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# NEW YORK'S GREAT LAKES ANGLER MARKETS

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## INTRODUCTION

Two recent studies of anglers in New York indicate the number of anglers fishing New York's Great Lakes has declined in the past 10 years (Connelly et al. 1990, 1997). Speculation exists that those fishing the Great Lakes now may be different from those fishing in the past, especially in areas where management changes to fishing regulations have occurred (Connelly et al. 1999). To resolve this speculation, New York Sea Grant sponsored a study to examine the characteristics and preferences of current and potential anglers to New York's Great Lakes. For this study, New York's Great Lakes waters were defined as Lake Erie, the Niagara and St. Lawrence Rivers, Lake Ontario and its embayments, and tributaries up to the first barrier impassable to fish.

Four types of market segmentation were used in this study to divide anglers into groups. Segmentation was based on: (1) anglers' past experience with and future intentions for Great Lakes fishing ("experience" segment); (2) where anglers live ("geographic" segment); (3) angler preferences for different types of fishing opportunities ("preference" segment); and (4) angler preferences for specific products such as charter boat and guide services or fishing tournaments and derbies ("products and services" segment). Within each of these four segments, anglers were broken down into groups according to their interests and where they live. By grouping anglers this way, educational and promotional materials can be effectively targeted to the anglers most likely to need and use them.

## METHODS

Data from a mail survey of New York fishing license holders were used to segment anglers. A sample of 5,000 license holders was drawn systematically from all fishing licenses, both resident and nonresident, for the license year beginning October 1, 1995, and ending September 30, 1996. The mail questionnaire was designed to gather data on Great Lakes fishing participation, reasons for lack of angler participation, future interests of anglers, and anglers' preferences for different types of fishing opportunities. The questionnaires were mailed in January 1997 and referred to fishing experiences in calendar year 1996.

## RESULTS AND DISCUSSION

### Survey Response

Of the 5,000 questionnaires mailed, 222 were undeliverable and 2,780 completed questionnaires were returned. This resulted in an adjusted response rate of 58%.

### Experience Segmentation

Anglers were divided into five groups based on their past experiences fishing the Great Lakes and their future intentions to do so: (1) anglers with "no experience past/future"; (2) anglers who have fished New York's Great Lakes in the "past only"; (3) "potential" Great Lakes anglers; (4) "sporadic" Great Lakes anglers; and (5) "consistent" Great Lakes anglers (Table 1). The "no experience past/future" group (Table 1), comprising 22% of anglers, had not fished the Great Lakes in the past and did not intend to do so in the future. Therefore, this group will not be discussed further.

Current and potential anglers were divided into three groups: potential, sporadic, and consistent (Table 1). The majority of anglers fit into one of these three groups. Twenty-five percent, over one-quarter of a million anglers (Table 1), were "consistent" users, having fished in New York's Great Lakes waters in each of the past six years.

Almost one-third of a million anglers were considered "sporadic," having fished at least once in the past six years in New York's Great Lakes waters. "Potential" Great Lakes anglers, those interested in Great Lakes fishing but who have not yet fished there, total almost 200,000.

Approximately 30% of current and potential anglers belong to sportsman's organizations. However, membership is split among many local, state, and national groups, making direct communication with large numbers of anglers via sportsman's organizations difficult. More than 40% of current and potential Great Lakes anglers have access to the Internet. This form of communication will likely continue to grow and thus may be a good way of reaching these anglers.

Over half of the potential group (56%) indicated that they did not fish the Great Lakes because they did not have the necessary boat or equipment; 29% indicated they did not have the knowledge or skills. More than half (56%) also indicated that they preferred to fish locations other than New York's Great Lakes waters.

Anglers in the small "past only" group (Table 1), those who had fished New York's Great Lakes in the past but did not intend to do so in the future, gave several reasons for no longer fishing New York's Great Lakes. Preference for fishing in other locations (75%) and lacking the necessary boat or equipment (54%) were most frequently mentioned. About 43% of anglers indicated that "due to contaminants, I wouldn't want to eat the fish."

