

*Plethobasus cyphus* (Rafinesque), SHEEPNOSE

It is questionable whether this species occurs in Kansas (see Schuster 1979), although Williams et al. (1993) listed Kansas in its distribution. One of the specimens of Scammon (1906), illustrated in Murray and Leonard (1962), is *Quadrula quadrula* (Schuster 1979). The identities of specimens listed by Branson (1966a, 1966c) are unknown. Oesch (1995) and McMurray et al. (2012) showed only one record (pre-1920) from western Missouri.

- Branson (1966a, 1966c) [as: *P. cypha*]
- Cope (1979)
- Liechti and Huggins (1977)
- Murray and Leonard (1962) [= *Quadrula quadrula* (Rafinesque)]
- Scammon (1906) [= *Quadrula quadrula* (Rafinesque)]
- Schuster (1979)
- Schuster and DuBois (1979)

**Synonyms:**

*Pleurobema aesopus* (Green)

*Pleurobema aesopus* (Green) = *Plethobasus cyphus* (Rafinesque)

- Scammon (1906)

*Pleurobema cicatricosum* (Say) = *Plethobasus cicatricosus* (Say)

- Scammon (1906)

*Pleurobema coccineum* (Conrad) = *Pleurobema sintoxia* (Rafinesque)

- Bleam et al. (1998)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Wedel (1959)

*Pleurobema coccineum solida* (Lea) = *Pleurobema sintoxia* (Rafinesque)

- Wedel (1959)

*Pleurobema cordatum* (Rafinesque), OHIO PIGTOE

Misidentified specimens of *Pleurobema sintoxia* (Rafinesque).

*Pleurobema cordatum* occurs in the eastern USA, but not in Kansas (Williams et al. 1993).

- Branson (1966a, 1966b)
- DuBois (1981)
- Schuster (1979)
- Schuster and DuBois (1979)

*Pleurobema cordatum catillus* (Conrad) = *Pleurobema sintoxia* (Rafinesque)

- Branson (1966c)
- Liechti and Huggins (1977)
- Murray and Leonard (1962)

*Pleurobema cordatum coccineum* (Conrad) = *Pleurobema sintoxia* (Rafinesque)

- Branson (1966c)
- Murray and Leonard (1962)

*Pleurobema cordatum pyramidatum* (Lea) = *Pleurobema sintoxia* (Rafinesque).

- Branson (1966c)
- Liechti and Huggins (1977)
- Murray and Leonard (1962)

***Pleurobema sintoxia* (Rafinesque), ROUND PIGTOE**

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Nickel et al. (2019)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Pleurobema coccineum* (Conrad)

*Pleurobema coccineum solida* (Lea)

*Pleurobema cordatum* Rafinesque

*Pleurobema cordatum catillus* (Conrad)

*Pleurobema cordatum coccineum* (Conrad)

*Pleurobema cordatum pyramidatum* (Lea)

*Quadrula coccinea* (Conrad)

*Quadrula plena* (Lea)

*Quadrula pyramidata* (Lea)

*Quadrula solida* (Lea)

*Unio coccineus* Conrad

*Unio plenus* Lea

*Unio pyramidatus* Lea

*Unio solidus* Lea

***Potamilus alatus* (Say), PINK HEELSPLITTER**

**NatureServe Status: Imperiled**

- Angelo et al. (2009)
- Bergman et al. (2000)
- Combes and Edds (2005)
- Dorsey (2000)
- Hoke (2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Pilger and Gido (2012)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis alatus* (Say)

*Proptera alata* (Say)

*Proptera alata megaptera* (Rafinesque)

*Unio alatus* Say

*Potamilus capax* (Green), FAT POCKETBOOK

Probably misidentified specimens of *Potamilus purpuratus*. See Schuster and DuBois (1979). *Potamilus capax* occurs in Iowa, Missouri, Arkansas, and Oklahoma (Williams et al. 1993).

