



As early as 1855, Robert Kennicott, who two years later would be one of the co-founders of the Chicago Academy of Sciences, gave a first account of some snails and clams found in the Chicago area. In 1898 and 1901, the curator at the Academy, Frank C. Baker, published a comprehensive account of the mollusks of Chicago and its environs, which is the baseline of our knowledge of the snails, slugs, clams, and mussels in the city and its suburbs. Despite the exponential growth of the city from 30,000 inhabitants in 1850 to 1.7 million in 1900, many more natural areas relatively untouched by human activity remained at the turn of the 20<sup>th</sup> century than may be found today. In the last century, Chicago's water bodies in particular were transformed beyond recognition. Lakes, ponds, creeks and marshes were filled in. Lake Calumet was turned into a harbor. The flow of the Chicago River was reversed. The shore of Lake Michigan was fortified with boulders and seawalls. Additionally, pollution and invasive species left their marks.

This guide presents a selection of Chicago freshwater snails, clams, and mussels, including those most likely to be encountered in the city and adjacent suburbs. There are many additional species in the area. If you find a snail, clam, or mussel you can't match to the images in this guide, take some pictures from several angles and send them to [mollguide@fieldmuseum.org](mailto:mollguide@fieldmuseum.org) to find out what it is. Only a few examples of large freshwater mussels (Unionidae) are included here. Detailed descriptions and photographs of all 38 species known to occur in the greater Chicago area can be found in the following publication by R. Klocek, J. Bland and L. Barghusen (2011): A field guide to the freshwater mussels of Chicago Wilderness (available on-line at: <https://fieldguides.fieldmuseum.org/guides/guide/386>).

## CLAMS AND MUSSELS

"!" denotes introduced species



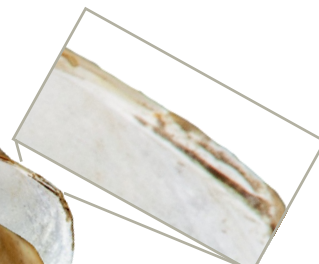
*Lampsilis siliquoides*  
fatmucket  
length: 6-12 cm



*Sphaerium occidentale*  
herrington fingernailclam  
length: up to 8 mm



*Musculium transversum*  
long fingernailclam  
length: 8-15 mm



*Pyganodon grandis*  
giant floater  
length: 10-15 cm,  
sometimes up to 25 cm

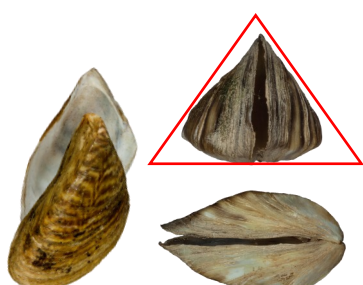
Small Asian clams can resemble certain fingernailclam species. Note that the lateral hinge teeth of Asian clams are serrated, whereas those of fingernailclams are smooth.



! *Corbicula fluminea*  
Asian clam  
length: 2.5-4 cm



! *Dreissena bugensis*  
quagga mussel  
length: up to 3.5 cm  
Valves without ridge, rounded;  
oval in cross section; contact  
line between valves wavy



! *Dreissena polymorpha*  
zebra mussel  
length: up to 3.5 cm  
Both valves with a pronounced ridge;  
triangular in cross section; contact  
line between valves straight

The zebra mussel and quagga mussel are native to the area of the Black and Caspian Seas, and Europe's Dnieper drainage, respectively. The zebra mussel was first recorded in North America in 1988, and in the Illinois part of Lake Michigan in 1989. It spread rapidly through the Great Lakes and from there into inland waters. Its relative, the quagga mussel, first appeared in the Illinois part of Lake Michigan in 2002. Since then, it has almost completely outcompeted and displaced the zebra mussel in Lake Michigan. The zebra mussel is, however, still common in many smaller inland lakes in the Chicago area. Both species are significant pests, as they compete with native species and cause drastic habitat alterations and biofouling of human-made structures.



# SNAILS



***Campeloma decisum***  
pointed campeloma  
length: 2-4 cm



! ***Cipangopaludina chinensis***  
Chinese mysterysnail  
length: up to 6 cm



***Planorbella trivolvis***  
marsh rams-horn  
width: 1.5-2.5 cm



***Gyraulus parvus***  
ash gyro  
width: 2.5-5 mm



***Pleurocera acuta***  
sharp hornsnailed  
length: up to 3.5 cm



***Elimia livescens***  
liver elimia  
length: 1.5-2.5 cm



***Ladislavella elodes***  
marsh pondsnailed  
length: 2-4 cm



***Physella acuta***  
pointed physa  
length: up to 15 mm  
This species is "left-handed,"  
or sinistral, meaning the  
shell coils to the left.



A diverse native mollusk fauna once lived in Lake Michigan's shallow waters along the Chicago coastline. Habitat transformation, pollution, and invasive species, namely the zebra and quagga mussels, have all but eradicated the native bivalves and gastropods. Millions of quagga mussel shells are littering Chicago's beaches today. Among them, worn shells of the native fauna can still occasionally be found.

Left: Accumulations of quagga mussel shells at 63<sup>rd</sup> Street Beach in Chicago



## Worn shells of the former Lake Michigan fauna

1. *Lampsilis siliquoidea* (fatmucket) 6 cm;
2. *Sphaerium striatinum* (striated fingernailclam) 8 mm;
3. *Pisidium dubium* (greater eastern peaclam) 6 mm;
4. *Campeloma decisum* (pointed campeloma) 3.5 cm;
5. *Elimia livescens* (liver elimia) 2 cm;
6. *Pleurocera acuta* (sharp hornsnailed) 3 cm;
7. *Probythinella emarginata* (delta hydrobe) 3 mm;
8. *Amnicola limosus* (mud amnicola) 4 mm;
9. *Valvata perdepessa* (purplecap valvata) 5 mm;
10. *Physella* sp. (physa) 5 mm;
11. *Ladislavella woodruffi* (coldwater pondsnailed) 6 mm