

Spring Bug Hunt Results – May 13, 2002

The Day

On Saturday April 13, 60 volunteers participated in the spring bug hunt despite rain that had been constant since the evening before. Luckily, the rain cleared, the sun came out, and the 10 teams were able to sample 18 sites. High water made it impossible to sample at one site. Following the sampling, 14 volunteers attended bug ID day on April 27. Bug ID day is an opportunity for volunteers to hone their identification skills by verifying field identifications. Nicole Vidales, an aquatic biologist from the MDEQ, further identified aquatic insects to family (team leaders only identify to Order).

New This Spring

Five new sites were added this year, and the Waterford Bend site that had consistently dangerously high water was eliminated. New sites include two on the lower branch in Canton and three on the upper branch.

Friends of the Rouge's benthic monitoring program was designed to involve a large number of volunteers in sampling the creeks of the Rouge River for the small insects, snails, clams and worms that live in the streambed. These organisms vary in their sensitivities to water pollution and the type and number of organisms found can be used to assess the health of a creek site. Volunteers sample two sites under the direction of a trained team leader. Samples of each organism are collected and field identifications are verified in the lab. The sampling program began May 2001 and is supported by a Volunteer Monitoring Program grant from the MDEQ and by the National Wet Weather Demonstration Project.

New Sites

1. Lower branch: Cherry Hill and Napier, Canton
2. South Fellows Creek (Lower): Ford and Ridge, Canton
3. Upper branch: Shiawassee Park, Farmington
4. Seeley Drain (Upper): 13 Mile and Haggerty, Farmington Hills
5. Tarabusi Creek (Upper): 8 Mile and Gill, Livonia



Cherry Hill and Napier site
(Bob Belaire)

Spring sampling was scheduled earlier in the spring this year to avoid missing aquatic insects that hatch in the early spring. Future spring sampling will be scheduled in mid-April to maintain consistency.

Comparisons to Last Spring

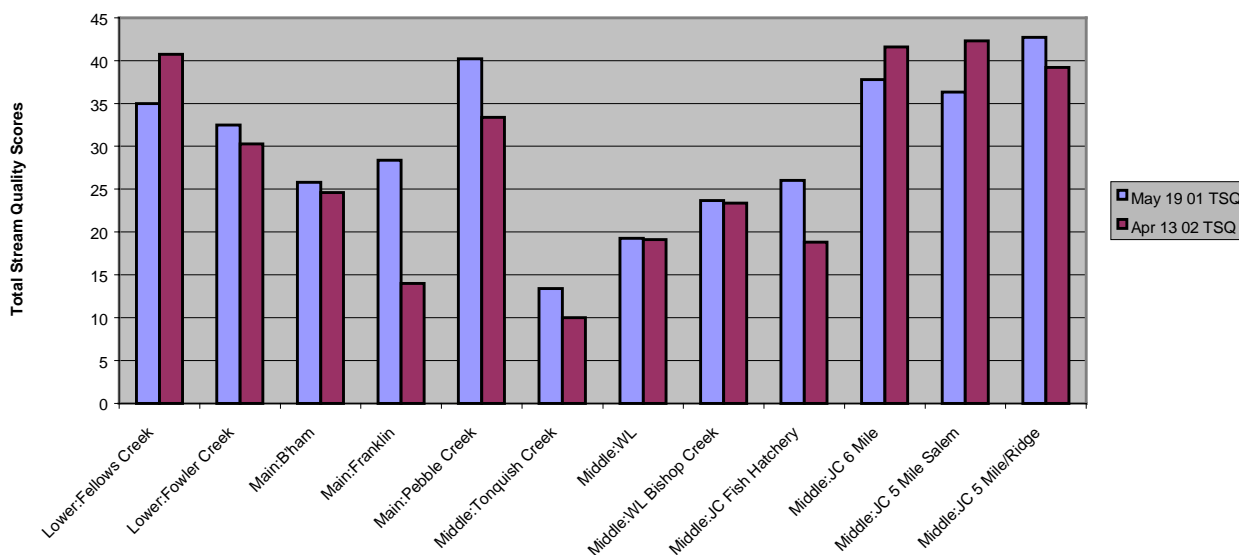
This is a long-term study and several years of gathering baseline data will be necessary before any true comparisons can be made. If volunteers are using consistent methods and sites are not changing, total stream quality scores (TSQ) and number of taxa for each site are expected to be similar from spring to spring. Observing the charts on pg. 2, TSQ scores and number of taxa were generally consistent for each site as compared to last spring.

One site had far lower numbers than last year. The Franklin site at the Franklin Cider Mill had a TSQ score of 14 this spring, down from 28 last spring. While it is too early to draw any conclusions based on the data from 2 springs, there is concern about whether the intense construction at this site will have a long term effect.

Total stream quality scores are determined by allocating points to each type of organism found based on sensitivity and adding the numbers up. A higher score = a healthier site. In the Rouge, scores range from 2-45.