**Synonyms:**

*Proptera capax* (Green)

*Potamilus laevisisima* (Lea) = *Potamilus obiensus* (Rafinesque)

- Cope (1983a)

***Potamilus obiensus* (Rafinesque), PINK PAPERSHELL**

**NatureServe Status: Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Combes and Edds (2005)
- Cope (1983b, 1985)
- Distler and Bleam (1995)
- Dorsey (2000)
- Hoke (1996, 1997, 2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Karlin et al. (2017)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Sherraden-Chance and Edds (2004)
- Sowards et al. (2016)
- Tiemann (2006)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis laevisisima* (Lea)

*Leptodea laevisisima* (Lea)

*Potamilus laevisisima* (Lea)

*Proptera laevisisima* (Lea)

*Unio laevisisimus* Lea

***Potamilus purpuratus* (Lamarck), BLEUFER**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Hoke (2005)
- Karlin et al. (2017)
- Miller (1992)
- Miller and Lynott (2006)
- Miller and Mosher (2008)
- Miller et al. (2014)
- Mosher (2007)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Sherraden-Chance and Edds (2004)
- Vanleeuwen and Arruda (2001)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Lampsilis purpuratus* (Lamarck)

*Proptera capax* (Green)

*Proptera purpurata* (Lamarck)

*Unio ater* Lea

*Unio purpurata* Lamarck

*Proptera alata* (Say) = *Potamilus alatus* (Say)

- Branson (1966b)
- DuBois (1981)
- Franzen and Leonard (1943)
- Liechti and Huggins (1977)
- Murray and Leonard (1962)
- Schuster (1979)
- Schuster and DuBois (1979)

*Proptera alata megaptera* (Rafinesque) = *Potamilus alatus* (Say)

- Wedel (1959)

*Proptera capax* (Green) = probably misidentified specimens of *Potamilus purpuratus* (Lamarck). See comments under *Potamilus capax*.

- Cope (1979)
- Liechti and Huggins (1977)
- Murray and Leonard (1962)
- Schuster and DuBois (1979)
- Wedel (1959)

*Proptera laevisima* (Lea) = *Potamilus obiensis* (Rafinesque)

- DuBois (1981)
- Eberle et al. (1986)
- Liechti and Huggins (1977)
- Metcalf (1980)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Wedel (1959)

*Proptera purpurata* (Lamarck) = *Potamilus purpuratus* (Lamarck)

- Branson (1966c)
- DuBois (1981)
- Leonard and Leonard (1946) [as: *Proptera* cf *purpurata*]
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Murray and Leonard (1962)
- Schuster (1979)
- Schuster and DuBois (1979)
- Wedel (1959)

*Ptychobranthus clintonensis* Simpson = *Ptychobranthus occidentalis* (Conrad)

- Scammon (1906) [as: *P. clintonense*]

*Ptychobranthus fasciolaris* (Rafinesque), KIDNEYSHELL

Probably misidentified specimens of *Ptychobranthus occidentalis* (Conrad). *Ptychobranthus fasciolaris* occurs in the eastern USA, but not in Kansas (Williams et al. 1993).

- Branson (1966a, 1966c)
- Murray and Leonard (1962) [as: *P. fasciolare*]

***Ptychobranthus occidentalis* (Conrad), OUACHITA KIDNEYSHELL**

**Kansas Status: Threatened**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bleam et al. (1998)
- Combes and Edds (2005)
- Cope (1979, 1983a, 1985)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller (1993)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Schuster (1979)
- Schuster and DuBois (1979)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Ptychobranthus clintonensis* Simpson  
*Ptychobranthus fasciolaris* (Rafinesque)  
*Ptychobranthus phaseolus* (Hildreth)  
*Unio phaseolus* Hildreth

*Ptychobranthus phaseolus* (Hildreth) = *Ptychobranthus occidentalis* (Conrad)

- Isely (1925)
- Scammon (1906)

***Pyganodon grandis* (Say), GIANT FLOATER**

**NatureServe Status: Apparently Secure**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam and Distler (1996)
- Carr and Fancher (2021)
- Combes and Edds (2005)
- Distler and Bleam (1995)
- Dorsey (2000)
- Hoke (1997, 2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Karlin et al. (2017)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Sherraden-Chance and Edds (2004)
- Sowards et al. (2016)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Anodonta bealii* Lea  
*Anodonta danielsii* Lea  
*Anodonta decora* Lea  
*Anodonta dejecta* Lewis  
*Anodonta grandis* Say  
*Anodonta opaca* Lea  
*Anodonta ovata* Lea  
*Anodonta plana* Lea

*Quadrula asper* (Lea) = *Quadrula quadrula* (Rafinesque)

- Scammon (1906) [as: *Q. aspera*]

*Quadrula coccinea* (Conrad) = *Pleurobema sintoxia* (Rafinesque)

