

**DEC**  
PUBLICATION



RECEIVED

AUG 02 2007  
NYSDEC REG 9  
FOIL  
\_\_REL\_\_ UNREL

Technical Report 79-1 (BEP)  
Division of Fish and Wildlife

---

**Toxic Substances  
in Fish and Wildlife**  
1978 Annual Report  
Volume 2

---

**March 1979**

*New York State/Department of Environmental Conservation*

PART I

| LOCATION                             | SPECIES             | NO. OF FISH ANALYZED | NO. OF ANALYSES | AVERAGE LENGTH (mm) | LENGTH RANGE (mm) | AVERAGE WEIGHT (g) | WEIGHT RANGE (g) | AVERAGE PCB (ppm) | PCB RANGE (ppm) | AVERAGE DDT * (ppm) | DDT RANGE (ppm) |
|--------------------------------------|---------------------|----------------------|-----------------|---------------------|-------------------|--------------------|------------------|-------------------|-----------------|---------------------|-----------------|
| <u>Niagara River (Upper)</u>         | Smallmouth bass     | 19                   | 2               | 316                 | 249-422           | 449                | 200-1134         | 3.23              | 2.55-3.99       | 0.12                | 0.10-0.14       |
|                                      | White sucker        | 20                   | 2               | 334                 | 218-457           | 410                | 83-457           | 1.68              | 0.36-3.00       | 0.08                | 0.02-0.14       |
| <u>Buffalo River Buffalo</u>         | White sucker        | 10                   | 1               | 283                 | 231-318           | 192                | 95-296           | 0.71              | -               | 0.34                | -               |
|                                      | Carp                | 10                   | 1               | 420                 | 356-483           | 1002               | 408-2087         | 4.26              | -               | 0.14                | -               |
| <u>Chautauqua Lake Bemus Point</u>   | Largemouth bass     | 10                   | 2               | 327                 | 274-386           | 472                | 271-779          | 0.27              | 0.21-0.33       | 0.09                | 0.08-0.10       |
|                                      | Brown bullhead      | 10                   | 1               | 276                 | 241-302           | 268                | 156-318          | 0.23              | -               | 0.14                | -               |
| <u>Eighteen Mile Cr. Olcott</u>      | Northern pike       | 13                   | 2               | 611                 | 450-754           | 1316               | 284-2586         | 5.71              | 5.27-6.09       | 0.53                | 0.51-0.56       |
|                                      | White sucker        | 20                   | 2               | 350                 | 249-445           | 431                | 105-796          | 2.73              | 2.03-3.00       | 0.24                | 0.14-0.34       |
| <u>Johnson Creek Lyndonville</u>     | Black crappie       | 10                   | 1               | 255                 | 243-268           | 283                | 233-327          | 0.45              | -               | 0.92                | -               |
|                                      | Brown bullhead      | 10                   | 1               | 264                 | 236-293           | 214                | 163-322          | 0.17              | -               | 0.37                | -               |
|                                      | White sucker        | 20                   | 2               | 324                 | 269-392           | 339                | 198-562          | 0.20              | 0.16-0.25       | 0.45                | 0.31-0.58       |
| <u>Canaseraga Creek Dansville</u>    | Shorthead redhorse  | 5                    | 1               | 246                 | 125-342           | 267                | 167-340          | 0.18              | -               | 0.01                | -               |
|                                      | Northern hog sucker | 6                    | 1               | 222                 | 216-248           | 94                 | 71-131           | 0.10              | -               | 0.01                | -               |
|                                      | White sucker        | 9                    | 1               | 250                 | 210-299           | 141                | 69-233           | 0.25              | -               | 0.01                | -               |
| <u>Cohocton River Coopers Plains</u> | Smallmouth bass     | 14                   | 2               | 258                 | 175-383           | 265                | 67-668           | 0.29              | 0.24-0.32       | 0.48                | 0.45-0.52       |
|                                      | White sucker        | 19                   | 2               | 316                 | 104-418           | 395                | 70-756           | 0.14              | 0.08-0.20       | 0.11                | 0.10-0.12       |
| <u>Canisteo River Addison</u>        | Smallmouth bass     | 21                   | 2               | 234                 | 188-295           | 164                | 50-304           | 0.70              | 0.68-0.72       | 0.02                | 0.02-0.02       |
|                                      | White sucker        | 10                   | 1               | 333                 | 295-394           | 353                | 214-702          | 0.25              | -               | <0.01               | -               |
|                                      | Northern hog sucker | 10                   | 1               | 257                 | 233-281           | 168                | 120-225          | 0.15              | -               | <0.01               | -               |
| <u>Susquehanna River Windsor</u>     | Smallmouth bass     | 12                   | 2               | 282                 | 218-382           | 314                | 132-688          | 0.66              | 0.64-0.67       | 0.04                | 0.04-0.04       |
|                                      | White sucker        | 15                   | 2               | 376                 | 250-442           | 584                | 156-856          | 0.72              | 0.32-0.92       | 0.04                | <0.01-0.05      |
| <u>Corbettsville</u>                 | Rock bass           | 19                   | 2               | 179                 | 92-242            | 135                | 37-300           | 0.38              | 0.37-0.38       | 0.01                | 0.01-0.02       |
|                                      | Walleye             | 6                    | 1               | 339                 | 315-382           | 293                | 202-447          | 2.08              | -               | 0.19                | -               |
|                                      | White sucker        | 20                   | 3               | 348                 | 185-492           | 476                | 55-1092          | 0.28              | 0.05-0.49       | 0.01                | <0.01-0.02      |

