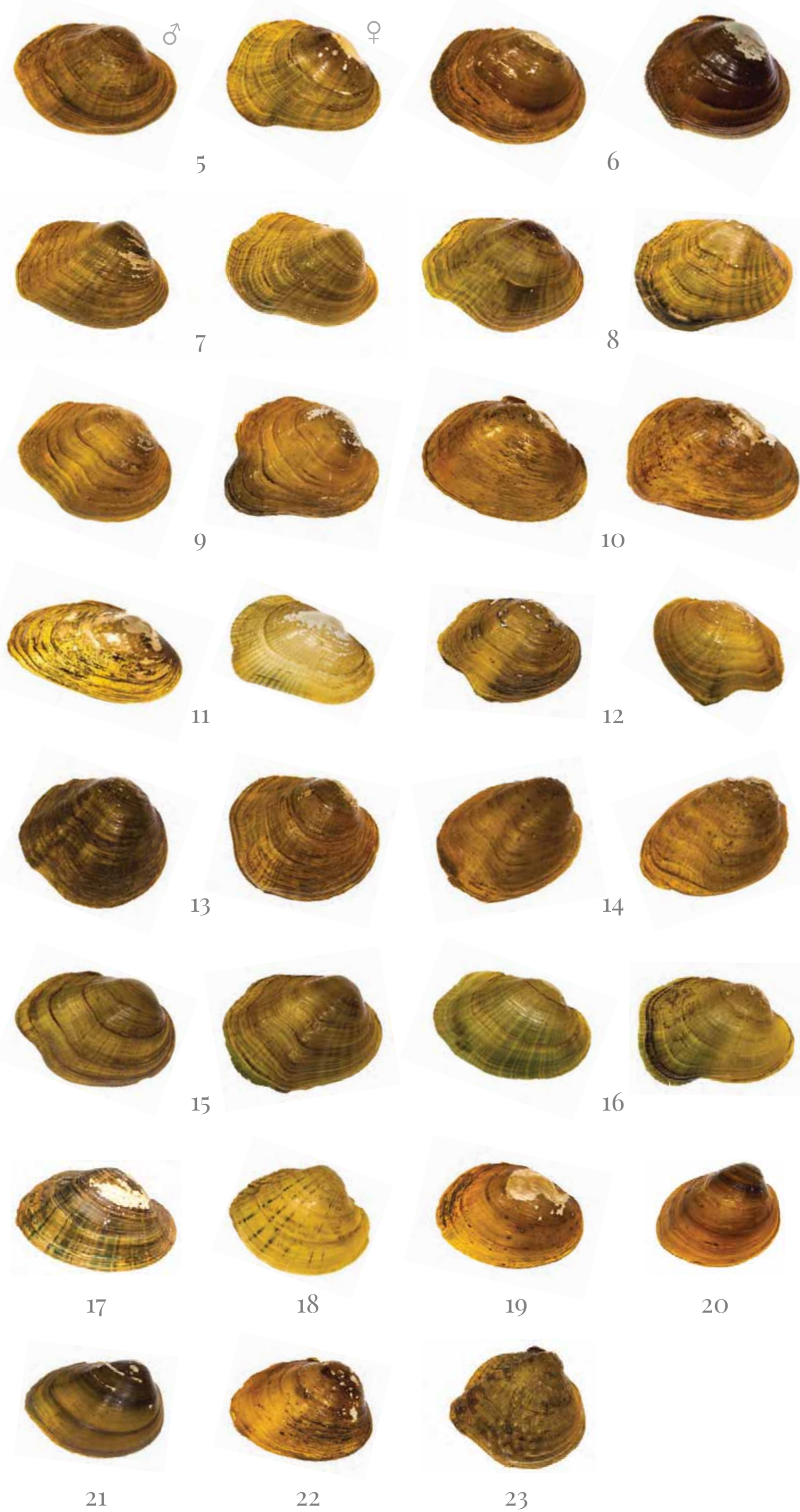