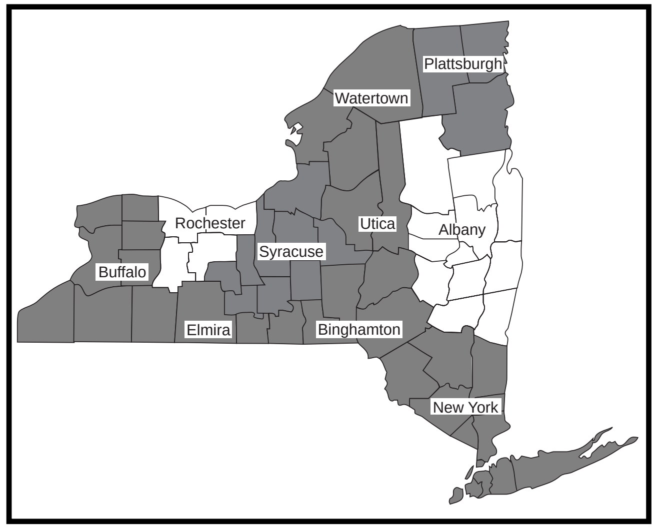
**Geographic Segmentation**

New York state was divided into 10 media market areas for this analysis (Figure 1; Brown 1981). Anglers in the various experience groups tend to live in different locations. Consistent anglers live closer to the Great Lakes, with almost 30% in the Buffalo region, 16% in Rochester, 14% in Syracuse, and 10% in Watertown. Sporadic anglers were quite dispersed, with 22% from out of state, 15% from Buffalo, 14% from Syracuse, and 12% from New York City. Many potential anglers live in the eastern portion of New York state, with 31% from New York City and 16% from Albany.

**Preference Segmentation**

Anglers were divided into six groups based on their preferences for different types of fishing (Table 2). The two largest groups (Table 2, #1 and #2) preferred a mix of fishing opportunities. For example, they preferred equal

**Figure 1.** New York state market regions (SRDS 1993).




amounts of open lake versus tributary fishing. Group #1 ("mix of noncompetitve opportunities") showed little interest in competitive fishing opportunities such as derbies, whereas 61% of group #2 ("mix of opportunities with a preference for motorboating") had either participated in a derby on New York's Great Lakes or were interested in participating in one in the future. Almost 80% of the second group had used charter boat or guide services in the past or were interested in using them in the future.

Three groups (Table 2, #3, #5, and #6) had varying levels of interest in boating. The largest group (#3, "catch and release, warmwater boat anglers") preferred catch and release fishing from a boat, and had a slight preference for warmwater species. Of the anglers in this group who fished in 1996, 71% fished from a boat they or their family or friends owned, and 46% fished from a boat for bass or walleye.

The next largest boating group (Table 2, #5, "warmwater, lake, motorboat anglers who keep fish") preferred to fish almost exclusively from motorboats and keep the fish they caught. They preferred mostly the open lake rather than tributaries and indicated a slight preference for warmwater species. Three-quarters (76%) of these anglers who fished the Great Lakes in 1996 fished from a boat and almost half (47%) fished from a boat for bass or walleye.

The smallest boating group (Table 2, #6, "coldwater, lake, motorboat anglers"), the smallest group overall, con-

**Table 1.** Estimated number of fishing license holders in each experience-based market group.

| Experience-based angler market groups | Estimated number of fishing license holders | Percent of fishing license holders |
|---|---|---|
| No experience past/future | 237,901 | 22% |
| Past only | 42,293 | 4 |
| Potential | 193,493 | 18 |
| Sporadic | 322,488 | 31 |
| Consistent | 261,162 | 25% |

**Table 2.** Angler market groups based on angler preferences for different fishing opportunities. "Equal" indicates that anglers prefer that equal amounts of each opportunity be available.

| Preference-based groups (estimated percent and number of anglers) | Open lake vs. tributary fishing | Fishing for coldwater vs. warm-water species | Shore fishing vs. fishing from a boat | Using motor-boats to fish vs. non-motor boats | Noncompetitive vs. competitive fishing (derby) | Catch & release vs. keeping fish |
|---|---|---|---|---|---|---|
| #1: Mix of noncom-petitive opportunities (30% or 232,366) | Equal | Equal | Equal | Equal | Prefer noncompetitive fishing | Equal |
| #2: Mix of opportuni-ties with a preference for motorboating (29% or 223,040) | Equal | Equal | Equal | Prefer motorboats | Equal | Equal |
| #3: Catch & release, warmwater motor-boat anglers (19% or 149,211) | Equal | Prefer warmwater species | Prefer fishing from boat | Prefer motorboats | Prefer noncompetitive fishing | Prefer catch & release |
| #4: Coldwater tributary anglers (11% or 83,931) | Prefer tributary fishing | Prefer coldwater species | Prefer wading vs. shore or boat fishing | Prefer wading vs. boating | Prefer noncompetitive fishing | Prefer catch & release |
| #5: Warmwater, lake, motorboat anglers who keep fish (7% or 55,954) | Prefer open lake fishing | Prefer warmwater species | Prefer fishing from boat | Prefer motorboats | Prefer noncompetitive fishing | Prefer keeping fish |
| #6: Coldwater, lake, motorboat anglers (4% or 32,640) | Prefer open lake fishing | Prefer coldwater species | Prefer fishing from boat | Prefer motorboats | Equal | Prefer catch & release |

sisted of anglers who preferred motorboating in the open lake almost exclusively and preferred to fish mostly for coldwater species. However, just over half (57%) of this group had actually fished from a boat in 1996 and 39% fished from a boat for trout or salmon. A small number of these anglers (13%) used charter boat services in 1996. Almost 40% had used charter boat or guide services in the past; few who had not used these services in the past were interested in using them in the future. Over half (54%) of the group had participated in derbies in the past and an additional 26% were interested in participating in the future.