- Baker (1909)
- Scammon (1906)

*Quadrula cylindrica* (Say) = *Theliderma cylindrica* (Say)

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bleam et al. (1998)
- Cope (1979, 1985)
- Isely (1925)
- Liechti and Huggins (1977)
- Miller et al. (2014)
- Mulhern et al. (2002)
- Murray and Leonard (1962)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Scammon (1906)
- Schuster (1979)
- Schuster and DuBois (1979)

*Quadrula ebenus* (Lea) = *Reginaia ebenus* (Lea)

- Scammon (1906)

***Quadrula fragosa* (Conrad), WINGED MAPLELEAF**

**Federal Status: Endangered**

**NatureServe Status: Presumed Extirpated**

- Angelo et al. (2009)
- Bleam et al. (1998)
- Cope (1985:39)
- Hoke (1997, 2004, 2005)
- Scammon (1906)

**Synonyms:**

*Unio fragosus* Conrad

*Quadrula berus* (Say) = *Megalonaias nervosa* (Rafinesque)

- Isely (1925)
- Scammon (1906)

*Quadrula houstonensis* (Lea) = possibly misidentified specimens of *Cyclonaias pustulosa* (Lea).

- Scammon (1906)

*Quadrula lacrymosa* (Lea) = *Quadrula quadrula* (Rafinesque)

- Baker (1909) [as: *Q. lacrymosa*]
- Clark and Gillette (1911) [as: *Q. lacrymosa*]
- Isely (1925) [as: *Q. lacrymosa*]
- Scammon (1906) [as: *Q. lacrymosa*]

*Quadrula metanavra* (Rafinesque) = *Theliderma metanavra* (Rafinesque)

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bleam et al. (1998)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Isely (1925)
- Liechti and Huggins (1977)
- Miller (1992)
- Miller (1993)
- Miller and Lynott (2006)
- Miller and Mosher (2008)
- Miller and Obermeyer (1997)
- Miller et al. (2014)
- Mosher (2007)
- Mulhern et al. (2002)
- Murray and Leonard (1962)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Scammon (1906)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Spicer et al. (2007)
- Vanleeuwen and Arruda (2001)
- Wolf and Stark (2008)

*Quadrula nobilis* (Conrad), GULF MAPLELEAF = misidentified *Quadrula quadrula* (Rafinesque).

- Isely (1925) [also as: *Tritogonia nobilis* (Conrad)]

*Quadrula nodulata* (Rafinesque) = *Cyclonaias nodulata* (Rafinesque)

- Angelo et al. (2009)
- Branson (1966a, 1966c)
- Cope (1979, 1983a, 1985)
- Liechti and Huggins (1977)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Vanleeuwen and Arruda (2001)
- Wolf and Stark (2008)

*Quadrula perplicata* (Conrad) = *Amblema plicata* (Say)

- Scammon (1906)

*Quadrula plena* (Lea) = *Pleurobema sintoxia* (Rafinesque)?

- Scammon (1906)



*Quadrula plicata* (Say) = *Amblema plicata* (Say)

- Scammon (1906)

*Quadrula pustulata* (Lea) = *Cyclonaias nodulata* (Rafinesque)

- Scammon (1906)

*Quadrula pustulosa* (Lea) = *Cyclonaias pustulosa* (Lea)

- Angelo et al. (2007)
- Angelo et al. (2009)
- Baker (1909)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Branson (1966a, 1966c)
- Clark and Gillette (1911)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Franzen and Leonard (1943)
- Hoke (1996, 1997, 2004, 2005)
- Isely (1925)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller (1993)
- Miller and Hibbard (1972)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Scammon (1906)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Spicer et al. (2007)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

*Quadrula pustulosa prasina* (Conrad) = *Cyclonaias pustulosa* (Lea)

- Wedel (1959)

*Quadrula pyramidata* (Lea) = probably misidentified specimens of *Pleurobema sintoxia* (Rafinesque).