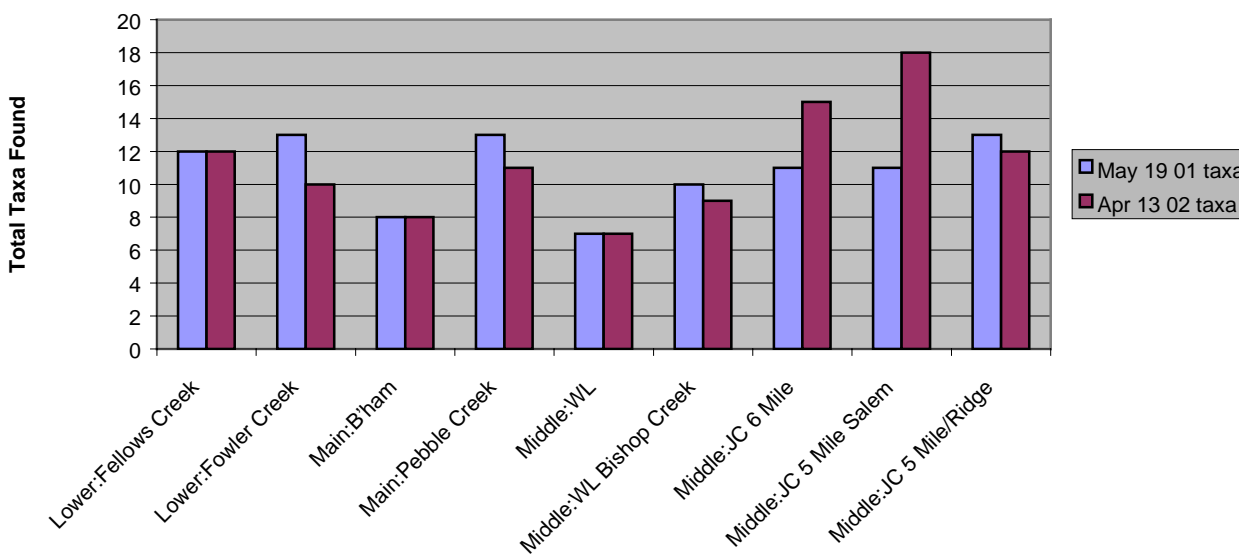
Taxa refers to the number of different families found and is a rough measure of diversity.

Spring Bug Hunt 2001 & 2002 Total Stream Quality Scores



JC = Johnson Creek
WL = Walled Lake

Spring Bug Hunt 2001 & 2002 Taxa Found



New Families Found

Some new families of caddisfly were found this spring. Two of these families are considered very sensitive: humpless case makers (*Brachycentridae*) and saddle-case makers (*Glossosomatidae*). The humpless case makers were found by Tim Polonkey's team at the Johnson Creek site on 6 Mile. The saddle-case makers were found by Joe Rathbun's group at Seeley Drain. Additionally, Joe's group found long-horned case makers at Shawassee Park.

Caddisfly larvae (*Trichoptera*) protect themselves from predators by building cases out of a variety of materials including grass, sticks, small pebbles, and even precious stones.

Dobsonfly larvae (Corydalidae) were found at 2 sites: Pebble Creek and the Johnson Creek on 5 Mile in Salem. This was the first time Friends of the Rouge volunteers found this very sensitive aquatic insect.

Stoneflies

Perlodid stoneflies were found at 4 sites this spring. This is double the number of sites from last spring and includes 1 new site: the Lower Rouge at Cherry Hill and Napier. The other sites were Fellows Creek, and the Johnson Creek at 6 Mile Road and at 5 Mile Road in Salem. Stoneflies are very sensitive and only found in very cold, clean, fast moving water.



Perlodid stonefly
(Brian McEwen)



Sampling at Johnson Creek
(Brian McEwen)

Friends of the Rouge website:
www.therouge.org

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Total Stream Quality Scores (TSQ) and Taxa Spring 2001 & 2002

stream	Apr 13 02 TSQ	Apr 13 02 taxa	Apr 13 sensitive families	May 19 01 TSQ	May 19 01 taxa
Lower:Fellows Creek	40.7	12	Perlodidae	35	12
Lower:Fowler Creek	30.3	10	Perlodidae	32.5	13
Lower: Cherry Hill E of Napier	16.5	6.0	Perlodidae		
Lower: S. Fellows	23.5	12.0			
Main:B'ham	24.6	8		25.8	8
Main:Franklin	14	5		28.4	
Main:Pebble Creek	33.4	11	Corydalidae	40.2	13
Main: Forest Lakes Outflow	15.2	7.0			
Middle:Tonquish Creek	10	5		13.4	
Middle:WL	19.1	7		19.3	7
Middle:WL Bishop Creek	23.4	10		23.7	9
Middle:JC Fish Hatchery	18.8	8		26	
Middle:JC 6 Mile	41.6	15	Brachycentridae, Perlodidae	37.8	11
Middle:JC 5 Mile Salem	42.3	18	Corydalidae, Perlodidae	36.3	11
Middle:JC 5 Mile/Ridge	39.2	12		42.7	15
Upper:Shiawassee Park	17.2	6.0			
Upper: Seeley Drain	22.0	11.0	Glossosomatidae		
Upper: Tarabusi	18.2	6.0			

Mark your calendar now for the
Fall Bug Hunt
 Saturday, October 12