

ILLINOIS NATURAL HISTORY SURVEY  
 CENTER FOR AQUATIC ECOLOGY  
 2001 CREEL SURVEY RESULTS

**2001 GAGES LAKE**  
 128 ACRES  
 REGION 2, DISTRICT 7

STRATIFICATION SUMMARY:

Day creel only.  
 Results cover 04/01/2001 through 10/31/2001  
 Year periods stratified.  
 Fishing modes (boat vs. shore) stratified.  
 Day types (weekday vs. weekend/holiday) stratified.  
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 284/642 = 44.2%

NUMBER OF INTERVIEWS: 739

Table 1. Total fishing effort, by fishing mode and day type.

| FISHING MODE | DAYTYPE | ANGLER-HOURS | 95% CI           | HOURS/ACRE | 95% CI       | % EFF |
|--------------|---------|--------------|------------------|------------|--------------|-------|
| BOAT         | WEEKDAY | 1414         | 1134-1694 ( 20%) | 11         | 9-13 ( 20%)  | 15%   |
|              | HOLIDAY | 1856         | 1622-2091 ( 13%) | 15         | 13-16 ( 13%) | 38%   |
|              | TOTAL   | 3270         | 2905-3636 ( 11%) | 26         | 23-28 ( 11%) | 28%   |
| SHORE        | WEEKDAY | 3203         | 2737-3669 ( 15%) | 25         | 21-29 ( 15%) | 12%   |
|              | HOLIDAY | 2898         | 2453-3344 ( 15%) | 23         | 19-26 ( 15%) | 23%   |
|              | TOTAL   | 6102         | 5457-6746 ( 11%) | 48         | 43-53 ( 11%) | 17%   |
| BOAT & SHORE | WEEKDAY | 4617         | 4073-5161 ( 12%) | 36         | 32-40 ( 12%) | 13%   |
|              | HOLIDAY | 4755         | 4251-5259 ( 11%) | 37         | 33-41 ( 11%) | 29%   |
|              | TOTAL   | 9372         | 8631-10113 ( 8%) | 73         | 68-79 ( 8%)  | 21%   |

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

| # HARVESTED | 95% CI   |        | #/HOUR | 95% CI            | #/HA  | #/ACRE | SPECIES         |
|-------------|----------|--------|--------|-------------------|-------|--------|-----------------|
| 1253        | 885-1621 | ( 29%) | .086   | .051-.120 ( 41%)  | 24.23 | 9.81   | All species     |
| 41          | 0-95     | (130%) | .004   | .000-.010 (149%)  | 0.80  | 0.32   | Black bullhead  |
| 22          | 0-57     | (165%) | .001   | .000-.002 (152%)  | 0.42  | 0.17   | Black crappie   |
| 470         | 190-750  | ( 60%) | .034   | .013-.055 ( 62%)  | 9.09  | 3.68   | Bluegill        |
|             |          |        | ****   | NOT RECORDED **** |       |        | Brown bullhead  |
| 388         | 202-574  | ( 48%) | .028   | .000-.056 (101%)  | 7.51  | 3.04   | Carp            |
| 87          | 30-144   | ( 65%) | .007   | .003-.011 ( 61%)  | 1.68  | 0.68   | Channel catfish |
| 5           | 0-21     | (278%) | .000   | .000-.001 (257%)  | 0.11  | 0.04   | Green sunfish   |
| 147         | 72-222   | ( 51%) | .007   | .003-.011 ( 52%)  | 2.84  | 1.15   | Largemouth bass |
| 32          | 0-77     | (142%) | .002   | .000-.007 (279%)  | 0.62  | 0.25   | Northern pike   |
| 7           | 0-24     | (236%) | .000   | .000-.001 (231%)  | 0.14  | 0.06   | Pumpkinseed     |
|             |          |        | ****   | NOT RECORDED **** |       |        | Smallmouth bass |
| 23          | 3-43     | ( 89%) | .002   | .000-.004 (109%)  | 0.44  | 0.18   | Walleye         |
|             |          |        | ****   | NOT RECORDED **** |       |        | Warmouth        |
|             |          |        | ****   | NOT RECORDED **** |       |        | White crappie   |
| 10          | 0-32     | (236%) | .001   | .000-.002 (236%)  | 0.19  | 0.08   | Yellow bullhead |
| 16          | 0-37     | (132%) | .001   | .000-.002 (148%)  | 0.30  | 0.12   | Yellow perch    |
| 5           | 0-16     | (220%) | .000   | .000-.001 (220%)  | 0.10  | 0.04   | Yellow bass     |

