



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
John R. Griffin, Secretary
Eric Schwaab, Deputy Secretary

MEMORANDUM

TO: Parties interested in MBSS training
FROM: Scott Stranko
SUBJECT: MBSS 2009 Training
DATE: 7 January 2009

The Maryland Biological Stream Survey is again offering training and testing sessions for biologists conducting stream sampling in Maryland. This memo describes spring (18 February) and summer (19-21 May) training/testing opportunities for those of you who are using MBSS stream sampling protocols. If you or your staff decide to attend, please send in the attached registration form and fee by the dates indicated. **SPECIAL NOTE:** Interest in MBSS training has been growing and the number of interested participants may again exceed the number of available spaces this year. With that in mind, we will accept registrations on a first come, first served basis. As always, all participants should come prepared to get into the water.

On **18 February 2009** we will be offering training for the MBSS Spring Index Period- collection of benthos, physical habitat data, & water quality. We will hold the training at the Patuxent River 4-H Center in Upper Marlboro from 8:00-4:00. Please see <http://www.pgparcs.com/places/parks/4h.html> for directions and information. The agenda for spring training is Attachment 1. Continental breakfast will be provided, but please bring a bag lunch. Because this training includes hands-on, in-the-stream activities, please bring waders and clothing appropriate for the weather. If the weather is bad and we need to postpone, we will send out an email to all registrants. You may also call 410-260-8603 after 3 PM on 17 February to check on the status of the training. The cost for spring training is \$50 payable via cash or check to Maryland DNR. **The registration deadline for spring training is February 12th.**

During **18-20 May 2009**, DNR staff will conduct MBSS training and testing for the Summer Index Period at New Germany State Park. Please see <http://www.dnr.state.md.us/publiclands/western/newgermany.html> for information. We recommend reserving cabins and camping spots soon. They can be reserved through the web site above. On 18 May, you'll have the opportunity to learn and review fish, herpetofauna, crayfish, exotic plant, and mussel taxonomy. Taxonomic experts will provide hands-on assistance and taxonomic review as required. There will also be an opportunity to be tested on your mussel and crayfish taxonomy on this day. A preliminary agenda for summer training and testing (including classroom and field training on 19 and 20 May) is shown as Attachment 2. Again, please bring your own waders. Coffee and pastries, and lunch will be provided each day of the summer training. There are several restaurants available for those folks staying overnight. The cost for the three day training session will be \$100 per person.

The registration deadline for summer training is 30 April.

As a final reminder, we will make every effort to accommodate all registrants, but if space becomes limiting, a first-come, first-served basis will be used to determine the final list of attendees.

We highly recommend that you review the MBSS Sampling Manual with your crew prior to training. A link to a downloadable version can be found at http://www.dnr.state.md.us/streams/pubs/ea-07-01b_fieldRevMay2007.pdf. The training activities will be more effective if all crew members have a good advance understanding of protocols, safety considerations, what samples need to be collected, and the importance of caring for data before the training actually occurs.

By attending training and participating in testing, you are helping to further the goal of seamless integration of monitoring and assessment in Maryland streams. It is important that all attendees turn in exams, habitat ratings, etc. so that we can certify that each person has completed the training, is qualified to identify fish, etc.- certificates of completion will not be issued without the necessary papers.

If you have any questions about registration, please feel free to contact Tiffany Adams (410) 260-8611; tadams@dnr.state.md.us. If you have questions about protocols you can contact me 410-260-8603; sstranko@dnr.state.md.us. Also, if you know of anyone else who may be interested in knowing about MBSS training opportunities in the future, please send them our way.

