Keller, S.R. et al. (2017) Environmental DNA Genetic Monitoring of the Nuisance Freshwater Diatom, *Didymosphenia geminata*, in Eastern North American Streams. *Diversity and Distributions*, DOI: 10.1111/ddi.12536

**Table S1.** Site data and results for *Didymosphenia* *geminata* monitoring in Maryland (MD) and Pennsylvania (PA), USA. *D. geminata*-positive sites are shaded in gray. Note that only *D. geminata*-positive sites have reported CT values (cycle number in qPCR that exceeded the baseline threshold), though all sites were tested.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample ID** | **Stream Name** | **Region** | **State** | **Latitude** | **Longitude** | **Sample Date** | **Filtered (L)** | **qPCR CT value** | **Benthic sample \*** |
| ANTI-101-S-2014 | EDGEMONT RESERVOIR UT | HIGHLAND | MD | 39.65833 | -77.54528 | 3/18/2014 | 13603 |  |  |
| BHCK-REF1-14 | BIG HUNTING CREEK UPPER | HIGHLAND | MD | 39.63100 | -77.45500 | 4/18/2014 | 14550 |  |  |
| BHCK-REF2-14 | BIG HUNTING CREEK LOWER | HIGHLAND | MD | 39.63300 | -77.45000 | 4/18/2014 | 12219 |  |  |
| CASS-101-D-2014 | PINEY CREEK UT | HIGHLAND | MD | 39.71308 | -79.01130 | 4/9/2014 | 10193 |  |  |
| CASS-102-R-2014 | LITTLE SHADE RUN | HIGHLAND | MD | 39.71360 | -79.18263 | 3/17/2014 | 16988 |  |  |
| CASS-103-D-2014 | TWOMILE RUN | HIGHLAND | MD | 39.71360 | -79.18263 | 4/9/2014 | 12427 |  |  |
| CASS-105-D-2014 | MEADOW RUN | HIGHLAND | MD | 39.67586 | -79.06200 | 4/9/2014 | 15100 |  |  |
| CASS-111-R-2014 | LITTLE LAUREL RUN | HIGHLAND | MD | 39.63564 | -79.15202 | 4/7/2014 | 14949 |  |  |
| CASS-307-R-2014 | CASSELMAN RIVER | HIGHLAND | MD | 39.68005 | -79.17011 | 4/7/2014 | 14974 |  |  |
| CORS-102-S-2014 | EMORY CREEK UT | COASTAL | MD | 39.08754 | -76.09499 | 3/13/2014 | 14864 |  |  |
| FIMI-109-R-2014 | BLACK SULPHUR RUN | HIGHLAND | MD | 39.66404 | -78.50764 | 4/8/2014 | 14907 |  |  |
| FIMI-202-R-2014 | BLACK SULFUR RUN | HIGHLAND | MD | 39.66201 | -78.48601 | 3/26/2014 | 15100 |  |  |
| FIMI-207-S-2014 | FIFTEEN MILE CREEK | HIGHLAND | MD | 39.68672 | -78.45571 | 3/26/2014 | 16057 |  |  |
| FIMI-404-R-2014 | FIFTEEN MILE CREEK | HIGHLAND | MD | 39.65397 | -78.40719 | 3/26/2014 | 16890 |  |  |
| GEOR-101-D-2014 | MILL RUN | HIGHLAND | MD | 39.54800 | -79.06570 | 4/9/2014 | 14991 |  |  |
| GUN-2014 | GUNPOWDER FALLS | EPIEDMONT | MD | 39.61907 | -76.69053 | 5/27/2014 | 15327 | 30 |  |
| JONE-109-S-2014 | DIPPING POND RUN UT | EPIEDMONT | MD | 39.43951 | -76.69843 | 4/28/2014 | 13590 |  |  |
