

1915

RICHARD J. NEVES

BLANTON DAVIS, VA.

Office of Fisheries & Econ.

DEPARTMENT OF COMMERCE
BUREAU OF FISHERIES

Economic Circular No. 15 Issued April 8, 1915

THE COMMON AND SCIENTIFIC NAMES OF FRESH-WATER MUSSELS.^a

It is a matter of general knowledge that the common names of mussels, like those of fish, are not fixed. Therefore, in recording definite information regarding the distribution or qualities of species it becomes necessary to use the scientific or Latin names, which correspond not only to explicit published descriptions of species, but also to type specimens located in museums. There are examples of shells which may seem intermediate and of doubtful identification, but the scientific name offers the nearest practicable approach to a positive nomenclature.

Should one write of the "bank-climbers," a reader familiar with common names as used on the Wabash River understands that reference is made to a shell of white nacre very similar to the yellow sand-shell but inferior in quality (*Lampsilis fallaciosa*); while one more familiar with the common names applied in Arkansas would think reference was made to a very different species having a purple nacre and regarded as worthless for purposes of manufacture (*Quadrula trapezoides*). It is unavoidable, therefore, that in its publications the Bureau should use the scientific names of unmistakable application, while it endeavors to couple with such names the appropriate common names.

On account of the direct commercial value of some 40 species of fresh-water mussels, there are many persons without scientific training who are yet interested in scientific papers dealing with their distribution, habits, and life history.

It has been suggested that the Bureau should publish in convenient reference form a list of the species most commonly mentioned, showing the scientific name with its common equivalent. The list which follows is not offered as complete. Where two or more common names occur, the first-mentioned is given as the one in most general use and the one which it is desirable should be universally accepted. The species adapted for present commercial use are indicated by the use of boldface type, but some of the marked species

^a By Robert E. Coker, director of the United States Fisheries Biological Station, Fairport, Iowa.

are not highly valued and others that are not here rated as commercial are sometimes used in manufacture.

In a third column there are singled out certain qualities or characters which determine the commercial rating. The record of these qualities will be of some value and will also serve to aid anyone familiar with mussels to relate the common and scientific names in cases of present confusion. The list thus becomes a catalogue of the commercial and noncommercial species more commonly encountered by pearlers and shell fishermen.

It may be noted that while a commercial species may vary in quality according to the locality from which it comes, it is almost universally true that a commercial species is a commercial species wherever found. A striking exception is the case of the fat mucket, which, as found in some lakes, is entirely worthless, while in other places, as in Lake Pepin, it appears as one of the most valuable of all shells. It seems unavoidable, therefore, that a distinctive name, such as "Lake Pepin mucket," should be retained in use for the good form characteristic of certain bodies of water. It may be added that the Lake Pepin mucket is not a true mucket, but is really a fat mucket which is greatly superior not only to ordinary fat muckets but even to the true muckets of the river or of Lake Pepin itself. A more appropriate common name might be desirable, but it is not our purpose here to create new names, and "Lake Pepin mucket" represents an unmistakable type.

Two questions that may arise from perusal of the list may be anticipated. The three-ridge and the blue-point are certainly not regularly distinguished. Perhaps the two species (*Q. undulata* and *Q. plicata*) are somewhat arbitrary. As used here, the three-ridge (*undulata*) is the more compressed form characteristic of headwater streams or shallow clearer streams, and the blue-point (*plicata*) is characteristic of the deeper and slackier waters of main streams. Essentially the same difference of distribution is noted in the case of the two purple warty-backs—the more compressed *Q. tuberculata* and the heavier *Q. granifera*; as the shells of neither are valued, no distinction by common name has arisen in this case.

The scientific nomenclature followed is that of Simpson's descriptive catalogue.^a Investigations of the present and future will lead to some permanent changes of scientific nomenclature, which will probably affect generic names (the first name in each case) more than specific names (the second name). It seems obviously advisable to follow the only complete monograph now available, even though a revision might be necessary after some years.

a Simpson, Charles Torrey; A descriptive catalogue of the Naiades or pearly fresh-water mussels. Bryant Walker, publisher, Detroit, Mich., 1914.

LIST OF THE COMMON MUSSEL SPECIES AND SOME OF THEIR CHARACTERS.

[NOTE.—After the scientific name indicates that the species is used commercially, but that owing to scarcity or inferior quality it has little standing as a commercial shell.]