- Isely (1925)
- Scammon (1906)

***Quadrula quadrula* (Rafinesque), MAPLELEAF**

**NatureServe Status: Apparently Secure**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam et al. (1998)
- Branson (1966a, 1966b, 1966c)
- Combes and Edds (2005)
- Cope (1983a, 1983b, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Eberle et al. (1986)
- Franzen and Leonard (1943)
- Hoke (1996, 1997, 2004, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Karlin et al. (2017)
- Kivett (1953)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Hibbard (1972)
- Miller and Lynott (2006)
- Miller and Mosher (2008)
- Miller et al. (2014)
- Mosher (2007)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Sowards et al. (2016)
- Spicer et al. (2007)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Plethobasus cyphus* (Rafinesque)

*Quadrula asper* (Lea)

*Quadrula fragosa* (Conrad)

*Quadrula lacrymosa* (Lea)

*Quadrula nobilis* (Conrad)

*Quadrula speciosa* (Lea)

*Unio asperrimus* Lea

*Unio fragosus* Conrad

*Unio lacrymosus* Lea

*Quadrula rubiginosa* (Lea) = *Fusconaia flava* (Rafinesque)

- Baker (1909)
- Isely (1925)
- Scammon (1906)

*Quadrula solida* (Lea) = *Pleurobema sintoxia* (Rafinesque)

- Scammon (1906)

*Quadrula speciosa* (Lea) = *Quadrula quadrula* (Rafinesque)

- Scammon (1906)

*Quadrula trigona* (Lea) = *Fusconaia flava* (Rafinesque)

- Scammon (1906)

*Quadrula undulata* (Barnes) & subspecies = *Amblema plicata* (Say)

- Baker (1909)
- Isely (1925)
- Scammon (1906)

*Reginaia ebenus* (Lea), EBONYSHELL

This species has been reported from the eastern USA, including Oklahoma, Arkansas, and Missouri. It has not been documented in Kansas (Williams et al. 1993). It has been reported from Kansas by the synonyms given below, but the identities of these specimens are unknown.

**Synonyms:**

*Quadrula ebenus* (Lea)  
*Unio ebana* Lea

*Sagittunio subrostratus* (Say), PONDMUSSEL

**NatureServe Status: Imperiled**

**Synonyms:**

*Lampsilis subrostratus* (Say)  
*Ligumia subrostrata* (Say)  
*Unio subrostratus* Say  
*Unio topekensis* Lea

*Strophitus edentulus* (Barnes) = *Strophitus undulatus* (Say)

- Isely (1925)
- Scammon (1906)

*Strophitus rugosus* (Swainson) = *Strophitus undulatus* (Say)

- Branson (1966a, 1966b, 1966c)
- Franzen and Leonard (1943)
- Murray and Leonard (1962)
- Wedel (1959)

*Strophitus undulatus* (Say), CREEPER

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam and Distler (1996)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Hoke (1996, 1997, 2004, 2005)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Tiemann (2006)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Anodonta arkansasensis* Lea  
*Anodonta edentula* Say  
*Strophitus edentulus* (Barnes)  
*Strophitus rugosus* (Swainson)

*Symphynota complanata* (Barnes) = *Lasmigona complanata* (Barnes)

- Clark and Gillette (1911)
- Isely (1925)
- Scammon (1906)

*Symphynota costata* (Rafinesque) = *Lasmigona costata* (Rafinesque)

- Scammon (1906)

*Theliderma cylindrica* (Say), RABBITSFOOT

**Kansas Status: Endangered**

**Federal Status: Threatened**

**NatureServe Status: Not Determined**

**Synonyms:**

*Quadrula cylindrica* (Say)  
*Unio cylindricus* Say

*Theliderma metanevra* (Rafinesque), MONKEYFACE

**NatureServe Status: Vulnerable**

**Synonyms:**

*Quadrula metanevra* (Rafinesque)  
*Unio metanevrus* (Rafinesque)

***Toxolasma lividum* Rafinesque, PURPLE LILLIPUT**

- Obermeyer et al. (1997b)

***Toxolasma parvum* (Barnes), LILLIPUT**

**NatureServe Status: Imperiled**

- Angelo et al. (2009)
- Bergman et al. (2000)
- Combes and Edds (2005)
- Cope (1983b, 1985)
- Distler and Bleam (1995)
- Dorsey (2000)
- Hoke (1996, 1997, 2004, 2005)
- Karlin et al. (2017)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Sowards et al. (2016)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Carunculina parva* (Barnes)  
*Lampsilis parva* (Barnes)  
*Unio parvus* Barnes

*Tritogonia tuberculata* (Barnes) = *Tritogonia verrucosa* (Rafinesque)

- Clark and Gillette (1911)
- Isely (1925)
- Scammon (1906)