Table 3. Total fishing harvest and harvest rates, in kilograms.

| KG HARVESTED | 95% CI  |        | KG/HOUR | 95% CI            | KG/HA | AVE KG | SPECIES         |
|--------------|---------|--------|---------|-------------------|-------|--------|-----------------|
| 526          | 296-757 | ( 44%) | .044    | .011-.077 ( 76%)  | 10.18 | 0.420  | All species     |
| 12           | 0-28    | (133%) | .001    | .000-.003 (148%)  | 0.23  | 0.293  | Black bullhead  |
| 3            | 0-8     | (156%) | .000    | .000-.000 (143%)  | 0.06  | 0.147  | Black crappie   |
| 21           | 9-33    | ( 57%) | .002    | .001-.003 ( 69%)  | 0.41  | 0.045  | Bluegill        |
|              |         |        | ****    | NOT RECORDED **** |       |        | Brown bullhead  |
| 223          | 70-376  | ( 68%) | .021    | .000-.052 (147%)  | 4.31  | 0.575  | Carp            |
| 50           | 20-81   | ( 60%) | .004    | .001-.006 ( 63%)  | 0.97  | 0.580  | Channel catfish |
| 0            | 0-1     | (278%) | .000    | .000-.000 (278%)  | 0.01  | 0.073  | Green sunfish   |
| 114          | 38-189  | ( 66%) | .007    | .002-.011 ( 71%)  | 2.19  | 0.772  | Largemouth bass |
| 75           | 0-296   | (293%) | .007    | .000-.030 (313%)  | 1.46  | 2.359  | Northern pike   |
| 0            | 0-1     | (236%) | .000    | .000-.000 (231%)  | 0.00  | 0.034  | Pumpkinseed     |
|              |         |        | ****    | NOT RECORDED **** |       |        | Smallmouth bass |
| 25           | 1-48    | ( 95%) | .002    | .000-.004 (127%)  | 0.48  | 1.088  | Walleye         |
|              |         |        | ****    | NOT RECORDED **** |       |        | Warmouth        |
|              |         |        | ****    | NOT RECORDED **** |       |        | White crappie   |
| 1            | 0-3     | (245%) | .000    | .000-.000 (236%)  | 0.02  | 0.090  | Yellow bullhead |
| 1            | 0-2     | (152%) | .000    | .000-.000 (211%)  | 0.01  | 0.045  | Yellow perch    |
| 1            | 0-2     | (220%) | .000    | .000-.000 (220%)  | 0.01  | 0.102  | Yellow bass     |

Table 4. Total fishing harvest and harvest rates, in pounds.