| JONE-315-S-2014 | NORTH BR OF JONES FALLS | EPIEDMONT | MD | 39.42925 | -76.71875 | 4/28/2014 | 15572 |  |  |
| LIBE-102-S-2014 | TIMBER RUN | EPIEDMONT | MD | 39.44055 | -76.86417 | 4/28/2014 | 15242 |  |  |
| LMON-203-X-2014 | BALLENGER CREEK | HIGHLAND | MD | 39.38700 | -77.47300 | 3/23/2014 | 16354 |  |  |
| LMON-301-X-2014 | BALLENGER CREEK | HIGHLAND | MD | 39.36400 | -77.41700 | 3/24/2014 | 14496 |  |  |
| LMON-302-X-2014 | BALLENGER CREEK | HIGHLAND | MD | 39.38100 | -77.45200 | 3/23/2014 | 15478 |  |  |
| LOCH-120-S-2014 | BAISMAN RUN | EPIEDMONT | MD | 39.48052 | -76.69829 | 4/28/2014 | 14628 |  |  |
| LOCR-102-S-2014 | SWAN CREEK | EPIEDMONT | MD | 39.19352 | -76.21896 | 3/13/2014 | 8494 |  |  |
| MARS-210-R-2014 | MARSH RUN | COASTAL | MD | 39.53726 | -77.76296 | 4/8/2014 | 16516 |  |  |
| MARS-224-R-2014 | MARSH RUN | COASTAL | MD | 39.50111 | -77.78002 | 4/15/2014 | 16912 |  |  |
| MATT-033-S-2014 | MATTAWOMAN CREEK | COASTAL | MD | 38.58225 | -77.09766 | 4/23/2014 | 15081 |  |  |
| MATT-104-R-2014 | MATTAWOMAN CREEK UT | COASTAL | MD | 38.56922 | -77.05589 | 4/23/2014 | 13024 |  |  |
| MATT-108-R-2014 | MATTAWOMAN CREEK UT | COASTAL | MD | 38.65889 | -76.93695 | 4/23/2014 | 14779 |  |  |
| MATT-212-R-2014 | MATTAWOMAN CREEK UT | COASTAL | MD | 38.54275 | -77.18592 | 4/2/2014 | 15468 |  |  |
| MATT-216-R-2014 | PINEY BRANCH | COASTAL | MD | 38.65197 | -76.97702 | 4/21/2014 | 15402 |  |  |
| MATT-320-R-2014 | MATTAWOMAN CREEK | COASTAL | MD | 38.65253 | -76.91421 | 4/24/2014 | 15780 |  |  |
| NANJ-117-R-2014 | NANJEMOY CREEK UT | COASTAL | MD | 38.40384 | -77.19379 | 4/1/2014 | 15884 |  |  |
| NANJ-331-S-2014 | MILL RUN | COASTAL | MD | 38.48386 | -77.08594 | 4/1/2014 | 14628 |  |  |
| NASS-108-S-2014 | MILLVILLE CREEK | COASTAL | MD | 38.24950 | -75.49247 | 3/11/2014 | 13251 |  |  |
| NASS-302-S-2014 | NASSAWANGO CREEK | COASTAL | MD | 38.26359 | -75.46182 | 3/11/2014 | 18281 |  |  |
| OWCK-REF1-14 | OWEN’S CREEK | HIGHLAND | MD | 39.67700 | -77.46100 | 4/18/2014 | 21471 |  |  |
| OWCK-REF2-14 | OWEN’S CREEK | HIGHLAND | MD | 39.67100 | -77.45500 | 4/18/2014 | 15884 |  |  |
| PAXL-294-S-2014 | SWANSON CREEK | COASTAL | MD | 38.56392 | -76.76012 | 3/31/2014 | 15572 |  |  |
| PAXM-201-X-2014 | WILSON OWENS BRANCH | COASTAL | MD | 38.82600 | -76.69600 | 4/21/2014 | 16988 |  |  |
| PAXM-202-X-2014 | SWAN POINT CREEK | COASTAL | MD | 38.76200 | -76.72400 | 4/21/2014 | 16422 |  |  |
| PRLN-626-S-2014 | MILL RUN | HIGHLAND | MD | 39.54581 | -78.90556 | 3/20/2014 | 13349 |  |  |
| PRMT-177-S-2014 | REEDER RUN | COASTAL | MD | 38.50854 | -77.20010 | 4/1/2014 | 14465 |  |  |