\* Analysis included DDT and its metabolites.

| LOCATION                         | SPECIES             | AVERAGE DIELDRIN* |            | AVERAGE ENDRIN |            | ENDRIN RANGE |            | AVERAGE HEPTACHLOR** |            | HEPTACHLOR RANGE |       | LINDANE LINDANE RANGE |       | AVG. MIREX |       | MIREX RANGE |       |
|----------------------------------|---------------------|-------------------|------------|----------------|------------|--------------|------------|----------------------|------------|------------------|-------|-----------------------|-------|------------|-------|-------------|-------|
|                                  |                     | (ppm)             | (ppm)      | (ppm)          | (ppm)      | (ppm)        | (ppm)      | (ppm)                | (ppm)      | (ppm)            | (ppm) | (ppm)                 | (ppm) | (ppm)      | (ppm) | (ppm)       | (ppm) |
| Niagara River<br>(Upper)         | Smallmouth bass     | 0.02              | <0.01-0.03 | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-ND      | <0.01                | <0.01-0.02 | <0.01-0.02       | 0.02  | ND-0.05               |       |            |       |             |       |
|                                  | White sucker        | 0.02              | <0.01-0.03 | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-ND      | <0.01                | <0.01-0.01 | <0.01-0.01       | 0.01  | ND-0.02               |       |            |       |             |       |
| Buffalo River<br>Buffalo         | White sucker        | 0.01              | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
|                                  | Carp                | 0.06              | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
| Chautauqua Lake<br>Bemus Point   | Largemouth bass     | <0.01             | <0.01-0.01 | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-ND      | <0.01                | ND-0.01    | ND-0.01          | ND    | ND-ND                 |       |            | ND    |             |       |
|                                  | Brown bullhead      | 0.02              | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
| Eighteen Mile Cr.<br>Olcott      | Northern pike       | 0.06              | 0.05-0.07  | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-ND      | <0.01                | ND-0.01    | ND-0.01          | 0.07  | 0.05-0.09             |       |            | 0.07  |             |       |
|                                  | White sucker        | 0.02              | 0.01-0.02  | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-ND      | <0.01                | <0.01-0.01 | <0.01-0.01       | 0.02  | 0.01-0.03             |       |            | 0.02  |             |       |
| Johnson Creek<br>Lyndonville     | Black crappie       | 0.04              | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
|                                  | Brown bullhead      | 0.02              | -          | <0.01          | -          | -            | -          | <0.01                | -          | -                | 0.03  | -                     | -     | -          | ND    | -           | -     |
|                                  | White sucker        | 0.01              | <0.01-0.02 | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-0.01    | <0.01                | 0.02-0.06  | 0.02-0.06        | ND    | ND-ND                 |       |            | ND    |             |       |
| Canaseraga Creek<br>Dansville    | Shorthead redhorse  | <0.01             | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
|                                  | Northern hog sucker | <0.01             | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
| White sucker                     | White sucker        | <0.01             | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
|                                  | White sucker        | <0.01             | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
| Cohocton River<br>Coopers Plains | Smallmouth bass     | 0.02              | 0.02-0.02  | <0.01          | ND-0.01    | ND-0.01      | ND-ND      | <0.01                | <0.01-0.01 | <0.01-0.01       | ND    | ND-ND                 |       |            | ND    |             |       |
|                                  | White sucker        | 0.01              | 0.01-0.01  | <0.01          | <0.01-0.01 | <0.01-0.01   | ND-ND      | <0.01                | <0.01-0.01 | <0.01-0.01       | ND    | ND-ND                 |       |            | ND    |             |       |
| Canisteo River<br>Addison        | Smallmouth bass     | 0.03              | 0.02-0.03  | ND             | ND-ND      | ND-ND        | ND-ND      | ND                   | <0.01      | <0.01-0.01       | ND    | ND-ND                 |       |            | ND    |             |       |
|                                  | White sucker        | 0.01              | -          | ND             | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
|                                  | Northern hog sucker | <0.01             | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
| Susquehanna River<br>Windsor     | Smallmouth bass     | <0.01             | <0.01-0.01 | <0.01          | <0.01-0.01 | <0.01-0.01   | <0.01-0.01 | <0.01                | <0.01-0.01 | <0.01-0.01       | ND    | ND-ND                 |       |            | ND    |             |       |
|                                  | White sucker        | <0.01             | <0.01-0.01 | <0.01          | <0.01-0.01 | <0.01-0.01   | <0.01-0.02 | <0.01                | <0.01-0.02 | <0.01-0.02       | ND    | ND-ND                 |       |            | ND    |             |       |
| Corbettsville                    | Rock bass           | ND                | ND-ND      | ND             | ND-ND      | ND-ND        | ND-ND      | <0.01                | <0.01-0.01 | <0.01-0.01       | ND    | ND-ND                 |       |            | ND    |             |       |
|                                  | Walleye             | <0.01             | -          | <0.01          | -          | -            | -          | ND                   | -          | -                | ND    | -                     | -     | -          | ND    | -           | -     |
|                                  | White sucker        | ND                | ND-ND      | ND             | ND-ND      | ND-ND        | ND-ND      | <0.01                | ND-0.01    | ND-0.01          | ND    | ND-ND                 |       |            | ND    |             |       |

\* Analysis included Aldrin.  
\*\* Analysis included Heptachlor epoxide.  
\*\*\* Analysis included Lindane and its isomers.  
ND = none detected