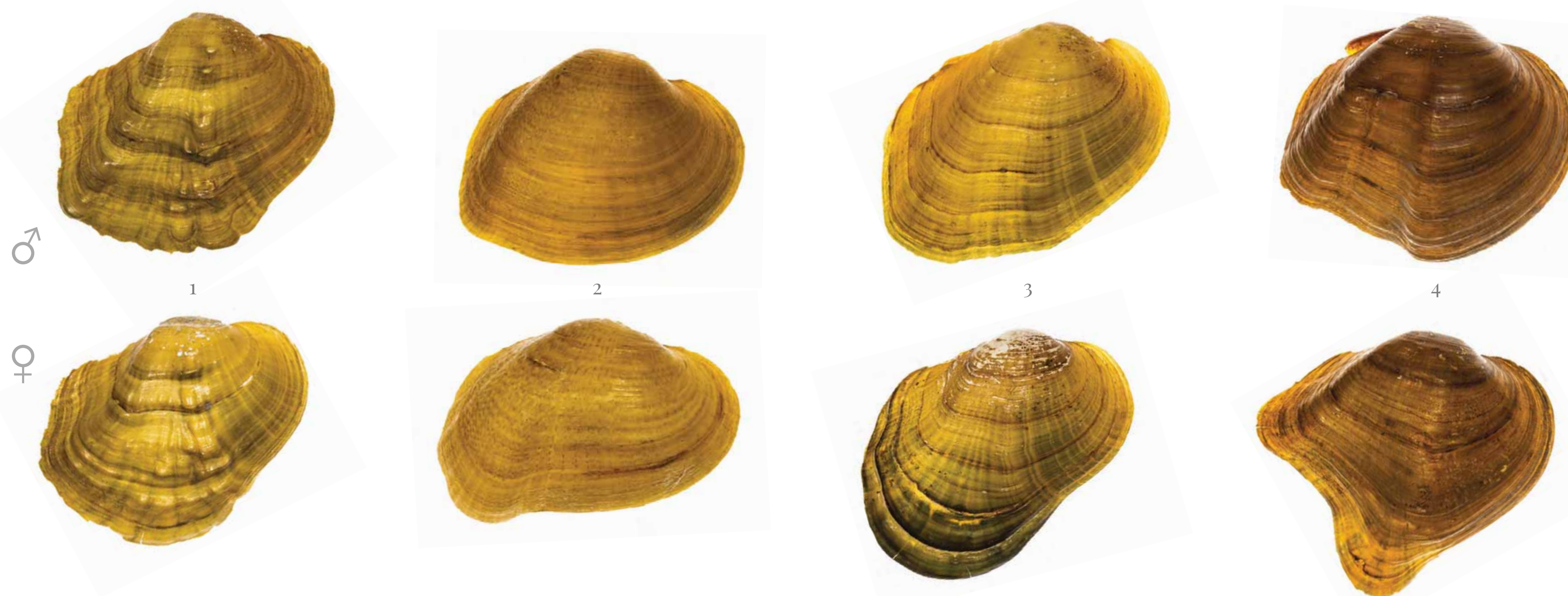