| PRUN-201-X-2014 | WOLFDEN RUN | HIGHLAND | MD | 39.39303 | -79.20252 | 4/14/2014 | 16186 |  |  |
| PRWA-104-R-2014 | GREEN SPRING RUN UT | HIGHLAND | MD | 39.62901 | -77.96822 | 4/8/2014 | 14919 |  |  |
| PTOB-002-S-2014 | HOGHOLE RUN | COASTAL | MD | 38.51108 | -77.02912 | 3/31/2014 | 16233 |  |  |
| RKGR-119-S-2014 | PATUXENT RIVER UT | EPIEDMONT | MD | 39.16949 | -76.97198 | 5/5/2014 | 13251 |  |  |
| SAVA-101-D-2014 | SAVAGE RIVER UT | HIGHLAND | MD | 39.64600 | -79.01700 | 4/9/2014 | 12996 |  |  |
| SAVA-202-D-2014 | BIG RUN | HIGHLAND | MD | 39.57428 | -79.15983 | 4/9/2014 | 15572 |  |  |
| SAVA-204-S-2014 | CRABTREE CREEK | HIGHLAND | MD | 39.50363 | -79.15566 | 3/20/2014 | 18691 |  |  |
| SAVA-225-S-2014 | SAVAGE RIVER | HIGHLAND | MD | 39.59930 | -79.06689 | 3/20/2014 | 15767 |  |  |
| SAVA-276-S-2014 | DOUBLE LICK RUN | HIGHLAND | MD | 39.54119 | -79.21349 | 4/11/2014 | 15710 |  |  |
| SAVA-301-D-2014 | SAVAGE RIVER | HIGHLAND | MD | 39.64250 | -79.02170 | 4/9/2014 | 13675 |  |  |
| SAVA-REF1-14 | LOWER SAVAGE RIVER | HIGHLAND | MD | 39.50121 | -79.10847 | 3/21/2014 | 14204 | 26 |  |
| SAVA-REF2-14 | UPPER SAVAGE RIVER | HIGHLAND | MD | 39.54402 | -79.13647 | 4/14/2014 | 11231 |  |  |
| SEAS-109-R-2014 | SOUTHEAST CREEK UT | COASTAL | MD | 39.13919 | -75.93846 | 3/12/2014 | 14846 |  |  |
| SEAS-111-R-2014 | BROWNS BRANCH UT | COASTAL | MD | 39.16335 | -75.95000 | 3/12/2014 | 20881 |  |  |
| SEAS-113-R-2014 | GRANNY FINLEY BRANCH | COASTAL | MD | 39.09289 | -75.97404 | 3/12/2014 | 17337 |  |  |
| STCL-051-S-2014 | ST. CLEMENTS CREEK UT | COASTAL | MD | 38.36662 | -76.73717 | 3/31/2014 | 15714 |  |  |
| UMON-119-S-2014 | BUZZARD BRANCH | HIGHLAND | MD | 39.58739 | -77.48935 | 3/19/2014 | 15122 |  |  |
| UMON-132-R-2014 | STEEP CREEK UT | HIGHLAND | MD | 39.54739 | -77.49303 | 3/25/2014 | 16461 |  |  |
| UMON-134-R-2014 | TURKEY CREEK | HIGHLAND | MD | 39.70000 | -77.37445 | 3/18/2014 | 15572 |  |  |
| UMON-229-R-2014 | MUDDY RUN | HIGHLAND | MD | 39.59968 | -77.41290 | 3/19/2014 | 14157 |  |  |
| UMON-288-S-2014 | HIGH RUN | HIGHLAND | MD | 39.60929 | -77.43406 | 3/18/2014 | 14493 |  |  |
| UMON-299-X-2014 | LITTLE TUSCARORA CREEK | HIGHLAND | MD | 39.47039 | -77.41470 | 3/25/2014 | 18120 |  |  |
| UPCK-113-S-2014 | SKELETON CREEK | COASTAL | MD | 38.72408 | -75.96062 | 3/10/2014 | 14440 |  |  |
| UPCK-203-R-2014 | BEAVERDAM BRANCH | COASTAL | MD | 38.82521 | -75.97929 | 3/10/2014 | 11646 |  |  |
| UPCR-208-S-2014 | CYPRESS BRANCH | COASTAL | MD | 39.28768 | -75.78362 | 3/12/2014 | 15572 |  |  |
