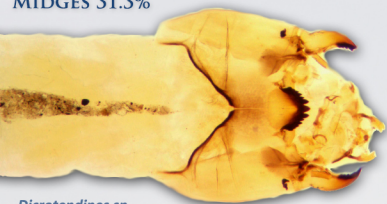


MELDAHL POOL (2017) - **HEALTHY CONDITION**

DOMINANT MACRO GROUPS

MIDGES 31.3%



Dicrotendipes sp.

MUSSELS 24.9%



Dreissena polymorpha

CADDISFLIES 13.5%



Cynellus fraternus

SNAILS 6.3%



Hydrobiidae sp.

SCUDS 6.1%



Gammarus sp.

BOULDER 10.2%



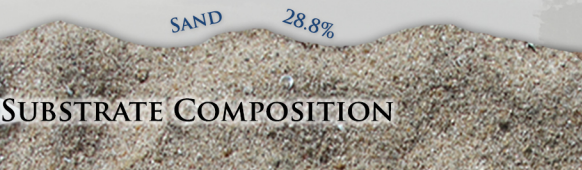
COBBLE 12.4%



GRAVEL 22.3%



SAND 28.8%



FINES 18.2%



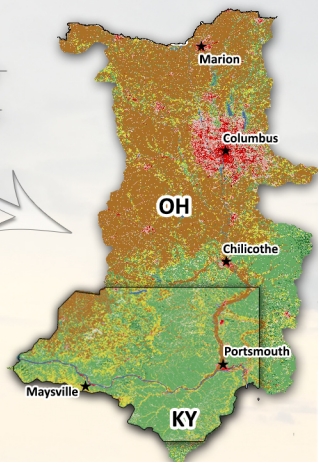
HARDPAN 7.0%



POOL SUBSTRATE COMPOSITION

This page summarizes the 2017 fish and macroinvertebrate (macro) surveys conducted by ORSANCO biologists in the Meldahl Pool of the Ohio River. Fish are collected via non-lethal electrofishing in the summer. Macros are collected in the fall from artificial substrate samplers placed in the water in late summer. The Meldahl pool is 95.2 miles long, extending from Greenup Locks and Dam (ORM 341.0) to Meldahl Locks and Dam (ORM 436.2). The pool has a gradient drop of 0.3 feet per mile, averages 1,603 feet wide and 23 feet deep. The pool flows adjacent to the states of Ohio and Kentucky. This scenic portion of the Ohio River has only a few small cities (Portsmouth, OH and Maysville, KY) and few anthropogenic impacts. The few impacts that do exist are agricultural (10.8%) and pastoral (12.1%) land uses. Deciduous forests are the dominant land cover (59.3%). As such, forested sandy shorelines are prevalent as well as instream woody cover. Meldahl receives water from one large tributary, the Scioto River (OH), and several smaller creeks in Ohio (Ohio Brush, Eagle, and Whiteoak) and Kentucky (Tygarts and Kinniconick).

OHIO RIVER BASIN



MELDAHL POOL SUB-BASIN

Meldahl L & D

Maysville

Vanceburg

Ohio

Kentucky

MELDAHL POOL

DOMINANT FISH FAMILIES

MINNOWS 43.9%



Channel Shiner

SHAD 17.8%



Gizzard Shad

SUCKERS 8.2%



River Carpsucker

SUNFISH & BASS 7.4%



Bluegill

DRUM 4.7%



Freshwater Drum

OTHER 1.2%

↓

AQUATIC INVASIVES WATCH



Silver Carp



Bighead Carp



Asiatic Clams



Zebra Mussels



Marine Scuds



Hydrilla

SURVEY SUMMARY

Electrofishing sampling occurred over an unusually long period of time, from early July to late August, due to extensive rain events. While average water clarity was lower than normal (28.3 inches) and water velocities were slightly elevated, neither negatively affected sampling. Notable catches include numerous Channel Shiners (*Notropis wickliffi*), the Ohio state endangered Shortnose Gar (*Lepisosteus platostomus*), and species of special concern River Redhorse (*Moxostoma carinatum*, OH) and Black Buffalo (*Ictiobus niger*, KY). Notable macroinvertebrate collections include a high percentage of fairly tolerant midges (*Dicrotendipes sp.*), invasive mussels (*Dreissena polymorpha*), and tolerant caddisflies (*Cynellus fraternus*). Non-native filter-feeding scuds (*Apocorophium lascustre*) were also observed. Independent biological indices were used to apply numeric values to important components of fish and macro assemblages and assess their relative status. The results (see above map) show that, on average, fish in Meldahl Pool were in 'Good' condition and the macros were in 'Fair' condition. Overall, these results indicate that Meldahl Pool harbored healthy aquatic communities.



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