Scientific name.	Common name.	Characters.
<i>Alebia dentata calcicola</i> , ...	Shipper-shell <i>a.</i>	Very small.
<i>Alebia dentata marginata</i> , ...	Flick-toe,	Small.
<i>Alebia dentata corporalis</i> , ...	Ship-pocket,	Inflated, thin-shelled.
<i>Alebia dentata granifera</i> , ...	Flicker,	Thin-shelled.
<i>Arcidens confragosus</i> , ...	Rock-pocketbook; bastard, rock-shell,	Rough exterior, inclined to be thin and brittle.
<i>Cyprina irritaria</i> , C., ...	Pan-shell; ringed; wavy, ...	Very dirty, appetible but hard; rather small and scarce.
<i>Dreissna dreissna</i> , C., ...	Teak, ...	Similar to Lin-shell in quality.
<i>Lampephilus dilatatus</i> , ...	Diamond-line shell, ...	Thin, brittle; generally purple or pink.
<i>Lampsilis anodontoides</i> , ...	Yellow sand-shell; Joe man's-shell, ...	Best for novelties and export trade; well known.
<i>Lampsilis capax</i> , ...	Pocketbook, ...	Thin, inflated, often pink, not commonly distinguished from ventricosa.
<i>Lampsilis fallaciosa</i> , C., ...	Stomach-sand-belly; bank climber (Michigan), ...	Thin-shelled; large shells good; similar to yellow sand-shell, but restricted in distribution, and generally too thin and small.
<i>Lampsilis fragilis</i> , ...	Paper-shell, ...	Very thin.
<i>Lampsilis fragilis</i> , ...	Bright's eye, ...	Ranker with mucket.
<i>Lampsilis fragilis</i> , ...	Hambo's shell, ...	Small; like a very young mucket.
<i>Lampsilis fragilis</i> , ...	Paper-shell, ...	Very thin.
<i>Lampsilis ligamentina</i> , ...	Mucket;—including green mucket,	Staple-shell; well known.
<i>Lampsilis ligamentina</i> , ...	Southern mucket; yellow-back mucket,	Unsurpassed for buttons.
<i>Lampsilis tuteola</i> , ...	Wat mucket; Lake Pepin mucket,	Cuts and finishes with least waste; quality excellent.
<i>Lampsilis ovata</i> , ...	Gauding southern pocket-book, ...	Like ventricosa, but thinner and more brittle.
<i>Lampsilis perotis</i> , ...	Phasant-shell <i>a.</i>	Like mucket, but too brittle and thin.
<i>Lampsilis purpurea</i> , ...	Purpury, ...	Thin and purple-spotted.
<i>Lampsilis recta</i> , ...	Black sand-shield; long John; honest John (Michigan), ...	White examples good; in form like yellow sand-shell.
<i>Lampsilis ventricosa</i> , ...	Pocketbook, ...	Inflated; inclined to brittleness; useful for novelties.
<i>Margaritana margaritifera</i> , ...	River pearl mussel, ...	Thing; not found in Mississippi Basin; pearl mussel of Europe and north-Atlantic drainage.
<i>Margaritana monodonta</i> , ...	Spectacle-case, ...	Thin and brittle.
<i>Medionidus subtextus</i> , ...	Fluted kidney-shell, ...	Small.
<i>Micromya exalata</i> , ...	Bird-wing <i>a.</i>	Very small.
<i>Obliquaria reflexa</i> , C., ...	Three-horned warty-back, ...	Small; otherwise equal to pimple-back.
<i>Obovaria ellipsis</i> , ...	Hickory-nut; Missouri nighthead, ...	Good; yields some "iridescents;" neoplasm with nighthead.
<i>Plagiola elegans</i> , ...	Deer-toe, ...	Small, white.
<i>Plagiola securis</i> , ...	Butterfly, ...	Excellent, but never abundant; quality like mucket, but superior.
<i>Pleurobema asopus</i> , C., ...	Bulldhead; sheepnose; "clear molt," ...	Tough, brittle.
<i>Ptychobranchus phaeolum</i> , C., ...	Kidney-shell, ...	Good, but hard and scarce.
<i>Quadrula coccinea</i> , C., ...	Flat nighthead, ...	Quality good, but yields many "tips;" thin; often pink.
<i>Quadrula cylindrica</i> , ...	Rabbit's foot, ...	Long, narrow, rough back; hard; often stained.
<i>Quadrula cherubis</i> , ...	Niggerhead, ...	Unsurpassed; yields "iridescents."
<i>Quadrula granifera</i> , ...	Purple warty-back, ...	Good quality, but purple-mottled.
<i>Quadrula heros</i> , ...	Washboard, ...	Very large; usually second grade; often discolored by stains; valued chiefly for large buttons.
<i>Quadrula lacrymosa</i> , ...	Maple-leaf, ...	Rough back; excellent in texture; yields "iridescents," but thinish at tips.
<i>Quadrula metanevra</i> , ...	Monkey-face, ...	Like maple-leaf, but inferior.
<i>Quadrula obliqua</i> , ...	Ohio River pig-toe, ...	Good quality; pure white, but lacking in lustre.
<i>Quadrula plicata</i> , ...	Blues-point, ...	Shapely shell of second quality.
<i>Quadrula pustulata</i> , C., ...	Pimple-back; warty-back, ...	Quality good; yields iridescents; almost equal to nighthead. These two species not commonly distinguished.
<i>Quadrula subrotunda</i> , C., ...	Long solid, ...	Like nighthead.
<i>Quadrula trapezoidea</i> , ...	Bank climber, ...	Purple; not distinguished from granifera.
<i>Quadrula tuberculata</i> , ...	Purple warty-back, ...	Good; somewhat inferior to nighthead.
<i>Quadrula undata</i> , ...	Pig-toe, ...	Like pectora; quality superior, but thinish at tip.
<i>Strophitus edentulus</i> , ...	Squaw-foot, ...	Thin, inflated; generally yellowish.

* Book name; no common name.

List of the Common Mussel Species and Some of Their Characters - Cont.

Scientific name.	Common name.	Character.
<i>Ampidromia crenularis</i> (Gmelin)	White-necked piddock; black-necked elephant's ear; lightning.	Large examples pink, but often orange.
<i>Ampidromia crenularis</i>	Light shell;....	Generally too thin and soft,....
<i>Ampidromia crenularis</i>	Smooth,....	Rough exterior, smooth inside.
<i>Cerithium septemcostatum</i>	Six-line pearl oyster;....
<i>Cerithium septemcostatum</i>	Oyster limpet;....
<i>Cerithium septemcostatum</i>	Acorn shell;....
<i>Cerithium septemcostatum</i>	Cat's paw; pewee;....	Small.
<i>Cerithium septemcostatum</i>	Snail shell;....
<i>Cale crassidens</i>	Elephant's ear;....
<i>Unio gibbosus</i> ,.....	Lady-finger; spike;....	Nacre generally purple, pink, or salmon; quality otherwise unexceptional, nacre being soft but firm; preferred for novelties. Resembles elephant's ear, but smaller, longer, and often with uneven inner surface.

a Book name; no common name.