The remaining group of anglers preferred mostly fishing tributaries for coldwater species (Table 2, #4, "coldwater tributary anglers"). Almost 80% of anglers in this group who fished in New York's Great Lakes region in 1996 fished tributaries for coldwater species. This group preferred to fish noncompetitively most of the time and practice catch and release fishing.

By comparing the "preference" groups identified in Table 2 with the "consistent," "sporadic," and "potential" Great Lakes angler groups identified in Table 1, the estimated number of anglers in each preference and experience group is identified (Table 3). Preference groups #1 and #2, preferring a mix of fishing opportunities, contain most of the potential Great Lakes anglers (nearly 136,000). In order the attract these anglers, the diverse fishing opportunities of New York's Great Lakes need to be marketed. A large portion of these potential anglers live in the New York City and Albany market regions.

**Segmentation by Products and Services**

Anglers in New York's Great Lakes region can also be segmented according to the services they use (that is, charter boat or guide services and fishing tournaments and derbies). Almost one-third (32%) of the anglers who had fished New York's Great Lakes in the past used charter boat or guide services. Approximately half of the anglers used these services with friends (not from work), about one-quarter went primarily with family members, about one-quarter went with friends from work, and very few (<5%) went alone or with strangers. We assume satisfaction with those services was high because 83% of those who had used the services in the past said they would like to use them again.

When broken down by experience groups, more than half (57%) of the consistent anglers were interested in charter boat or guide services in the future; 75% of the potential anglers were interested. Anglers who used these services in the past tended to be older, with half (49%) over age 45. Anglers who had not used these services in the past but are interested were younger, with

**Table 3.** Estimated number of anglers in preference groups and by experience-based market groups.

| Experience-based market groups | Preference market groups #1 | #2 | #3 | #4 | #5 | #6 |
|---|---|---|---|---|---|---|
| Consistent anglers | 67,119 | 69,730 | 63,462 | 27,683 | 19,848 | 13,319 |
| Sporadic anglers | 103,196 | 82,557 | 57,403 | 41,601 | 22,574 | 15,157 |
| Potential anglers | 61,918 | 73,914 | 26,702 | 13,738 | 13,738 | 3,483 |
| **Total** | **232,366** | **223,040** | **149,211** | **83,931** | **55,954** | **32,640** |

32% under age 35. Almost one-third of past users came from out of state. The largest proportions of potential anglers live in Buffalo (19%), New York City (16%), and Syracuse (13%). One-quarter of potential anglers indicated they didn't fish the Great Lakes because of limited access to the water. Charter boat operators and guides might want to emphasize their ability to provide access to the water as a way of reaching these potential anglers. Over two-fifths (44%) of those with past or potential interest in charter boat or guide services have access to the Internet.

One-quarter (26%) of those who had fished the Great Lakes in the past had participated in a fishing tournament or derby. One-third (34%) of those who participated in 1996 were new to Great Lakes derbies. Only 23% of those who had participated in tournaments and derbies prior to 1996 also participated in 1996. It appears that many anglers do not participate in derbies year after year. However, virtually all (97%) of those who participated in 1996 said they would like to participate again.

When broken down into experience groups, over half (53%) of the consistent users were interested in future derby participation, whereas 38% of sporadic and potential Great Lakes anglers were interested. One-quarter of past derby participants live in the Buffalo area; 19% of potential participants live there. The greatest proportion of past derby participants live in areas along the Great Lakes, whereas larger proportions of potential participants are found in New York City (16%) and out of state (17%). Anglers who indicated an interest in derbies but had not participated in the past indicated that they do not fish New York's Great Lakes because they lacked the necessary boat or equipment (45%), didn't have the knowledge or skills for Great Lakes fishing (19%), or preferred to fish other locations (32%).

## CONCLUSION

Market segmentation allows businesses and communities to target their advertising geographically. Anglers residing in different locations exhibit different levels of involvement in Great Lakes fishing. Businesses can further refine their advertising, reaching consistent anglers who live nearby with one message and targeting potential anglers, many of whom live in the New York City area, with a different message.

Specific information about the use of Great Lakes services and products by anglers can benefit service-related businesses such as charter boat and guide services. Potential Great Lakes anglers were the largest potential market for charter boat or guide services, whereas consistent anglers comprised most of the potential market for derbies and tournaments.

The size and composition of the potential Great Lakes angler group provides important information to communities and organizations interested in attracting new anglers. It was determined that the majority of the potential market identified prefer a mix of fishing opportunities and live in the New York City and Albany areas.

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