| LB HARVESTED | 95% CI   |        | LB/HOUR | 95% CI            | LB/ACRE | AVE LB | SPECIES         |
|--------------|----------|--------|---------|-------------------|---------|--------|-----------------|
| 1161         | 653-1668 | ( 44%) | .097    | .023-.171 ( 76%)  | 9.08    | 0.926  | All species     |
| 27           | 0-62     | (133%) | .003    | .000-.007 (148%)  | 0.21    | 0.645  | Black bullhead  |
| 7            | 0-18     | (156%) | .000    | .000-.001 (143%)  | 0.05    | 0.324  | Black crappie   |
| 47           | 20-73    | ( 57%) | .004    | .001-.006 ( 69%)  | 0.37    | 0.099  | Bluegill        |
|              |          |        | ****    | NOT RECORDED **** |         |        | Brown bullhead  |
| 492          | 155-829  | ( 68%) | .046    | .000-.114 (147%)  | 3.85    | 1.267  | Carp            |
| 111          | 45-177   | ( 60%) | .009    | .003-.014 ( 63%)  | 0.87    | 1.278  | Channel catfish |
| 1            | 0-3      | (257%) | .000    | .000-.000 (257%)  | 0.01    | 0.160  | Green sunfish   |
| 250          | 85-416   | ( 66%) | .015    | .004-.025 ( 71%)  | 1.96    | 1.702  | Largemouth bass |
| 166          | 0-652    | (293%) | .016    | .000-.066 (313%)  | 1.30    | 5.201  | Northern pike   |
| 1            | 0-2      | (231%) | .000    | .000-.000 (231%)  | 0.00    | 0.076  | Pumpkinseed     |
|              |          |        | ****    | NOT RECORDED **** |         |        | Smallmouth bass |
| 55           | 3-107    | ( 95%) | .004    | .000-.010 (127%)  | 0.43    | 2.399  | Walleye         |
|              |          |        | ****    | NOT RECORDED **** |         |        | Warmouth        |
|              |          |        | ****    | NOT RECORDED **** |         |        | White crappie   |
| 2            | 0-7      | (245%) | .000    | .000-.000 (236%)  | 0.01    | 0.198  | Yellow bullhead |
| 2            | 0-4      | (152%) | .000    | .000-.000 (211%)  | 0.01    | 0.100  | Yellow perch    |
| 1            | 0-4      | (220%) | .000    | .000-.000 (220%)  | 0.01    | 0.224  | Yellow bass     |

Table 5. Total fishing catch and catch rates, in numbers of fish.  
Catch includes both harvested and released fish.

| # CAUGHT | 95% CI             | #/HOUR | 95% CI            | #/HA   | #/ACRE | SPECIES         |
|----------|--------------------|--------|-------------------|--------|--------|-----------------|
| 14064    | 12565-15564 ( 11%) | .937   | .832-1.042 ( 11%) | 271.93 | 110.05 | All species     |
| 257      | 144-369 ( 44%)     | .020   | .007-.032 ( 63%)  | 4.96   | 2.01   | Black bullhead  |
| 346      | 213-479 ( 38%)     | .023   | .013-.033 ( 42%)  | 6.68   | 2.71   | Black crappie   |
| 8736     | 7438-10035 ( 15%)  | .534   | .443-.625 ( 17%)  | 168.91 | 68.36  | Bluegill        |
| 27       | 0-64 (136%)        | .002   | .000-.004 (122%)  | 0.53   | 0.21   | Brown bullhead  |
| 524      | 329-719 ( 37%)     | .040   | .011-.068 ( 72%)  | 10.13  | 4.10   | Carp            |
| 229      | 137-321 ( 40%)     | .016   | .008-.025 ( 52%)  | 4.43   | 1.79   | Channel catfish |
| 261      | 120-402 ( 54%)     | .015   | .007-.024 ( 57%)  | 5.05   | 2.04   | Green sunfish   |
| 1739     | 1482-1995 ( 15%)   | .137   | .114-.160 ( 17%)  | 33.62  | 13.60  | Largemouth bass |
| 477      | 348-606 ( 27%)     | .049   | .023-.076 ( 54%)  | 9.22   | 3.73   | Northern pike   |
| 174      | 47-302 ( 73%)      | .008   | .003-.014 ( 69%)  | 3.37   | 1.36   | Pumpkinseed     |
| 6        | 0-31 (430%)        | .001   | .000-.002 (318%)  | 0.11   | 0.05   | Smallmouth bass |
| 181      | 104-258 ( 42%)     | .016   | .008-.024 ( 52%)  | 3.50   | 1.42   | Walleye         |
| 22       | 2-42 ( 89%)        | .001   | .000-.001 ( 88%)  | 0.42   | 0.17   | Warmouth        |
| 32       | 5-59 ( 85%)        | .002   | .000-.004 ( 91%)  | 0.62   | 0.25   | White crappie   |
| 40       | 7-72 ( 83%)        | .002   | .000-.004 ( 82%)  | 0.77   | 0.31   | Yellow bullhead |
| 1009     | 734-1284 ( 27%)    | .070   | .034-.106 ( 51%)  | 19.50  | 7.89   | Yellow perch    |
| 5        | 0-16 (220%)        | .000   | .000-.001 (220%)  | 0.10   | 0.04   | Yellow bass     |