| WIRH-215-R-2014 | MIDDLE NECK BRANCH | COASTAL | MD | 38.38370 | -75.58740 | 3/11/2014 | 15289 |  |  |
| WIRH-220-S-2014 | LEONARD POND RUN | COASTAL | MD | 38.41408 | -75.59259 | 3/6/2014 | 15172 |  |  |
| YOUG-102-D-2014 | YOUGHIOGHENY RIVER LAKE UT | HIGHLAND | MD | 39.69680 | -79.38090 | 4/10/2014 | 12741 |  |  |
| YOUG-103-D-2014 | YOUGHIOGHENY RIVER LAKE UT | HIGHLAND | MD | 39.69670 | -79.38210 | 4/10/2014 | 14864 |  |  |
| YOUG-104-D-2014 | BUFFALO RUN UT | HIGHLAND | MD | 39.68631 | -79.41013 | 4/10/2014 | 11906 |  |  |
| YOUG-105-D-2014 | LAUREL RUN | HIGHLAND | MD | 39.38240 | -79.49230 | 4/10/2014 | 14157 |  |  |
| YOUG-106-D-2014 | SALT BLOCK RUN | HIGHLAND | MD | 39.56510 | -79.46830 | 4/10/2014 | 12288 |  |  |
| YOUG-432-S-2014 | BEAR CREEK | HIGHLAND | MD | 39.64252 | -79.27980 | 3/19/2014 | 15855 |  |  |
| BABB | BABB CK | HIGHLAND | PA | 41.55595 | -77.37805 | 4/14/2015 | 17901 |  |  |
| BAKER RUN RWQMN | BAKER RUN | HIGHLAND | PA | 41.24068 | -77.61049 | 4/2/2015 | 18123 |  | Abs |
| BLOC | BLOCKHOUSE CK | HIGHLAND | PA | 41.47393 | -77.23044 | 4/14/2015 | 14820 |  | Abs |
| BOWN | BOWMAN CK | HIGHLAND | PA | 41.42725 | -76.02756 | 4/14/2015 | 12082 |  | Abs |
| CEDAR RUN | CEDAR RUN | HIGHLAND | PA | 41.52812 | -77.44738 | 4/8/2015 | 22487 |  | Abs |
| EF SINN RWQMN | EAST FORK SINNEMAHONING CK | HIGHLAND | PA | 41.57467 | -77.91243 | 4/2/2015 | 21862 |  | Abs |
| ELK | ELK RUN | HIGHLAND | PA | 41.73642 | -77.58154 | 4/15/2015 | 14875 |  | Abs |
| GENESEE FORKS | GENESEE FORKS | HIGHLAND | PA | 41.77702 | -77.71476 | 4/14/2015 | 21022 |  |  |
| KETTLE CK RWQMN | KETTLE CREEK | HIGHLAND | PA | 41.49970 | -77.77068 | 4/2/2015 | 16310 |  | Abs |
| LITTLE PINE | LITTLE PINE CK | HIGHLAND | PA | 41.31000 | -77.36278 | 4/14/2015 | 22419 |  | Abs |
| LONG | LONG RUN | HIGHLAND | PA | 41.76142 | -77.55928 | 4/15/2015 | 20479 |  | Abs |
| LYSK | LOYALSOCK CK | HIGHLAND | PA | 41.45880 | -76.33104 | 4/13/2015 | 13204 |  | Abs |
| MARSH TIOGA | MARSH CK | HIGHLAND | PA | 41.76306 | -77.41333 | 4/15/2015 | 16845 |  | Abs |
| NINEMILE | NINEMILE RUN | HIGHLAND | PA | 41.79146 | -77.76387 | 4/14/2015 | 23210 |  | Abs |
| PHOENIX RUN | PHOENIX RUN | HIGHLAND | PA | 41.74580 | -77.59648 | 4/15/2015 | 16373 |  |  |
| PINE BLACKWELL | PINE CK (BLACKWELL) | HIGHLAND | PA | 41.64694 | -77.45056 | 4/15/2015 | 17568 | 33 | Pres |
| PORTAGE BR RWQMN | PORTAGE BR SINNEMAHONING CK | HIGHLAND | PA | 41.51169 | -78.22029 | 4/2/2015 | 18986 |  | Abs |
