Distribution and Relative Abundance of Upper Mississippi and Illinois River Mussels, 2024.

Table 1. Distribution and relative abundance of Upper Mississippi and Illinois River mussel species by navigation pool. Also included are the lower Minnesota River, lower St. Croix River (below St. Croix Falls), and the open Mississippi River (Middle) extending from Lock and Dam 26 to the Ohio River. See bibliography for references.

Species		Upper Mississippi River Navigation Pool																														Illinois River Navigation Pool				
Scientific name	Common name	Lower Minnesota	Lower St. Croix	Upper SAF*	Lower SAF*	1	2	3	4	5	5a	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	Middle	Alton	LaGrange	Peoria	Starved Rock	Marseilles
Margaritiferidae																																				
Cumberlandia monodonta	**spectaclecase**		R				H	H	R						H	R				H	R	R	R	H	R	R		R	R		R		H	H			
Amblemini																																				
Amblema plicata	threeridge	R	A	C	R	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	A	A	A	A	C
Anodontini																																				
Alasmidonta marginata	elktoe	H	R				R	R	R	R	H	R	H	R	H	H	R	R	H		H												H	H	R	
Alasmidonta viridis	slippershell mussel																	H																H	H	
Anodontoides ferussacianus	cylindrical papershell	H							H																									H	H	
Arcidens confragosus	rock pocketbook	H	R				C	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	H	R	R	R	R	R	C	R	R	R	R
Lasmigona complanata	white heelsplitter	R	R	R	H	H	R	R	R	C	R	R	R	R	R	R	R	R	C	R	R	R	R	R	R	R	R	R	R	R	R	R	R	C	C	C	R
Lasmigona compressa	creek heelsplitter		R																	H	H																
Lasmigona costata	fluted shell	H	R				R	H	H	R		H	H	R	R	R			H	R	H	H						R					H	H		H	R
Pyganodon grandis	giant floater	R	C	C	R	C	C	C	R	C	R	R	R	R	C	R	C	C	R	R	R	R	R	C	R	C	R	R	R	R	C	R	C	C	C	C	C
Simpsonaias ambigua	**salamander mussel**		R				H	H								R	H	R												H						
Strophitus undulatus	strange floater	H	R	A	R	C	C	R	R	R	R	R	R	R	C	R	R	R	R	R	R	R	R	H	R	R		R	R				H	H	H		R
Utterbackia imbecillis	paper pondshell	R	R	R	R	R	R	R	R	C	R	R	R	R	R	R	R	R	R	R	R	R	C	R	A	R	R	R	R	R	R	R	R	R	R	H	R
Utterbackiana suborbiculata	flat floater								R	R	R	R	H	R	R	R			R	H	R	R	R			R		H	H	R	R	R	R	R	H	R	H
Lampsilini																																				
Actinonaias ligamentina	mucket	H	R				R	R	R	R	H	H	R	R	R	R	R	R	R	C	R	R	R	R	R	R		R	R	H	R		R	R	R	R	C
Ellipsaria lineolata	butterfly	H	R				R	R	R	R	R	R	R	R	R	R	C	C	R	C	A	C	C	C	C	A	R	A	A	C	C	R	R	H	H	H	H
Epioblasma triquetra	**snuffbox**		R				RR	H	H		H	H				H				H	H	H												H		H	H
Lampsilis cardium	plain pocketbook	R	R	A	R	R	C	C	R	A	R	C	C	C	C	R	C	C	C	C	C	R	C	C	C	R	R	R	C	C	R	R	R	H	H	R	R
Lampsilis higginsii	**Higgins eye**	H	R				RR	RR	RR	RR	RR	R	R	R	R	R	R	R	R	R	R	R	R	R	R			H	H				H	H	H	H	H
Lampsilis sietmani	canary kingshell															R													R					R		
Lampsilis siliquoidea	fatmucket	H	R	C	R	R	R	R	R	R	H	R	R	R	R	R	R	R	R	R	R		R		H				H				H	H	R	H	R
Lampsilis teres	yellow sandshell	H	H				H	H	R	H	H	H	R	H	R	R	R	H	H	R	R	H	R	H	R	R	R	R	R	C	C	C	R	R	H	H	H
Ligumia recta	black sandshell	H	R	C	H	R	C	R	R	C	R	R	R	R	C	R	C	R	C	C	R	R	R	R	R	R	R	R	R	R	R		R	H	H	H	R
Ligumia subrostrata	pondmussel																					H	H	H	H												