***Tritogonia verrucosa* (Rafinesque), PISTOLGRIP**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bergman et al. (2000)
- Branson (1966a, 1966b, 1966c)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Franzen and Leonard (1943)
- Hoke (1997, 2004, 2005)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller (1992)
- Miller and Hibbard (1972)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Tritogonia tuberculata* (Barnes)  
*Unio tuberculata* Barnes

***Truncilla donaciformis* (Lea), FAWNSFOOT**

**Kansas Status: In Need of Conservation**

**NatureServe Status: Imperiled**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Bleam et al. (1998)
- Branson (1966c)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Dean et al. (2002)
- Distler and Bleam (1995)
- Franzen and Leonard (1943)
- Hoke (1997, 2005)
- Liechti and Huggins (1977)
- Metcalf (1980)
- Miller (1992)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Obermeyer (1997)
- Obermeyer (1998)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1979)
- Schuster and DuBois (1979)
- Sherraden-Chance and Edds (2004)
- Tiemann (2006)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Plagiola donaciformis* (Lea)

*Unio donaciformis* (Lea)

*Unio zigzag* Lea

*Truncilla triquetra* Rafinesque = *Epioblasma triquetra* (Rafinesque)

- Scammon (1906)

***Truncilla truncata* Rafinesque, DEERTOES**

**Kansas Status: In Need of Conservation**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Bleam et al. (1998)
- Branson (1966c)
- Combes and Edds (2005)
- Cope (1983a, 1985)
- Hoke (1996, 2004, 2005)
- Leonard and Leonard (1946)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller and Lynott (2006)
- Miller et al. (2014)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Schuster (1979)
- Schuster and DuBois (1979)
- Tiemann (2006)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

**Synonyms:**

*Plagiola elegans* (Lea)