Table 6. Total fishing catch and catch rates, in kilograms.

| KG CAUGHT | 95% CI           | KG/HOUR | 95% CI           | KG/HA | AVE KG | SPECIES         |
|-----------|------------------|---------|------------------|-------|--------|-----------------|
| 2267      | 1943-2591 ( 14%) | .193    | .150-.237 ( 22%) | 43.83 | 0.161  | All species     |
| 59        | 34-83 ( 42%)     | .005    | .002-.007 ( 55%) | 1.13  | 0.228  | Black bullhead  |
| 29        | 17-40 ( 40%)     | .002    | .001-.003 ( 44%) | 0.56  | 0.084  | Black crappie   |
| 291       | 247-336 ( 15%)   | .018    | .015-.021 ( 18%) | 5.63  | 0.033  | Bluegill        |
| 3         | 0-7 (138%)       | .000    | .000-.000 (125%) | 0.06  | 0.114  | Brown bullhead  |
| 290       | 135-445 ( 53%)   | .027    | .000-.058 (116%) | 5.61  | 0.554  | Carp            |
| 122       | 74-170 ( 39%)    | .009    | .005-.014 ( 46%) | 2.36  | 0.533  | Channel catfish |
| 12        | 5-20 ( 63%)      | .001    | .000-.001 ( 61%) | 0.24  | 0.047  | Green sunfish   |
| 925       | 761-1088 ( 18%)  | .080    | .060-.100 ( 25%) | 17.88 | 0.532  | Largemouth bass |
| 410       | 164-655 ( 60%)   | .042    | .013-.072 ( 70%) | 7.92  | 0.859  | Northern pike   |
| 8         | 2-13 ( 75%)      | .000    | .000-.001 ( 73%) | 0.15  | 0.043  | Pumpkinseed     |
| 3         | 0-13 (318%)      | .000    | .000-.002 (430%) | 0.06  | 0.551  | Smallmouth bass |
| 60        | 29-91 ( 51%)     | .005    | .002-.008 ( 65%) | 1.16  | 0.332  | Walleye         |
| 3         | 0-5 (102%)       | .000    | .000-.000 (111%) | 0.05  | 0.119  | Warmouth        |
| 3         | 0-5 ( 94%)       | .000    | .000-.000 ( 86%) | 0.05  | 0.086  | White crappie   |
| 3         | 0-6 ( 88%)       | .000    | .000-.000 ( 88%) | 0.06  | 0.084  | Yellow bullhead |
| 46        | 34-57 ( 25%)     | .003    | .002-.005 ( 51%) | 0.88  | 0.045  | Yellow perch    |
| 1         | 0-2 (220%)       | .000    | .000-.000 (220%) | 0.01  | 0.102  | Yellow bass     |

Table 7. Total fishing catch and catch rates, in pounds.