Extinct Freshwater Mussels of the American Southeast



Species | Last Seen in the Wild

1. **Cincinnati Riffleshell** (*Epioblasma cincinnatiensis*) Various locations. Late 1800's
2. **Upland Combshell** (*Epioblasma metastriata*) Conasauga River, GA. 1988
3. **Green Blossom** (*Epioblasma gubernaculum*) Clinch River, VA. 1982
4. **Leafshell** (*Epioblasma flexuosa*) Ohio River, OH/KY. 1900
5. **Yellow Blossom** (*Epioblasma florentina*) Tennessee River, AL. 1925
6. **Acornshell** (*Epioblasma haysiana*) Clinch River, VA. Late 1960's
7. **Sugarspoon** (*Epioblasma arcaiformis*) Holston River, TN. 1940's
8. **Angled Riffleshell** (*Epioblasma biemarginata*) Tennessee River, AL. 1970
9. **Cumberland Leafshell** (*Epioblasma stewardsonii*) Holston River, TN. 1915
10. **Southern Acornshell** (*Epioblasma othcaloogensis*) Conasauga River, GA. 1973
11. **Narrow Catspaw** (*Epioblasma lenior*) Stones River, TN. 1967
12. **Forkshell** (*Epioblasma lewisii*) Cumberland River, KY. 1950's
13. **Fine-rayed Pearly Mussel** (*Epioblasma personata*) Tennessee River, AL. 1924
14. **Tennessee Riffleshell** (*Epioblasma propinqua*) Clinch River, TN. 1914
15. **Tubercled Blossom** (*Epioblasma torulosa*) Kanawha River, WV. 1969
16. **Turgid Riffleshell** (*Epioblasma turgidula*) Duck River, TN. 1972
17. **Ochlockonee Arcmussel** (*Alasmidonta wrightiana*) Ochlocknee River, FL. 1931
18. **Lined Pocketbook** (*Lampsilis binominata*) Flint River, GA. 1978
19. **Haddleton Lampmussel** (*Obovaria haddletoni*) Choctawhatchee River, FL. 1964
20. **Flat Pigtoe** (*Pleurobema marshalli*) Tombigbee River, AL & MS. 1980
21. **Black Clubshell** (*Pleurobema curtum*) East Fork Tombigbee River, AL. 1992
22. **Coosa Pigtoe** (*Pleurobema stabile*) Conasauga River, GA. 2002
23. **Stirrupshell** (*Thebaderma stapes*) Tombigbee River, AL. 1980

“What has happened to America’s mollusks is happening to a large fraction of the world’s other fauna and flora. Now is the time to act.”

-E. O. Wilson | University Research Professor Emeritus, Harvard University

Mantle Lures

There are approximately 275 species of extant (still living) freshwater mussels in North America. Through natural selection, the Wayrayed Lampmussel (*Lampsilis fasciola*) has evolved a variety of mantle lures each resembling a fish prey item. When a black bass (*Micropterus*) attacks the lure several thousand parasitic larval mussels (glochidia) are released into the fish's gills which feed on the blood therein. After several weeks, the glochidia detach from the gills, settle on the bottom and begin life on their own as a free-living organism.



Host Fishes

The Redline Darter (*Nothonotus rufilineatus*, above) and Bluebreast Darter (*Nothonotus camurus*, below) have been reported to serve as glochidial hosts for the federally endangered Oyster Mussel (*Epioblasma capsaeformis*).



Conglutinates

The Kidneyshell (*Ptychobranchus fasciolaris*) releases its glochidia in gel-like sacks (conglutinates) resembling the larvae of aquatic diptera. When a small fish such as a darter or minnow attempts to eat the conglutinate it ruptures, releasing glochidia into the fish's mouth and gills. The glochidia are transported by the fish to other parts of the creek or river, dispersing the larval mussels upstream or downstream. Some species of freshwater mussels produce conglutinates that resemble fish larvae, eggs, or worms.



Species Back From the Brink

This is the original label (probably from the early 20th century) that accompanied a Winged Spike (*Elliptio nigella*) from the Chattahoochee River. This species is restricted to the Chattahoochee and Flint River drainages in Georgia and Alabama, and was thought to have gone extinct in the late 1950's. Recently, it was rediscovered in the Flint River and is now flourishing.

A special thanks to the following institutions for granting access to their natural history collections:

The National Museum of Natural History at the Smithsonian Institution | The North Carolina Museum of Natural Sciences | The Ohio State University's Museum of Biological Diversity | The University of Florida's Florida Museum of Natural History | The University of Tennessee's McClung Museum of Natural History and Culture | The University of Michigan's Museum of Natural History | The Academy of Natural Sciences of Drexel University

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