*Unio elegans* Lea

- Unio aberti* Conrad = *Cyprogenia aberti* (Conrad)
- Call (1887)
- Unio alatus* Say = *Potamilus alatus* (Say)
- Call (1885b, 1885d, 1887)
  - Popenoe (1885)
- Unio anodontooides* (Lea) = *Lampsilis teres* (Rafinesque)
- Call (1885b, 1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio asperrimus* Lea = *Quadrula quadrula* (Rafinesque)
- Call (1885d, 1887)
  - Popenoe (1885)
- Unio ater* Lea = *Potamilus purpuratus* (Lamarck)
- Popenoe (1885)
- Unio camptodon* Say = *Uniomermis tetralasmus* (Say)
- Call (1885b, 1885c, 1885d, 1887)
- Unio coccineus* Conrad = *Pleurobema sintoxia* (Rafinesque)
- Call (1885b, 1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio cornutus* Barnes = *Obliquaria reflexa* Rafinesque
- Call (1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio cylindricus* Say = *Theliderma cylindrica* (Say)
- Call (1885b, 1885d)
  - Popenoe (1885)
- Unio donaciformis* (Lea) = *Truncilla donaciformis* (Lea)
- Call (1885b, 1885c, 1886, 1887)
  - Popenoe (1885)
- Unio dorfeuillianus* Lea = *Cyclonaias pustulosa* (Lea)
- Call (1885b)
- Unio ebena* Lea = *Reginaia ebennus* (Lea)
- Call (1885b, 1885d) [as: *U. ebennus*]
- Unio elegans* Lea = *Truncilla truncata* Rafinesque
- Call (1885b, 1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio ellipsis* Lea = *Obovaria olivaria* (Rafinesque)
- Call (1885b)
  - Popenoe (1885)
- Unio fragosus* Conrad = *Quadrula fragosa* (Conrad)
- Call (1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio gibbosus* Barnes = *Eurynia dilatata* (Rafinesque)
- Call (1885c, 1885d, 1886, 1887)
  - Isely (1925)
  - Popenoe (1885)
- Unio gracilis* Barnes = *Leptodea fragilis* (Rafinesque)
- Call (1885b, 1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio houstonensis* Lea = probably misidentified specimens of *Cyclonaias pustulosa* (Lea).
- Call (1885c)
- Unio lacrymosus* Lea = *Quadrula quadrula* (Rafinesque)
- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. lacrymosus*]
- Unio laevissimus* Lea = *Potamilus obiensis* (Rafinesque)
- Call (1885b, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio ligamentina* Lamarck = *Ortmanniana ligamentina* (Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. See comments under *O. ligamentina*.
- Call (1885, 1885d, 1886, 1887) [as: *U. ligamentinus*]
  - Popenoe (1885) [as: *U. ligamentinus*]
- Unio luteola* Lamarck = *Lampsilis siliquoidea* (Barnes)
- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. luteolus*]
  - Popenoe (1885) [as: *U. luteolus*]
- Unio metanervus* (Rafinesque) = *Theliderma metanerva* (Rafinesque)
- Call (1885c, 1885d, 1886, 1887)
  - Popenoe (1885)
- Unio multiplicatus* Lea = *Megalonaias nervosa* (Rafinesque)
- Call (1886, 1887)
  - Popenoe (1885)
- Unio negatus* Lea = *Fusconaia flava* (Rafinesque)
- Call (1887)
- Unio occidens* Lea = *Lampsilis cardium* (Rafinesque)
- Call (1885c, 1885d, 1887)
- Unio parvus* Barnes = *Toxolasma parvum* (Barnes)
- Call (1885b, 1885c, 1885d, 1887)
  - Popenoe (1885)
- Unio pealii* Lea = *Obovaria olivaria* (Rafinesque)
- Call (1885b, 1885c, 1886)
- Unio petrinus* Gould = *Cyclonaias petrina* (Gould), TEXAS PIMPLEBACK. Probably misidentified specimens of *Cyclonaias pustulosa* (Lea).
- Call (1885c, 1885d, 1886)
- Unio phaseolus* Hildreth = *Ptychobranchus occidentalis* (Conrad)
- Call (1885c, 1885d, 1886)
  - Popenoe (1885)
- Unio plenus* Lea = *Pleurobema sintoxia* (Rafinesque)?
- Call (1885d)
- Unio plicata* Say = *Amblema plicata* (Say)
- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. plicatus*]
- Unio popenoi* Call = *Cyprogenia aberti* (Conrad)
- Call (1885a, 1885b, 1886, 1887)
  - Popenoe (1885)
- Unio powellii* Lea = *Ortmanniana ligamentina* (Lamarck) or possibly misidentified specimens of *Lampsilis rafinesqueana* Frierson. *Lampsilis powelli* (Lea), ARKANSAS FATMUCKET, occurs only in Arkansas (Williams et al. 1993). See comments under *O. ligamentina*.
- Call (1887).
- Synonyms:**  
*Lampsilis powelli* (Lea)
- Unio purpurata* Lamarck = *Potamilus purpuratus* (Lamarck)
- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. purpuratus*]
- Unio pustulatus* Lea = *Cyclonaias nodulata* (Rafinesque)
- Call (1885d, 1886, 1887)
- Unio pustulosus* Lea = *Cyclonaias pustulosa* (Lea)
- Call (1885b, 1885c, 1885d, 1886, 1887)
  - Popenoe (1885)

*Unio pyramidatus* Lea = probably misidentified specimens of *Pleurobema sintoxia* (Rafinesque).

- Call (1885c)

*Unio recta* Lamarck = *Ligumia recta* (Lamarck)

- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. rectus*]
- Popenoe (1885) [as: *U. rectus*]

*Unio rubiginosa* Lea = *Fusconaia flava* (Rafinesque)

- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. rubiginosus*]
- Popenoe (1885) [as: *U. rubiginosus*]

*Unio satur* Lea = possibly misidentified specimens of *Lampsilis cardium* (Rafinesque). *Lampsilis satura* (Lea), SANDBANK POCKETBOOK, does not occur in Kansas (Williams et al. 1993).

- Call (1886) [= *Unio occidens*]

*Unio schoolcraftii* Lea = *Cyclonaias pustulosa* (Lea)

- Call (1887)

*Unio securis* Lea = *Ellipsaria lineolata* (Rafinesque)

- Call (1885c, 1887)
- Popenoe (1885)

*Unio solidus* Lea = *Pleurobema sintoxia* (Rafinesque)

- Call (1885c, 1886, 1887)
- Popenoe (1885)

*Unio spatulatus* Lea = *Venustaconcha ellipsiformis* (Conrad)

- Call (1886)

*Unio sphaericus* Lea = *Cyclonaias pustulosa* (Lea)

- Call (1886, 1887)

*Unio subrostratus* Say = *Sagittunio subrostratus* (Say)

- Call (1885c, 1885d, 1886, 1887)
- Popenoe (1885)