Obliquaria reflexa	threehorn wartyback	H	A	A	R	A	A	A	A	A	C	A	A	A	C	A	C	A	A	A	A	C	C	C	C	A	A	A	A	C	A	C	C	C	R	H	R
Obovaria olivaria	hickorynut	H	R				R	R	R	R	R	C	A	R	R	C	C	C	C	C	R	R	C	C	C	C	R	A	C	C	C	C	R	R	R	H	H
Potamilus alatus	pink heelsplitter	R	C	A	R	C	C	C	R	R	H	R	C	R	C	C	R	R	R	C	R	C	C	R	C	C	R	R	R	C	C	R	R	R	R		R
Potamilus capax	**fat pocketbook**				H				H		H					H			H	H		H		H	H	R	H	H	R	H	H	H	H	H		H	H
Potamilus fragilis	fragile papershell	C	C	A	H	R	C	R	C	C	R	R	R	C	C	R	A	C	R	R	C	R	C	C	A	R	R	R	C	C	C	A	C	C	C	R	A
Potamilus leptodon	**scaleshell**	H					H									H			H																		R
Potamilus ohiensis	pink papershell	C	R	R		R	R	C	R	C	R	R	R	R	R	R	R	R	R	R	R	R	C	R	C	R	R	C	R	R	R	R	R	R	R	C	R
Potamilus purpuratus	bleufer																								H							R					
Toxolasma parvum	lilliput	R	R	R			R	R	R	C	R	C	R	R	R	C	C	R	R	R	R	R	R	R	R				R	R	H	R	H	R	H		R
Toxolasma texasiense	Texas lilliput																															H					
Truncilla donaciformis	fawnsfoot	H	R	R	R	R	R	R	R	R	C	C	R	R	R	R	R	R	C	R	C	R	C	C	C	R	R	C	R	R	R	R	R	R	R	H	R
Truncilla truncata	deertoe	R	C	A	R	A	A	C	A	R	R	R	C	A	C	A	A	C	C	C	A	R	C	C	C	C	R	C	A	C	C	R	C	A	C	H	R
Venustaconcha ellipsiformis	ellipse		H					H	H												H															
Villosa iris	rainbow																																		H	H	
Pleurobemini																																				
Elliptio crassidens	elephant ear	H	R				H	H	H	H		H	H	H	H	H	H	H	H	H	H	H	R					H	H	H	H		H	H	H	H	H
Euryinia dilatata	spike	H	C			H	R	R	C	R	R	R	H	H	C	R	R	H	H	R	H	H	R			R	H	H	H	H		H	H	H	H	H	H
Fusconaia flava	Wabash pigtoe	H	A	A	R	A	C	A	A	A	C	C	C	C	R	C	A	C	C	C	R	C	C	C	R	C	R	R	R	C	C	R	R	H	R	H	R
Plethobasus cyphyus	**sheepnose**	H	R				H	H	R	R	H	H	R	H	H	R	R	H	H	R	R	R	R	H		R	H	R	R	H			H	H	H	H	H
Pleurobema rubrum	pyramid pigtoe																																H	H			
Pleurobema sintoxia	round pigtoe	H	C	R			R	R	R	C	R	R	R	R	R	R	C	R	R	R	R	R	R	R		R	H	H	R	R	R		H	H	H	H	R
Reginaia ebena	ebonyshell	H	R				H	H	H	H	H	H	H	H	R	H	R	H	R	H	H	H	H	R	H	R	R	R	R	R	R	H	R	H	H	H	H
Quadrulini																																				
Cyclonaias nodulata	wartyback	H	H			C	C	C	R				R	H	R	R	R	R	R	R	R	R	R	C	C	C	R	C	C	R	R	R	R	R	H	H	H
Cyclonaias pustulosa	pimpleback	H	A			R	A	C	C	A	C	C	C	R	C	C	C	C	C	C	A	A	A	C	A	C	C	C	C	C	C	R	C	R	R	A	C
Cyclonaias tuberculata	purple wartyback	H	R				H	H	R			H	H	H		H	H	H	H	H	H	H		H		R	H		H	R	H		H	H	H	H	R
Megalonaias nervosa	washboard	H	R				R	R	R	R	R	R	R	R	C	C	C	R	R	C	A	A	A	C	C	R	R	C	A	C	A	R	C	R	R		R
Quadrula fragosa	**winged mapleleaf**	H	R				RR	H	H			H		H		H																					
Quadrula quadrula	mapleleaf	R	R	A	R	A	A	C	C	R	R	R	R	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	A	A	A	A	A
Theliderma metanevra	monkeyface	H	R				R	R	R	R	R	R	R	R	R	R	R	R	C	R	C	R	C	R	C	R	R	R	R	R	R	R	H	H	H	H	H
Tritogonia verrucosa	pistolgrip	H	R				R	R	R	H	H	H	R	R	R	R	H		H	H	H	H	H	H	R		H	R	R	H	H		H	H	R	H	R
Uniomerus tetralasmus	pondhorn																															R	H				
Live species		11	39	18	12	17	32	30	35	31	25	28	30	30	33	36	32	29	28	31	31	29	33	26	28	32	22	29	32	27	27	25	24	21	19	10	27
Historic		28	3	0	4	2	9	11	8	4	10	10	7	8	4	8	4	7	11	9	10	10	3	8	5	0	7	6	6	5	7	4	16	20	18	27	16
Total species		39	42	18	16	19	41	41	43	35	35	38	37	38	37	44	36	36	39	40	41	39	36	34	33	32	29	35	38	32	34	29	40	41	37	37	43