| LB CAUGHT | 95% CI    |        | LB/HOUR | 95% CI           | LB/ACRE | AVE LB | SPECIES         |
|-----------|-----------|--------|---------|------------------|---------|--------|-----------------|
| 4998      | 4283-5713 | ( 14%) | .426    | .330-.522 ( 22%) | 39.11   | 0.355  | All species     |
| 129       | 74-184    | ( 42%) | .010    | .004-.015 ( 55%) | 1.01    | 0.503  | Black bullhead  |
| 64        | 38-89     | ( 40%) | .005    | .003-.007 ( 44%) | 0.50    | 0.185  | Black crappie   |
| 642       | 545-740   | ( 15%) | .039    | .032-.046 ( 18%) | 5.03    | 0.074  | Bluegill        |
| 7         | 0-16      | (138%) | .000    | .000-.001 (125%) | 0.05    | 0.252  | Brown bullhead  |
| 640       | 298-982   | ( 53%) | .059    | .000-.128 (116%) | 5.00    | 1.221  | Carp            |
| 269       | 163-375   | ( 39%) | .021    | .011-.030 ( 46%) | 2.11    | 1.175  | Channel catfish |
| 27        | 10-45     | ( 63%) | .002    | .001-.003 ( 61%) | 0.21    | 0.105  | Green sunfish   |
| 2039      | 1679-2400 | ( 18%) | .177    | .132-.221 ( 25%) | 15.96   | 1.173  | Largemouth bass |
| 903       | 361-1445  | ( 60%) | .093    | .028-.159 ( 70%) | 7.07    | 1.894  | Northern pike   |
| 17        | 4-29      | ( 75%) | .001    | .000-.001 ( 73%) | 0.13    | 0.096  | Pumpkinseed     |
| 7         | 0-38      | (430%) | .001    | .000-.004 (430%) | 0.06    | 1.216  | Smallmouth bass |
| 133       | 65-201    | ( 51%) | .011    | .004-.018 ( 65%) | 1.04    | 0.732  | Walleye         |
| 6         | 0-12      | (102%) | .000    | .000-.000 (111%) | 0.05    | 0.262  | Warmouth        |
| 6         | 0-12      | ( 94%) | .000    | .000-.001 ( 86%) | 0.05    | 0.190  | White crappie   |
| 7         | 1-14      | ( 88%) | .000    | .000-.001 ( 88%) | 0.06    | 0.186  | Yellow bullhead |
| 101       | 75-126    | ( 25%) | .007    | .003-.011 ( 51%) | 0.79    | 0.100  | Yellow perch    |
| 1         | 0-4       | (220%) | .000    | .000-.000 (220%) | 0.01    | 0.224  | Yellow bass     |

Table 8. Hours per completed trip and supplementary questions for all trips.

|                           | MEAN | 95% CI  |        | MIN | MAX | #SAMPLES |
|---------------------------|------|---------|--------|-----|-----|----------|
| HOURS PER COMPLETED TRIP* |      |         |        |     |     |          |
| BOAT                      | 2.6  | 2.3-2.9 | ( 12%) | 0.8 | 6.5 | 69       |
| SHORE                     | 1.4  | 1.1-1.6 | ( 17%) | 0.2 | 3.5 | 43       |
| BOAT & SHORE              | 2.1  | 1.9-2.4 | ( 11%) | 0.2 | 6.5 | 112      |
| MILES TRAVELED            | 1.4  | 1.2-1.7 | ( 17%) | 1   | 40  | 649      |
| SUCCESS RATING (1-10)     | 3.6  | 3.4-3.8 | ( 5%)  | 1   | 10  | 648      |

\*36 samples were from split interviews of completed trips.  
15.9% of all 703 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 12 out of 703 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

| PARTY SIZE:      | 1   | 2   | 3  | 4  | 5 | 6 | 7 | 8 | 9 | 10+ |
|------------------|-----|-----|----|----|---|---|---|---|---|-----|
| BOAT INTERVIEWS  | 71  | 165 | 28 | 4  |   |   |   |   |   |     |
| SHORE INTERVIEWS | 150 | 209 | 56 | 11 | 7 | 2 |   |   |   |     |

Table 10. Number of interviews (and %) per species sought for all interviews.

|              |     |                 |
|--------------|-----|-----------------|
| 324 ( 46.1%) | ANY | All species     |
| 14 ( 2.0%)   | BLG | Bluegill        |
| 24 ( 3.4%)   | CAP | Carp            |
| 13 ( 1.8%)   | CCF | Channel catfish |
| 10 ( 1.4%)   | CRP | Crappie spp.    |
| 263 ( 37.4%) | LMB | Largemouth bass |
| 16 ( 2.3%)   | NOP | Northern pike   |
| 39 ( 5.5%)   | WAE | Walleye         |