*Unio tenuissimus* Lea = *Leptodea leptodon* (Rafinesque)

- Call (1885c)

*Unio tetralasmus* Say & subspecies = *Uniomereus tetralasmus* (Say)

- Baker (1909)
- Isely (1925)
- Scammon (1906)

*Unio topekaensis* Lea = *Sagittunio subrostratus* (Say)

- Call (1885b, 1885c) [as: *U. topekaensis*]
- Popenoe (1885) [as: *U. topekaensis*]

*Unio trigonus* Lea = *Fusconaia flava* (Rafinesque)

- Call (1886, 1887)

*Unio tuberculata* Barnes = *Tritogonia verrucosa* (Rafinesque)

- Call (1885b, 1885c, 1885d, 1886, 1887) [as: *U. tuberculatus*]
- Popenoe (1885) [as: *U. tuberculatus*]

*Unio undulatus* Barnes = *Amblema plicata* (Say)

- Call (1885b, 1885c, 1885d, 1886, 1887)
- Popenoe (1885)

*Unio ventricosus* Barnes = *Lampsilis cardium* (Rafinesque)

- Call (1885b)
- Popenoe (1885)

*Unio zigzag* Lea = *Truncilla donaciformis* (Lea)

- Call (1885b, 1887)

## ***Uniomereus tetralasmus* (Say), PONDHORN**

**NatureServe Status: Vulnerable**

- Angelo et al. (2007)
- Angelo et al. (2009)
- Basch et al. (1961)
- Bergman et al. (2000)
- Branson (1966b, 1966c)
- Carr and Fancher (2021)
- Cope (1885)
- Distler and Bleam (1995)
- Dorsey (2000)
- DuBois (1981)
- Franzen and Leonard (1943)
- Hoke (1996, 1997, 2004, 2005)
- Huggins and Moss (1974)
- Leonard and Leonard (1946)
- Leonard (1943)
- Liechti and Huggins (1977)
- Metcalf (1980, 1983)
- Miller and Hibbard (1972)
- Murray and Leonard (1962)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Schuster (1978, 1979)
- Schuster and DuBois (1979)
- Sowards et al. (2016)
- Tiemann (2006)
- Vanleeuwen and Arruda (2001)
- Wedel (1959)
- Welch et al. (2011)
- Wolf and Stark (2008)

### **Synonyms:**

*Unio camptodon* Say

*Unio tetralasmus* Say

***Utterbackia imbecillis* Say, PAPER PONDSHELL**

**NatureServe Status: Vulnerable**

- Angelo et al. (2009)
- Bergman et al. (2000)
- Bleam and Distler (1996)
- Combes and Edds (2005)
- Distler and Bleam (1995)
- Hoke (1996, 1997, 2005)
- Hoke (2009; Region V: Missouri River habitats)
- Karlin et al. (2017)
- Nickel et al. (2019)
- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)
- Obermeyer et al. (1997b)
- Pilger and Gido (2012)
- Sowards et al. (2016)
- Tiemann (2006)
- Wolf and Stark (2008)

**Synonyms:**

*Anodonta imbecillis* Say

***Utterbackiana suborbiculata* (Say), FLAT FLOATER**

**Kansas Status: Endangered**

**NatureServe Status: Critically Imperiled**

**Synonyms:**

*Anodonta suborbiculata* Say

***Venustaconcha ellipsiformis* (Conrad), ELLIPSE**

**Kansas Status: Endangered**

**NatureServe Status: Critically Imperiled**

- Angelo et al. (2009)
- Cope (1985)
- Obermeyer et al. (1997b)

**Synonyms:**

*Actinonaias ellipsiformis* (Conrad)

*Lampsilis ellipsiformis* (Conrad)

*Unio spatulatus* Lea

*Venustaconcha pleasi* (Marsh)

*Villosa iris* (Lea)

***Venustaconcha pleasi* (Marsh), BLEEDINGTOOTH MUSSEL**

*Venustaconcha pleasi* does not occur in Kansas. See

*Venustaconcha ellipsiformis* (Conrad).

- Obermeyer et al. (1995)
- Obermeyer et al. (1997a)

***Villosa iris* (Lea), RAINBOW = possibly misidentified specimens**

of *Venustaconcha ellipsiformis* (Conrad). *Villosa iris* (now *Cambarunio iris*) is not known to occur in Kansas.

- Cope (1979)
- Schuster and DuBois (1979)

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