

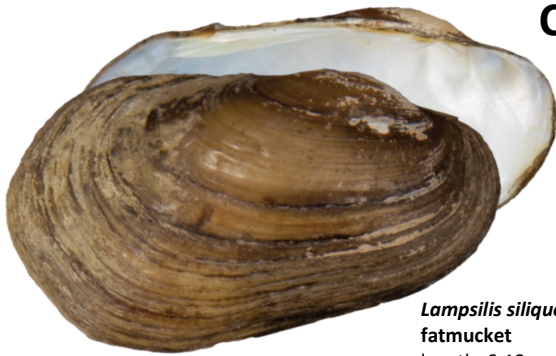


As early as 1855, Robert Kennicott, who two years later would be one of the co-founders of the Chicago Academy of Sciences, gave a first account of some snails and clams found in the Chicago area. In 1898 and 1901, the curator at the Academy, Frank C. Baker, published a comprehensive account of the mollusks 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 20th 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 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

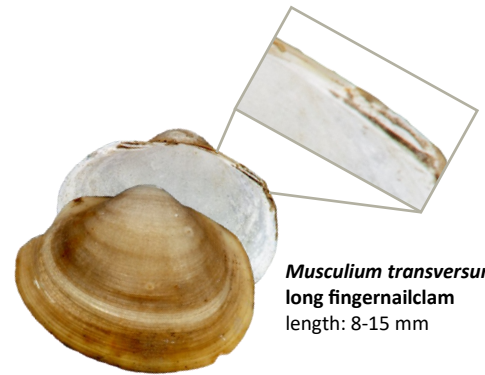
"!" denotes introduced species



Lampsilis siliquoidea
fatmucket
length: 6-12 cm



Sphaerium occidentale
herrington fingernailclam
length: up to 8 mm

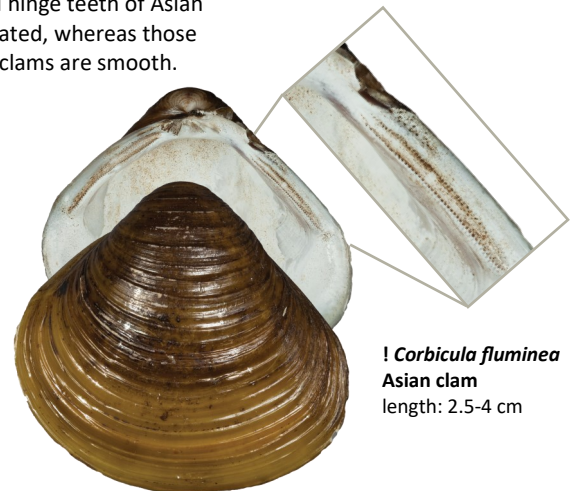


Musculium transversum
long fingernailclam
length: 8-15 mm



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

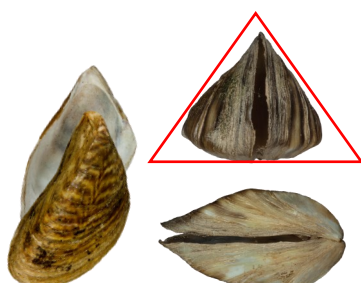
Small Asian clams can resemble certain fingernailclam species. Note that the lateral hinge teeth of Asian clams are serrated, whereas those of fingernailclams are smooth.



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



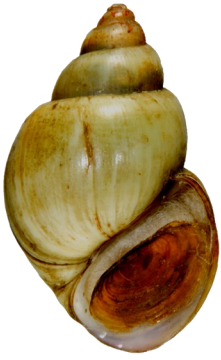
! *Dreissena bugensis*
quagga mussel
length: up to 3.5 cm
Valves without ridge, rounded;
oval in cross section; contact
line between valves wavy



! *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

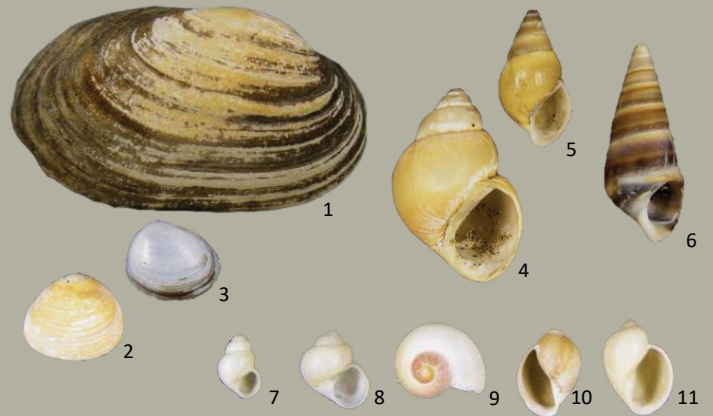


Physella acuta
pointed physa
length: up to 15 mm
This species is "left-handed,"
or sinistral, meaning the
shell coils to the left.



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 63rd 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 perdepressa* (purplecap valvata) 5 mm;
10. *Physella* sp. (physa) 5 mm;
11. *Ladislavella woodruffi* (coldwater pondsnailed) 6 mm