Thanks,

Scott Stranko

ATTACHMENT 1

February 18, 2009

Agenda

MBSS Spring Index Period training

- 9:00 MBSS Program Orientation/What's new with the MBSS?
- 9:30 Landowners, GPS use and photographic records
- 9:45 QA/QC procedures/problems
- 10:10 Water Quality
- 10:30 **Break**
- 10:45 Benthic Macroinvertebrate Sampling
- 11:00 Habitat
- 11:20 Vernal Pools
- 11:40 Frog call test (optional) and review
- 12:00 **Lunch (bring a bag lunch)**
- 1:00 Field Practice (4 breakout groups; two each for benthos and habitat)
- 4:30 **Adjorn**

We are again offering an **optional** frog call test during MBSS spring training. Participants who pass the test will be certified to report frog presence at sampled sites on data sheets based on hearing the frog call. A passing grade is 18 out of 20 correct or 90%. There are 20 species of frogs found in Maryland whose calls are likely to be on the test:

Eastern Narrowmouth Toad (*Gastrophryne carolinensis*), Eastern Spadefoot Toad (*Scaphiopus holbrookii*) American Toad (*Bufo americanus*), Fowler's Toad (*Bufo woodhousii fowleri*), Carpenter Frog (*Rana virgatipes*), Bullfrog (*Rana catesbeiana*), Wood Frog (*Rana sylvatica*), Green Frog (*Rana clamitans melanota*), Pickerel Frog (*Rana palustris*), Southern Leopard Frog (*Rana utricularia*) (*Rana sphenoccephala*), Northern Leopard Frog (*Rana pipiens*), Northern Cricket Frog (*Acris crepitans crepitans*), Northern Spring Peeper (*Pseudacris crucifer crucifer*), Gray Treefrog (*Hyla versicolor*), Cope's Gray Treefrog (*Hyla chrysoscelis*), Mountain Chorus Frog (*Pseudacris brachyphona*), Southeastern Chorus Frog (*Pseudacris feriarum*), Green Treefrog (*Hyla cinerea*), Barking Treefrog (*Hyla gratiosa*).

Frog calls can be heard several web sites for those interested in practicing before the training.

In the field, each person will have the opportunity to demonstrate (and be signed off on) benthic, water quality, and habitat sampling techniques, and we will review things like site location. After each crew demonstrates proficiency in field techniques, we will hold a short debriefing to discuss scheduling, outstanding equipment needs, sites with special sampling conditions, etc. Once again, come prepared to sample, including gear appropriate for the weather. At the conclusion of training, a certificate of completion will be issued to each participant.

ATTACHMENT 2

The tentative schedule for 2009 Summer Index Period training is as follows:

Day 1: 18 May 2009

- 10:00 – 4:00 Fish, herpetofauna, crayfish, mussel and exotic plant taxonomy review and testing. Hard copies of the fish key will be provided. Bring your own identification guides for fish and other faunal groups if you wish.
- 2:30 Test on crayfish and mussel identification (optional).

Day 2: 19 May 2009

- 8:30 MBSS program orientation/What's new with the MBSS?
- 8:45 Review of MBSS QA/QC results
- 9:00 Summer sampling protocol review
- 10:15 **Break**
- 10:30 Fish taxonomy exam (Raesly)
- 12:30 **Lunch (provided)**
- 1:30 Review of fish exam (Raesly)
- 2:00 Crayfish sampling protocols
- 2:15 Mussel sampling protocols
- 2:30 Herpetofauna sampling protocols
- 2:45 **Break**
- 2:45 Herpetofauna taxonomy exam
- 4:15 Review of herp exam
- 4:45 **Adjourn**

Day 3: 20 May 2009

- 8:30 Landowner interactions and reporting
- 8:45 Water Quality Sampling Workshop
- 9:00 Habitat assessment protocol review
- 10:00 **Break**
- 10:15 Habitat assessment - field
- 11:15 Review of habitat assessment results – field
- 11:30 **Lunch (provided)**
- 12:00 Summer sampling protocol- field
- 4:30 Review of Crew performance
- 5:00 **Adjourn- issuance of certificates**

In the field, each person will have the opportunity to demonstrate (and be signed off on) fish, water quality and habitat sampling techniques.

MBSS 2009 Training Registration Form

Training Date(s)	Name/ Organization/email (please print email clearly)	Fee Remitted (If check, write #)
TOTAL ATTENDEES: ___ 18 Feb ___ 18-20 May		
Fees: 18 Feb (\$50); 18-20 May (\$100)		
TOTAL FEE: \$ _____		

Send to: Tiffany Adams
 Maryland Department of Natural Resources
 Tawes State Office Bldg., C-2
 Annapolis, MD 21401
 Phone: 410-260-8611
 Email tadams@dnr.state.md.us
 Receipts available upon request