| S. BR. PINE | S BR PINE CK | HIGHLAND | PA | 41.73219 | -77.64149 | 4/15/2015 | 15427 |  |  |
| SLATE RUN | SLATE RUN | HIGHLAND | PA | 41.47067 | -77.50646 | 4/8/2015 | 14383 |  |  |
| SNAK | SNAKE CREEK | HIGHLAND | PA | 41.92994 | -75.84137 | 4/14/2015 | 16454 |  | Abs |
| TROUT RUN RWQMN | TROUT RUN | HIGHLAND | PA | 41.07359 | -78.36118 | 4/2/2015 | 16787 | 35 | Abs |
| UPPER PINE | UPPER PINE CK | HIGHLAND | PA | 41.79011 | -77.76123 | 4/14/2015 | 15458 |  | Abs |
| WPIN RWQMN | WEST BRANCH PINE CK | HIGHLAND | PA | 41.72483 | -77.66985 | 4/15/2015 | 29620 | 25 | Pres |
| WPIN CRIPPEN | WEST BRANCH PINE CK | HIGHLAND | PA | 41.71274 | -77.70019 | 4/15/2015 | 20580 |  | Abs |
| YOUGH DAM | YOUGHIOGHENY RIVER | HIGHLAND | PA | 39.80699 | -79.36422 | 7/9/2015 | 15145 | 26 |  |
| YOUGH RAMCAT | YOUGHIOGHENY RIVER | HIGHLAND | PA | 39.82703 | -79.37978 | 7/9/2015 | 15706 | 30 |  |
| BABB | BABB CK | HIGHLAND | PA | 41.55595 | -77.37805 | 4/30/2014 | 17441 |  |  |
| BLOC | BLOCKHOUSE CK | HIGHLAND | PA | 41.47393 | -77.23044 | 4/30/2014 | 15100 |  |  |
| CEDAR RUN | CEDAR RUN | HIGHLAND | PA | 41.52812 | -77.44738 | 4/30/2014 | 15100 |  |  |
| ELK | ELK RUN | HIGHLAND | PA | 41.73642 | -77.58154 | 4/30/2014 | 14157 |  |  |
| GENESEE FORKS | GENESEE FORKS | HIGHLAND | PA | 41.77702 | -77.71476 | 4/30/2014 | 14157 |  |  |
| LITTLE PINE | LITTLE PINE CK | HIGHLAND | PA | 41.31000 | -77.36278 | 4/30/2014 | 16516 |  |  |
| LONG | LONG RUN | HIGHLAND | PA | 41.76142 | -77.55928 | 4/30/2014 | 14864 |  |  |
| MARSH TIOGA | MARSH CK | HIGHLAND | PA | 41.76306 | -77.41333 | 4/30/2014 | 15969 |  |  |
| NINEMILE | NINEMILE RUN | HIGHLAND | PA | 41.79146 | -77.76387 | 4/30/2014 | 15100 |  |  |
| PHOENIX RUN | PHOENIX RUN | HIGHLAND | PA | 41.74580 | -77.59648 | 4/30/2014 | 14157 |  |  |
| PINE BLACKWELL | PINE CK (BLACKWELL) | HIGHLAND | PA | 41.64694 | -77.45056 | 4/29/2014 | 14157 | 33 | Pres |
| S. BR. PINE | S BR PINE CK | HIGHLAND | PA | 41.73219 | -77.64149 | 4/30/2014 | 15100 |  |  |
| SLATE RUN | SLATE RUN | HIGHLAND | PA | 41.47067 | -77.50646 | 4/30/2014 | 15553 |  |  |
| UPPER PINE | UPPER PINE CK | HIGHLAND | PA | 41.79011 | -77.76123 | 4/30/2014 | 15289 |  |  |
| WPIN RWQMN | WEST BRANCH PINE CK | HIGHLAND | PA | 41.72483 | -77.66985 | 4/30/2014 | 14157 | 32 | Pres |
| WPIN CRIPPEN | WEST BRANCH PINE CK | HIGHLAND | PA | 41.71274 | -77.70019 | 4/30/2014 | 14157 |   | Abs |

\* In Benthic Sampling Results column, ‘Pres’ indicates *Didymosphenia* was confirmed present and ‘Abs’ indicates no evidence of *Didymosphenia* presence, after microscopic examination