

Friends of Casco Bay Residential Pesticide Study

Eight sites were sampled in southern Maine throughout the 2003 field season after rain events. Samples were frozen and sent to the lab all at once. Propiconazole was detected once at two different sites. Dicamba was detected three times at two different sites, and clopyralid was detected once.

Results in parts per billion:

| Friends of Casco Bay Surface Water - Pesticide Results (Collected Spring 2003) | | | | | | | | |
|--|---------------|---------------|------------|-----------------|------------|-------|------|-----------|
| Sample/Site Code | Pendamethalin | Propiconazole | Dicamba | Clopyralid | Permethrin | 2,4-D | MCPP | Triclopyr |
| Detection Limit | 0.1 | 0.05 | 2 | 0.5 | 0.1 | 0.5 | 0.5 | 0.5 |
| BS4 | ND | 0.057 | ND | 0.91 | ND | ND | ND | ND |
| BS9 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS12 | ND | ND | 3.8 | ND | ND | ND | ND | ND |
| BS5 | ND | 0.075 | ND | ND | ND | ND | ND | ND |
| BS7 | ND | ND | 2.2 | ND | ND | ND | ND | ND |
| BS9 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS10 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS12 | ND | ND | 4.1 | ND | ND | ND | ND | ND |
| BS17 | ND | ND | ND | ND | ND | ND | ND | ND |
| BS18 | ND | ND | ND | ND | ND | ND | ND | ND |
| | | | | | | | | |
| Sample Description | | | | Collection Date | | | | |
| BS4 Falmouth Town Landing | | | | 4/22/03 | | | | |
| BS9 Broad Cove - Cape Elizabeth | | | | 4/22/03 | | | | |
| BS12 Baxter Blvd. - Portland | | | | 4/22/03 | | | | |
| BS5 Freeport Town Landing | | | | 5/21/03 | | | | |
| BS7 Harraseeket Yacht Club | | | | 5/21/03 | | | | |
| BS9 Broad Cove - Cape Elizabeth | | | | 5/21/03 | | | | |
| BS10 Twin Knolls - Portland | | | | 5/21/03 | | | | |
| BS12 Baxter Blvd. - Portland | | | | 5/21/03 | | | | |
| BS17 Lowell's Cove-East - Harpswell | | | | 6/5/03 | | | | |
| BS18 Lowell's Cove-West - Harpswell | | | | 6/5/03 | | | | |

FOCB also collected samples in 2005 at similar sites and found 4.62 ppb 2,4-D in one sample. FOCB is continuing this sampling in 2006.

BPC Residential Pesticide Study

One of the Board's field staff collected grab samples from a small tributary to the Penobscot River in Brewer to look for lawn care pesticides and other outdoor use pesticides homeowners may use. This tributary drains a large residential area where such pesticide use is common.

Results in parts per billion:

| Sample date | Pendameethalin MDL=0.1 | Propiconazole MDL=0.05 | Dicamba MDL=2 | Clopyralid MDL=0.5 | Permethrin MDL=0.1 | 2,4-D MDL=0.5 | MCPP MDL=0.5 | Triclopyr MDL=0.5 |
|-------------|---------------------------|---------------------------|------------------|-----------------------|-----------------------|------------------|-----------------|----------------------|
| 6/11/03 | nd | nd | nd | nd | nd | nd | nd | nd |
| 6/14/03 | nd | nd | nd | nd | nd | 1.2 | nd | nd |
| 8/2/03 | nd | nd | 3.5 | nd | nd | nd | nd | nd |
| 9/4/03 | nd | nd | nd | nd | nd | nd | nd | nd |
| 7/2/04 | nd | nd | nd | nd | nd | nd | nd | nd |
| 8/13/04 | nd | nd | nd | nd | nd | nd | nd | nd |

Notes: Sampling occurred after significant rain events (1 in. in 24 hrs.)

Rain gauges and a Standard Operating Procedures (SOP) utilized

Site's characteristics recorded

It can't be assumed that all the pesticides in the table above were applied in the watershed

Residential samples were also collected in a small stream near condos in Scarborough in 2004 and in small streams in Augusta in 2005, but no pesticides were found. If sampling at these sites continues more care should be given to timing collection with first flush of a rain event.