*Upper St. Anthony Falls Pool (SAF) extends above the falls at Upper St. Anthony Falls Lock and Dam upstream to Coon Rapids Dam. Lower St. Anthony Falls Pool (SAF) extends from the Lower St. Anthony Falls Lock and Dam to the Upper St. Anthony Falls Lock and Dam.

Status Key

H = Records of occurrence but no live collections have been documented since approximately 1980.

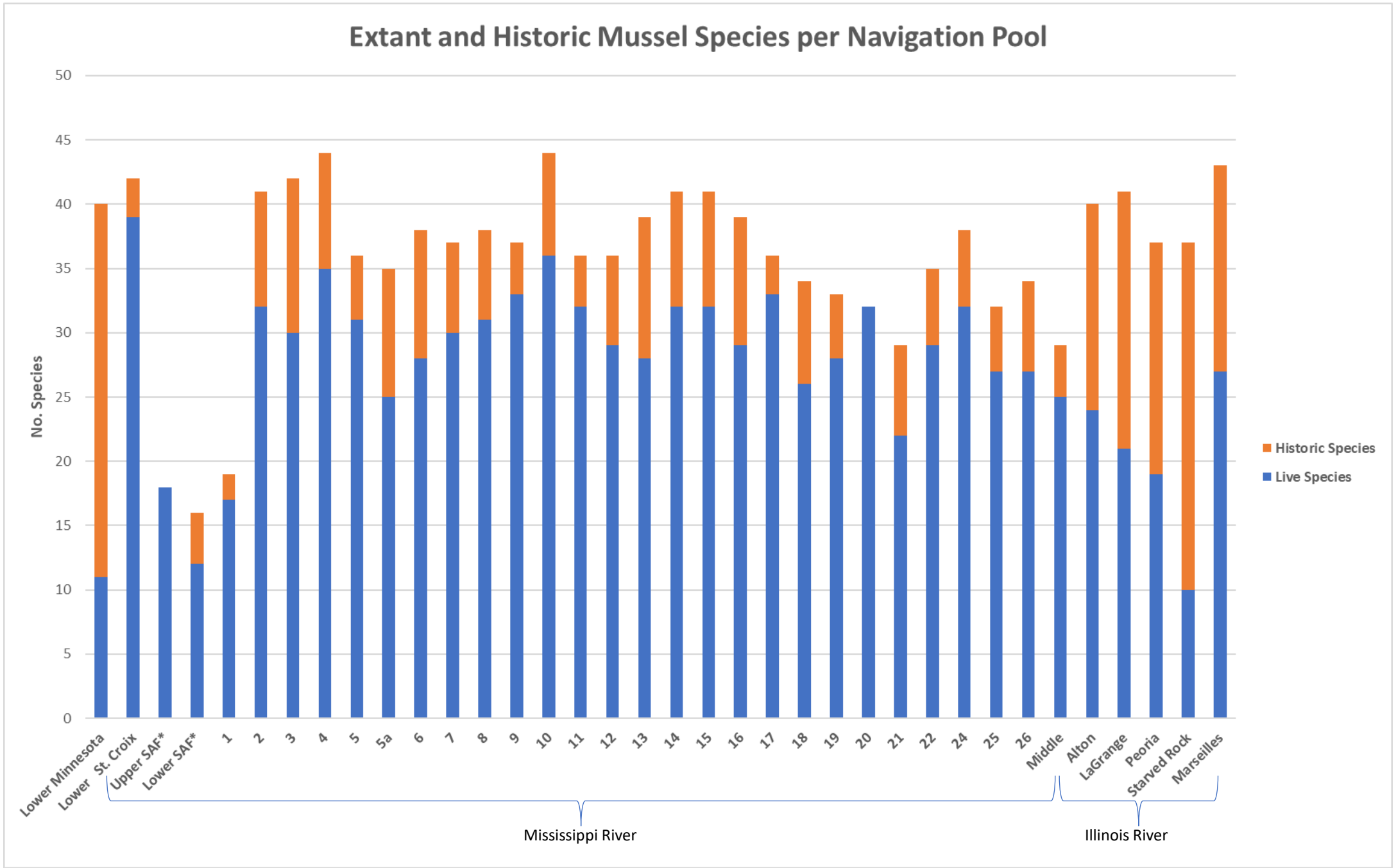
R = Rare, does not usually appear in sample collections, populations are small either naturally or have declined and may or may not be near extirpation.

C = Commonly taken in most samples; can make up a large portion of some samples.

A = Abundantly taken in most samples.

RR = Recently collected since 2005 and Rare, Reestablishing range where previously extirpated.

Citation: Kelner, D. (2024). Upper Mississippi and Illinois River Navigation Reach Mussel Species Districbution and Relative Abundance. U.S. Army Corps of Engineers, St. Paul District.


Extant and Historic Mussel Species per Navigation Pool
No. Species
50
45
40
35
30
25
20
15
10
5
0
Historic Species
Live Species
Lower Minnesota
Lower St. Croix
Upper SAF*
Lower SAF*
1
2
3
4
5
5a
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
24
25
26
Middle
Alton
LaGrange
Peoria
Starved Rock
Marseilles
Mississippi River
Illinois River

Extant and Historic Mussel Species
No. Species
60
50
40
30
20
10
0
29
11
3
39
8
45
12
37
Lower Minnesota
Lower St. Croix
Mississippi
Illinois
Live Species
Historic Species

Federally Endangered Extant and Historic Mussel Species Distribution in Navigation Pools, 2024.

Species		Upper Mississippi River Navigation Pool																																Illinois River Navigation Pool				
Scientific name	Common name	Lower Minnesota	Lower St. Croix	Upper SAF	Lower SAF	1	2	3	4	5	5a	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	Middle	Alton	LaGrange	Peoria	Starved Rock	Marseilles
Cumberlandia monodonta	spectaclecase																																					
Simpsonaias ambigua	salamander mussel																																					
Epioblasma triquetra	snuffbox																																					
Lampsilis higginsii	Higgins eye																																					
Potamilus capax	fat pocketbook																																					
Potamilus leptodon	scaleshell																																					
Plethobasus cyphyus	sheepnose																																					
Quadrula fragosa	winged mapleleaf																																					

Historic

Extant

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